Catalog of Courses Fall 2008

JCCC Statement of General Education

Graduation Requirements

Associate's Degrees and Certificates

Transfer Guides

JCCC's transfer programs range from accounting to theater. Credits from JCCC can be transferred to many colleges and universities in the United States.

Credit Career and Certificate Program List

JCCC's career programs provide the opportunity for students to study specific careers and enter the job market directly. Each program has been designed with the assistance of a community advisory committee of men and women currently working in the field who are well aware of the requirements and job potential in today's market.

Although career program courses usually are not intended to be transfer programs, some of the courses may transfer to four-year colleges and universities. Specific information on course transferability can be found in the Success Center on campus or on the transfer information Web site (http://web.jccc.net/academic/transfer). Several of the career programs enable students to gain valuable work experience in the community while taking the career program courses.

Students who are interested in a career program should contact a JCCC counselor for more information. Counselors can assist students with entrance requirements, course selection and sequence, and job possibilities. Careful planning and course selection can be just as important in a career program as dedication in the classroom.

Johnson County Community College and the Metropolitan Community College District (MCC) have developed cooperative agreements that allow Johnson County residents to enroll in selected career programs at MCC, while paying Johnson County resident credit hour tuition. Reverse Cooperative Programs allow Missouri residents to enroll in selected career programs at JCCC, while paying the MCC tuition rates. For more information, see the student handbook cooperative programs.

Credit Course Descriptions

Descriptions of the courses offered at JCCC, with additional links to the course outlines.

Continuing Education Certificate Programs

Certificate programs offered through JCCC's continuing education program.

Continuing Education Course Descriptions

Student Handbook

Admissions information, services for students, student code of conduct, and academic policies and procedures.

Faculty and Staff

A list of full-time faculty and administrators.

Accreditation

Johnson County Community College is officially accredited by the North Central Association of Colleges and Schools. In addition, individual programs are accredited by associated professional organizations:

- Accounting, Business Office Technology, Business Entrepreneurship, Business Administration and Marketing and Management - Association of Collegiate Business Schools and Programs
- Dental Hygiene - American Dental Hygienists Association and American Dental Association
- Fire Service Administration - International Fire Service Accreditation Congress
- Hospitality Food and Beverage and Chef Apprentice - American Culinary Federation
- Interior Design – National Kitchen and Bath Association
- Mobile Intensive Care Technician - Joint Review Committee on Educational Programs for the EMT-Paramedic
- Nursing - Kansas State Board of Nursing and National League for Nursing and National League of Nursing
- Paralegal and Legal Nurse Consulting - American Bar Association
- Police Academy - University of Kansas
- Respiratory Care - Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon recommendation of the Committee on Accreditation for Respiratory Care

Notice of Nondiscrimination

Johnson County Community College is committed to a policy of nondiscrimination.

Johnson County Community College

Series 400: Personnel

Section 411: Application of Personnel Policies

Johnson County Community College is a place where freedom of expression and civility are encouraged. In valuing diversity, the college recognizes the individual differences based on unique ethnic, cultural, gender and political backgrounds, and the differences represented by staff in age, education and physical ability. In a diverse environment, it becomes the responsibility of each employee to respect these individual differences and to refrain from imposing personal viewpoints on other staff or students.

All personnel policies of the Johnson County Community College shall be applied without regard to a person's race, color, age, sex, religion, marital status, national origin, disability, veteran's status, sexual orientation or other factors which can not be lawfully considered, to the extent specified by applicable federal and state laws.

Date of Adoption:

Revised: 3/2/00, 4/10/06

Johnson County Community College does not discriminate on the basis of sex, race, color, national origin, disability, age, religion, marital status, veteran's status, sexual orientation, or other factors that cannot be lawfully considered in its programs and activities as required by all applicable laws and regulations. Inquiries concerning the college's compliance with its non-discrimination policies may be referred to the Dean of Student Services or Director of Human Resources, Johnson County Community College, 12345 College Blvd, Overland Park, KS 66210,

913-469-8500; or to Office for Civil Rights, 8930 Ward Parkway, Suite 2037, Kansas City, MO 64114, 816-268-0550.

JCCC provides a range of services to allow persons with disabilities to participate in educational programs and activities. If you desire support services, contact the office of Access Services for Students With Disabilities (913) 469-8500, ext. 3521, or TDD (913) 469-3885. The Access Services office is located in the Success Center on the second floor of the Student Center.

JCCC Statement of General Education

General education at Johnson County Community College combines essential thinking skills with knowledge from areas such as the arts, communication, humanities, language, mathematics, natural sciences, and social sciences. It prepares students to become lifelong learners capable of making informed, ethical decisions in an increasingly complex and diverse global community.

Students who pursue a course of study at JCCC will be expected to:

- Access and evaluate information from credible sources.
- Collaborate respectfully with others.
- Communicate effectively through the clear and accurate use of language.
- Demonstrate an understanding of the broad diversity of the human experience.
- Process numeric, symbolic, and graphic information.
- Read, analyze, and synthesize written material.
- Select and apply appropriate problem-solving techniques.
- Use current technology efficiently and responsibly.

Graduation Requirements

One semester prior to your graduation:

Complete an Application for Degree and/or Certificate of Completion Form and turn it in at the Success Center, second floor, Student Center, or mail to the attention of the Records Office, 12345 College Blvd., Overland Park, Kan. 66210.

Graduation Application Deadlines:

 - **June 15** for summer graduation

 - **October 15** for fall graduation

 - **February 15** for spring graduation

Requirements for degree or certificate of graduation

- For an associate's degree, 15 credit hours must be earned in residence at JCCC. Advanced standing credit will not count toward satisfying this credit hour requirement.
- For the associate of arts and associate of science degrees, the completion of an approved cultural diversity course.
- For certificates, a student must complete a minimum of 50 percent of the required coursework at JCCC.
- Graduates must have earned both a 2.0 grade point average at JCCC and have a cumulative 2.0 or better on all completed course work.
- Developmental and/or prerequisite courses, required before enrollment in college-level courses, will not count toward fulfilling graduation degree/certificate requirements.
- Students must be enrolled in classes at JCCC during the semester they anticipate completing degree/certificate requirements and wish to graduate.

Rules to determine a student's graduation catalog term

Students are considered continuously enrolled if they complete at least one class during each regular fall and spring semester. If students do not maintain continuous enrollment, they will be required to follow the graduation requirements that are in effect at the time of re-enrollment.

Graduation Verification Process

1. When an Application for Degree and/or Certificate of Completion Form is received in the Records office, an initial verification will be completed to ensure degree and/or certificate requirements will be satisfied.

2. A letter will be sent to the student once the verification is complete. If you do not receive a letter, please contact the Admissions Office to verify your mailing address.

3. A student's degree and/or certificate status will be recorded on a student's permanent transcript once grades have been posted and a final verification is done to ensure that all graduation requirements have been completed.

Graduation Application Deadline Appeal Process

If a student misses the application deadline, a student may submit an Graduation Appeal Form. This form can be picked up in the Success Center, second floor, Student Center, or found online at Records (http://www.jccc.net/home/depts.php/5105).

Associate's Degrees and Certificates

Associate's Degrees Offered at JCCC

Graduation Requirements
To officially graduate, an application for graduation must be filed in the Records Office by the appropriate deadline.

Students graduating with an associate of arts degree or an associate of science degree must complete an approved cultural diversity course. This diversity requirement will be waived for students graduating before August 2009.

Cultural Diversity Requirement

Associate of Arts

Associate of Science

Associate of Applied Science

(Associate of Science and Associate of Applied Science degrees require a student to choose an academic major. Visit http://www.jccc.net/home/catalog/current to view the majors of study available at JCCC.)

Associate of General Studies

Kansas AVS/TC Articulated, A.A.S.

Certificates

Certificate programs at Johnson County Community College provide specialized training for a specific career. To earn a certificate, students must successfully complete approved certificate requirements with a cumulative grade point average of 2.0 or higher and a JCCC GPA of 2.0 or higher. Students must complete a minimum of 50 percent of the required course work at JCCC.

Students must be enrolled at the college during the semester they anticipate completing certificate requirements and must submit an Application for Graduation to the JCCC Student Success Center.

Certificates are issued at the end of each semester.

Graduation exercises are held once a year at the completion of the spring semester. Students who have completed the requirements for a certificate in prior semesters of the same academic year will be invited to participate in graduation.

JCCC offers two types of certificates.
- Certificate of Completion: A certificate of completion may be awarded for a specified course of study not exceeding 15 credit hours.

- Career Certificate: A career certificate may be awarded for programs of 16 to 59 credit hours.

Associate of Arts

The associate of arts degree from JCCC
- is designed for students who plan to transfer to a baccalaureate college or university.
- requires completion of 64 college-level credit hours within specified course distribution areas with a 2.0 or higher GPA.
- requires the completion of a cultural diversity course from a list of approved courses. Some of the courses in this list will also meet humanities, social science or non-lab science requirements for this degree.

The 64 hours of credit necessary to complete the associate of arts degree include the following:
- Communications (9 credit hours)
- Humanities (6 credit hours)

    - History is included in the Humanities category
- Social Science and/or Economics (6 credit hours)
- Science and Mathematics (9 credit hours)**

    **Must include one course from a lab science and one from mathematics
- Health and/or Physical Education (1 credit)

Note: The associate of arts degree is designed as a transfer curriculum. Students should refer to the transfer program sheets in the Student Success Center.

The following is an example of a first year schedule for an undecided transfer student. Students interested in a specific major or degree should talk with a JCCC counselor.

First Semester - CR (Credit Hours)

ENGL 121 Composition I   3

Social Science Elective 3

Math/Natural Science Elective 3-5

Humanities Elective 3

General Elective 3

Total Credit Hours 15-17

Second Semester - CR (Credit Hours)

ENGL 122 Composition II 3

Oral Communication Elective 3

Math/Natural Science Elective 3-5

Social Science/Humanities Elective 3

General Elective 3

Total Credit Hours 15-17

An associate of arts program is designed specifically to meet your educational objectives and needs by allowing you to complete general education requirements.

General Education Requirements

Communications - 9 hours

A. English Composition - 6 hours

```
ENGL 121   Composition I*......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
ENGL 122   Composition II*.....................................3
           Prerequisite: ENGL 121
*Prerequisite/Corequisite required
```

B. Oral Communication - 3 hours

```
SPD  120   Interpersonal Communication.........................3
SPD  121   Public Speaking.....................................3
SPD  125   Personal Communication..............................3
SPD  180   Intercultural Communication^........................3
^Also meets Cultural Diversity Requirement
```

Humanities - 6 hours

```
No more than one course from each of the five
areas may count toward the six required hours.
```

A. Literature/Theatre

```
ENGL 130   Introduction to Literature*.........................3
           Prerequisite: ENGL 121
ENGL 215   U.S. Latino and Latina Literature*^.................3
           Prerequisite or corequisite: ENGL 122
ENGL 227   Introduction to Poetry*.............................3
           Prerequisite: ENGL 122
ENGL 230   Introduction to Fiction*............................3
           Prerequisite: ENGL 122
ENGL 231   American Prose*.....................................3
           Prerequisite: ENGL 122
ENGL 235   Drama as Literature*................................3
           Prerequisite: ENGL 122
ENGL 241   British Writers*....................................3
ENGL 250   World Masterpieces*.................................3
           Prerequisite: ENGL 122
ENGL 254   Masterpieces of the Cinema*.........................3
           Prerequisite: ENGL 122
ENGL 256   American Poetry*....................................3
           Prerequisite: ENGL 122
```

```
THEA 120  Introduction to Theater.............................3
```
*Prerequisite/Corequisite required
^Also meets Cultural Diversity Requirement

B. Foreign Language

```
FL   178  Intermediate Russian I*..............................3
          Prerequisite: FL 151 or two years of high school Russian
FL   179  Intermediate Russian II*.............................3
          Prerequisite: FL 178
          or three years of high school Russian
FL   192  Intermediate Chinese I*..............................3
          Prerequisite: FL 166 or equivalent
FL   193  Intermediate Chinese II*.............................3
          Prerequisite: FL 192 or equivalent
FL   220  Intermediate German I*...............................3
          Prerequisite: FL 121 or two years of high school German
FL   221  Intermediate German II*..............................3
          Prerequisite: FL 220 or three years of high school German
FL   230  Intermediate Spanish I*..............................3
          Prerequisites: FL 131 with a grade of C or higher or
          three years of high school Spanish or the appropriate
          score on the placement test
FL   231  Intermediate Spanish II*.............................3
          Prerequisite: FL 230 with a grade of C or higher or
          or four years of high school Spanish or the appropriate
          score on the placement test
FL   240  Intermediate French I*...............................3
          Prerequisite: FL 141 or two years of high school French
FL   241  Intermediate French II*..............................3
          Prerequisite: FL 240 or three years of high school French
```
*Prerequisite/Corequisite required

C. History

```
HIST 125  Western Civilization: Readings and Discussion I......3
HIST 126  Western Civilization: Readings and Discussion II.....3
HIST 128  Medieval History.....................................3
HIST 129  Early Modern Europe 1500-1789........................3
HIST 130  European History Since 1789..........................3
HIST 135  Eastern Civilization^................................3
HIST 137  African American Studies^............................3
HIST 140  U.S. History to 1877.................................3
HIST 141  U.S. History Since 1877..............................3
HIST 151  World History I: Traditional World^..................3
HIST 152  World History II: Modern World^......................3
HIST 160  Modern Russian History^..............................3
HIST 162  Modern Latin America^................................3
```
^Also meets Cultural Diversity Requirement

D. Humanities

```
ARTH 180  Art History: Ancient to Renaissance..................3
ARTH 182  Art History: Renaissance to Modern...................3
ARTH 184  Art History: Twentieth Century.......................3
ARTH 188  History of Photography...............................3
HUM  122  Introduction to Humanities...........................3
HUM  145  Introduction to World Humanities I^..................3
HUM  146  Introduction to World Humanities II^.................3
HUM  155  Classical Mythology..................................3
HUM  164  Civilization.........................................3
MUS  121  Introduction to Music Listening......................3
MUS  125  Introduction to Jazz Listening.......................3
MUS  126  Introduction to World Music^.........................3
REL  120  Exploring World Religions^...........................3
REL  125  Religions of the East^...............................3
REL  126  Religions of the West^...............................3
```
^Also meets Cultural Diversity Requirement

E. Philosophy

```
PHIL 121  Introduction to Philosophy...........................3
PHIL 124  Logic and Critical Thinking..........................3
PHIL 143  Ethics.......................................................3
PHIL 154  History of Ancient Philosophy........................3
PHIL 176  Philosophy of Religion................................3
```

Social Science/Economics - 6 hours

```
No more than one course from each of the six
areas may count toward the six required hours.
```

A. Anthropology

```
ANTH 125  Cultural Anthropology^................................3
ANTH 126  Physical Anthropology.................................3
ANTH 130  World Cultures^.......................................3
ANTH 142  World Prehistory......................................3
^Also meets Cultural Diversity Requirement
```

B. Economics

```
ECON 132  Survey of Economics...................................3
ECON 230  Economics I...........................................3
ECON 231  Economics II..........................................3
```

C. Political Science

```
POLS 122  Political Science.....................................3
POLS 124  American National Government..........................3
POLS 126  State and Local Government............................3
POLS 132  Introduction to Comparative Government^..............3
POLS 135  International Relations^..............................3
^Also meets Cultural Diversity Requirement
```

D. Psychology

```
PSYC 121  Applied Psychology....................................3
PSYC 130  Introduction to Psychology............................3
```

E. Sociology

```
SOC  122  Introduction to Sociology^............................3
SOC  125  Social Problems^......................................3
SOC  131  Marriage and the Family...............................3
^Also meets Cultural Diversity Requirement
```

F. Gender and Ethnic Studies

```
WGS  201  Global Women's Studies^...............................3
^Also meets Cultural Diversity Requirement
```

Science and/or Mathematics - 9 hours

```
Must include at least one course from a lab science
and one from mathematics.
```

A. Life Science

```
BIOL 122  Principles of Biology.................................3
```

```
BIOL 123   Principles of Biology Lab*...........................1
           Prerequisite or corequisite: BIOL 122 or
           consent of the assistant dean
BIOL 124   Oceanus: Essentials of Oceanography..................3
BIOL 125   General Botany.......................................5
BIOL 127   General Zoology......................................5
BIOL 130   Environmental Science...............................3
BIOL 131   Environmental Science Lab*..........................1
           Prerequisite or corequisite: BIOL 130
BIOL 140   Human Anatomy.......................................4
BIOL 144   Human Anatomy and Physiology........................5
BIOL 150   Biology of Organisms*...............................5
           Prerequisite: BIOL 135 or
           consent of the assistant dean
BIOL 225   Human Physiology*...................................4
           Prerequisites: CHEM 122 and either BIOL 140 or BIOL 144
BIOL 230   Microbiology*.......................................3
           Prerequisite: CHEM 122 or
           one year of high school chemistry
BIOL 231   Microbiology Lab*...................................2
           BIOL 231 students must be currently enrolled in BIOL 230
           or have successfully completed BIOL 230 within the
           last three years.
*Prerequisite/Corequisite required
```

B. Physical Science

```
ASTR 120   Fundamentals of Astronomy...........................3
ASTR 122   Astronomy...........................................4
CHEM 120   Chemistry in Society................................4
CHEM 122   Principles of Chemistry.............................5
CHEM 124   General Chemistry I Lecture*........................4
           Prerequisite or corequisite: MATH 171 or assessment test
           and
           Corequisite: CHEM 125
CHEM 125   General Chemistry I Lab*............................1
           Prerequisite or Corequisite: CHEM 124
           Students who withdraw from GENERAL CHEMISTRY I
           LECTURE must
           also withdraw from the corresponding laboratory
           GENERAL CHEMISTRY I LABORATORY
           Students may not withdraw from the laboratory course
           GENERAL CHEMISTRY I LABORATORY without withdrawing from
           CHEMISTRY I LECTURE.
CHEM 131   General Chemistry II Lecture*.......................4
           Prerequisites: CHEM 124 and CHEM 125 and
           Corequisite: CHEM 132
CHEM 132   General Chemistry II Lab*...........................1
           Prerequisites: CHEM 124 and CHEM 125 and
           Corequisite: CHEM 131
           Students
           who withdraw from GENERAL CHEMISTRY II LECTURE
           must also withdraw from the corresponding
           laboratory GENERAL CHEMISTRY II LABORATORY.
           Students may not withdraw from the laboratory
           course GENERAL CHEMISTRY II LABORATORY without
           withdrawing from CHEMISTRY II LECTURE.
CHEM 140   Principles of Organic & Biological Chemistry*.......5
           Prerequisites: BIOL 135
           and CHEM 122 or permission of the assistant dean
GEOS 130   General Geology.....................................5
GEOS 140   Physical Geography..................................3
GEOS 141   Physical Geography Lab*.............................2
           Prerequisite or Corequisite: GEOS 140 or the equivalent
GEOS 145   World Regional Geography^...........................3
PHYS 130   General Physics I*..................................5
           Prerequisite: MATH 171 or assessment scores
PHYS 131   General Physics II*.................................5
           Prerequisite: PHYS 130
PHYS 220   Engineering Physics I*..............................5
```

```
             Prerequisite or corequisite: MATH 242
PHYS 221   Engineering Physics II*...............................5
             Prerequisites: PHYS 220 and MATH 242
PSCI 120   Physical Science.....................................4
*Prerequisite/Corequisite required
^Also meets Cultural Diversity Requirement
```

C. Mathematics

```
MATH 165   Finite Mathematics*..................................3
             Prerequisite: MATH 116 with a grade of "C" or higher
             or appropriate score on the math assessment test
MATH 171   College Algebra*+....................................3
             Prerequisite: MATH 116 with a grade of "C" or higher
             or MATH 134 with a grade of "C" or higher
             or appropriate score on the math assessment test
             Note: Not available to students with credit in MATH 173
MATH 172   Trigonometry*+.......................................3
             Prerequisite: MATH 171 with a grade of "C" or higher
             or appropriate score on the math assessment test
             Note: Not available to students with credit in MATH 173
MATH 173   Precalculus*+........................................5
             Prerequisite: MATH 116 with a grade of "C" or higher
             or appropriate score on the math assessment test
             Note:Not available for credit for students with credit in
             MATH 171 and/or MATH 172
MATH 175   Discrete Mathematics and its Applications*...........3
             Prerequisite: MATH 171 or MATH 173
             with a grade of "C" or higher
             or appropriate score on the math assessment test
MATH 181   Statistics*..........................................3
             Prerequisite: MATH 171 or MATH 173
             or an equivalent course with a grade of "C" or higher
             or appropriate score on the math assessment test
MATH 225   Mathematics as a Decision Making Tool*...............3
             Prerequisite: MATH 171 or MATH 173
             with a grade of "C" or higher
             or appropriate score on the math assessment test
MATH 231   Business and Applied Calculus I*.....................3
             Prerequisite: MATH 171 or MATH 173
             with a grade of "C" or higher
             or appropriate score on the math assessment test
MATH 232   Business and Applied Calculus II*....................3
             Prerequisites: MATH 231 and either MATH 172 or MATH 173
             with a grade of "C" or higher
             or appropriate score on the math assessment test
MATH 241   Calculus I*..........................................5
             Prerequisite: MATH 172 or MATH 173
             or an equivalent course with a grade of "C" or higher
             or an appropriate score on an assessment test
MATH 242   Calculus II*.........................................5
             Prerequisite: MATH 237 or MATH 241
             or an equivalent course with a grade of "C" or higher
MATH 243   Calculus III*........................................5
             Prerequisite: MATH 242
             or an equivalent course with a grade of "C" or higher
MATH 244   Differential Equations*..............................3
             Prerequisite: MATH 243
             or an equivalent course with a grade of "C" or higher
*Prerequisite/Corequisite required
```

```
Note: +MATH 173 is not available for credit to students
who have completed MATH 171 and/or MATH 172.
Students who have credit in MATH 173 will not
receive credit for MATH 171 and/or MATH 172.
```

Health and/or Physical Education - 1 hour

```
HPER       Any Activity Course..................................1
EMS  121   CPR I - Basic Life Support for Healthcare Provider...1
HMEC 151   Nutrition and Meal Planning..........................3
HPER 192   Wellness for Life....................................1
HPER 200   First Aid and CPR....................................2
HPER 202   Personal Community Health............................3
HPER 205   Individual Lifetime Sports...........................2
HPER 240   Lifetime Fitness I...................................1
HPER 255   Introduction to Physical Education...................3
```

Cultural Diversity Requirement - 1 course

```
ANTH 125   Cultural Anthropology~...............................3
ANTH 130   World Cultures~......................................3
ANTH 134   Native Americans.....................................3
ANTH 135   American Indian Artistic Tradition...................3
ANTH 142   World Prehistory.....................................3
ANTH 150   People and Cultures of Mesoamerica...................3
ARTH 186   Art History: Introduction to Asian Art...............3
BUS  235   Introduction to International Business...............3
ENGL 215   U.S. Latino and Latina Literature*~..................3
           Prerequisite or corequisite: ENGL 122
FL   145   Field Study in Russian Language & Culture............2
GEOS 145   World Regional Geography~............................3
HC   125   International Awareness Field Study...................2
HIST 135   Eastern Civilization~................................3
HIST 137   African American Studies~............................3
HIST 150   Islam: Religion & Civilization.......................3
HIST 151   World History I: Traditional World~..................3
HIST 152   World History II: Modern World~......................3
HIST 160   Modern Russian History~..............................3
HIST 162   Modern Latin America~................................3
HIST 195   History of the Middle East...........................3
HUM  137   Introduction to Russian Culture......................3
HUM  145   Introduction to World Humanities I~..................3
HUM  146   Introduction to World Humanities II~.................3
HUM  150   Islam: Religion & Civilization.......................3
INTR 145   Introduction to the Deaf Community...................3
           Prerequisite: Acceptance to interpreter training program
           and
           Prerequisite or corequisite: ANTH 125 and SPD 120 for
           Interpreter Training Program
           Corequisites for Interpreter Training Prog: INTR 122 and
           INTR 126 and INTR 130 and INTR 147
           all with a grade of "C" or higher
           Note: Prerequisite or corequisite of INTR 120 or ASL 120
           or FL 180
           required for students in the American Sign Language
           Studies Certificate
MUS  126   Introduction to World Music~.........................3
POLS 132   Introduction to Comparative Government...............3
POLS 135   International Relations~..............................3
POLS 200   Model United Nations.................................3
PSYC 205   Human Sexuality*.....................................3
           Prerequisite: PSYC 130
REL  120   Exploring World Religions~...........................3
REL  125   Religions of the East~...............................3
REL  126   Religions of the West~...............................3
REL  150   Islam: Religion & Civilization.......................3
SOC  122   Introduction to Sociology~...........................3
SOC  125   Social Problems~.....................................3
SOC  146   Introduction to Social Work and Social Welfare.......3
SOC  165   Chinese Society: Past and Present....................3
SOC  200   Intercultural Applications...........................3
           Prerequisite or corequisite:  SPD 180
SPD  180   Intercultural Communication~.........................3
WGS  201   Global Women's Studies~..............................3
WGS  220   The Many Women of Islam..............................3
*Prerequisite/Corequisite required
```

~also meets a General Education requirement

Associate of Science

The associate of science degree from JCCC
- is designed with an emphasis in a specific career program.
- requires completion of a minimum of 64 college-level credit hours within specified course distribution areas, including the emphasis of study, with a 2.0 or higher GPA.
- requires the completion of a cultural diversity course from a list of approved courses. Some of the courses in this list will also meet humanities, social science or non-lab science requirements for this degree.

The 64 hours of credit necessary to complete the associate of science degree include the following general education requirements plus the courses listed for the specific career program:
- Communications (9 hours)
- Humanities (6 hours)
- Social Science and/or Economics (6 hours)
- Science and Mathematics (12 hours)
- Health and/or Physical Education (1 hour)

Specific courses that meet the associate of science degree requirements are:

General Education Requirements

(available for career programs only)

A. Communications - 9 hours

```
ENGL 121   Composition I*......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
*Prerequisite/Corequisite required
```

B. Communications Elective - 6 hours

(two of the following)

```
ENGL 122   Composition II*.....................................3
           Prerequisite: ENGL 121
ENGL 123   Technical Writing I*................................3
           Prerequisite: ENGL 121
ENGL 140   Writing for Interactive Media*......................3
           Prerequisite: ENGL 121
BUS  150   Business Communications*............................3
           Prerequisite: ENGL 121
SPD  120   Interpersonal Communication.........................3
SPD  121   Public Speaking.....................................3
SPD  125   Personal Communication..............................3
SPD  180   Intercultural Communication^........................3
*Prerequisite/Corequisite required
^Also meets Cultural Diversity Requirement
```

Humanities - 6 hours

```
Two courses from any of the following categories
may count toward the six required hours.
```

A. Literature/Theater

```
ENGL 130   Introduction to Literature*..........................3
           Prerequisite: ENGL 121
ENGL 215   U.S. Latino and Latina Literature*^..................3
           Prerequisite or corequisite: ENGL 122
ENGL 227   Introduction to Poetry*..............................3
           Prerequisite: ENGL 122
ENGL 230   Introduction to Fiction*.............................3
           Prerequisite: ENGL 122
ENGL 231   American Prose*......................................3
           Prerequisite: ENGL 122
ENGL 235   Drama as Literature*.................................3
           Prerequisite: ENGL 122
ENGL 241   British Writers*.....................................3
ENGL 250   World Masterpieces*..................................3
           Prerequisite: ENGL 122
ENGL 254   Masterpieces of the Cinema*..........................3
           Prerequisite: ENGL 122
ENGL 256   American Poetry*.....................................3
           Prerequisite: ENGL 122
THEA 120   Introduction to Theater..............................3
*Prerequisite/Corequisite required
^Also meets Cultural Diversity Requirement
```

B. Foreign Language

```
FL   178   Intermediate Russian I*..............................3
           Prerequisite: FL 151 or two years of high school Russian
FL   179   Intermediate Russian II*.............................3
           Prerequisite: FL 178
           or three years of high school Russian
FL   192   Intermediate Chinese I*..............................3
           Prerequisite: FL 166 or equivalent
FL   193   Intermediate Chinese II*.............................3
           Prerequisite: FL 192 or equivalent
FL   220   Intermediate German I*...............................3
           Prerequisite: FL 121 or two years of high school German
FL   221   Intermediate German II*..............................3
           Prerequisite: FL 220 or three years of high school German
FL   230   Intermediate Spanish I*..............................3
           Prerequisites: FL 131 with a grade of C or higher or
           three years of high school Spanish or the appropriate
           score on the placement test
FL   231   Intermediate Spanish II*.............................3
           Prerequisite: FL 230 with a grade of C or higher or
           or four years of high school Spanish or the appropriate
           score on the placement test
FL   240   Intermediate French I*...............................3
           Prerequisite: FL 141 or two years of high school French
FL   241   Intermediate French II*..............................3
           Prerequisite: FL 240 or three years of high school French
*Prerequisite/Corequisite required
```

C. History

```
HIST 125   Western Civilization: Readings and Discussion I......3
HIST 126   Western Civilization: Readings and Discussion II.....3
HIST 128   Medieval History.....................................3
HIST 129   Early Modern Europe 1500-1789........................3
HIST 130   European History Since 1789..........................3
HIST 135   Eastern Civilization^................................3
HIST 137   African American Studies^............................3
HIST 140   U.S. History to 1877.................................3
HIST 141   U.S. History Since 1877..............................3
HIST 151   World History I: Traditional World^..................3
HIST 152   World History II: Modern World^......................3
HIST 160   Modern Russian History^..............................3
HIST 162   Modern Latin America^................................3
```

^Also meets Cultural Diversity Requirement

D. Humanities

```
ARTH 180   Art History: Ancient to Renaissance..................3
ARTH 182   Art History: Renaissance to Modern...................3
ARTH 184   Art History: Twentieth Century.......................3
ARTH 188   History of Photography...............................3
HUM  122   Introduction to Humanities...........................3
HUM  145   Introduction to World Humanities I^..................3
HUM  146   Introduction to World Humanities II^.................3
HUM  155   Classical Mythology..................................3
HUM  164   Civilization.........................................3
MUS  121   Introduction to Music Listening......................3
MUS  125   Introduction to Jazz Listening.......................3
MUS  126   Introduction to World Music^.........................3
REL  120   Exploring World Religions^...........................3
REL  125   Religions of the East^...............................3
REL  126   Religions of the West^...............................3
```
^Also meets Cultural Diversity Requirement

E. Philosophy

```
PHIL 121   Introduction to Philosophy...........................3
PHIL 124   Logic and Critical Thinking..........................3
PHIL 143   Ethics...............................................3
PHIL 154   History of Ancient Philosophy........................3
PHIL 176   Philosophy of Religion...............................3
```

Social Science/Economics - 6 hours

Two courses from any of the following categories
may count toward the six required hours.

A. Anthropology

```
ANTH 125   Cultural Anthropology^...............................3
ANTH 126   Physical Anthropology................................3
ANTH 130   World Cultures^......................................3
ANTH 142   World Prehistory.....................................3
```
^Also meets Cultural Diversity Requirement

B. Economics

```
ECON 132   Survey of Economics..................................3
ECON 230   Economics I..........................................3
ECON 231   Economics II.........................................3
```

C. Political Science

```
POLS 122   Political Science....................................3
POLS 124   American National Government.........................3
POLS 126   State and Local Government...........................3
POLS 132   Introduction to Comparative Government^..............3
POLS 135   International Relations^..............................3
```
^Also meets Cultural Diversity Requirement

D. Psychology

```
PSYC 121   Applied Psychology...................................3
PSYC 130   Introduction to Psychology...........................3
```

E. Sociology

```
SOC   122  Introduction to Sociology^...........................3
SOC   125  Social Problems^.....................................3
SOC   131  Marriage and the Family..............................3
^Also meets Cultural Diversity Requirement
```

F. Gender and Ethnic Studies

```
WGS   201  Global Women's Studies^..............................3
^Also meets Cultural Diversity Requirement
```

Science and Mathematics -12 hours

Must include at least one course in mathematics
and at least one in a lab science.

The mathematics requirement will be satisfied by
any mathematics course except Fundamentals of
Mathematics and Elementary Algebra.

A. Science

(Life Science)

```
BIOL 122  Principles of Biology................................3
BIOL 123  Principles of Biology Lab*..........................1
          Prerequisite or corequisite: BIOL 122 or
          consent of the assistant dean
BIOL 124  Oceanus: Essentials of Oceanography.................3
BIOL 125  General Botany.......................................5
BIOL 127  General Zoology......................................5
BIOL 130  Environmental Science...............................3
BIOL 131  Environmental Science Lab*..........................1
          Prerequisite or corequisite: BIOL 130
BIOL 140  Human Anatomy........................................4
BIOL 144  Human Anatomy and Physiology........................5
BIOL 150  Biology of Organisms*...............................5
          Prerequisite: BIOL 135 or
          consent of the assistant dean
BIOL 225  Human Physiology*...................................4
          Prerequisites: CHEM 122 and either BIOL 140 or BIOL 144
BIOL 230  Microbiology*.......................................3
          Prerequisite: CHEM 122 or
          one year of high school chemistry
BIOL 231  Microbiology Lab*...................................2
          BIOL 231 students must be currently enrolled in BIOL 230
          or have successfully completed BIOL 230 within the
          last three years.
*Prerequisite/Corequisite required
```

(Physical Science)

```
ASTR 120  Fundamentals of Astronomy...........................3
ASTR 122  Astronomy...........................................4
CHEM 120  Chemistry in Society................................4
CHEM 122  Principles of Chemistry.............................5
CHEM 124  General Chemistry I Lecture*........................4
          Prerequisite or corequisite: MATH 171 or assessment test
          and
          Corequisite: CHEM 125
CHEM 125  General Chemistry I Lab*............................1
          Prerequisite or Corequisite: CHEM 124
          Students who withdraw from GENERAL CHEMISTRY I
          LECTURE must
          also withdraw from the corresponding laboratory
```

```
          GENERAL CHEMISTRY I LABORATORY
          Students may not withdraw from the laboratory course
          GENERAL CHEMISTRY I LABORATORY without withdrawing from
          CHEMISTRY I LECTURE.
CHEM 131  General Chemistry II Lecture*......................4
          Prerequisites: CHEM 124 and CHEM 125 and
          Corequisite: CHEM 132
CHEM 132  General Chemistry II Lab*..........................1
          Prerequisites: CHEM 124 and CHEM 125 and
          Corequisite: CHEM 131
          Students
          who withdraw from GENERAL CHEMISTRY II LECTURE
          must also withdraw from the corresponding
          laboratory GENERAL CHEMISTRY II LABORATORY.
          Students may not withdraw from the laboratory
          course GENERAL CHEMISTRY II LABORATORY without
          withdrawing from CHEMISTRY II LECTURE.
CHEM 140  Principles of Organic & Biological Chemistry*........5
          Prerequisites: BIOL 135
          and CHEM 122 or permission of the assistant dean
GEOS 130  General Geology....................................5
GEOS 140  Physical Geography.................................3
GEOS 141  Physical Geography Lab*............................2
          Prerequisite or Corequisite: GEOS 140 or the equivalent
GEOS 145  World Regional Geography^..........................3
PHYS 130  General Physics I*.................................5
          Prerequisite: MATH 171 or assessment scores
PHYS 131  General Physics II*................................5
          Prerequisite: PHYS 130
PHYS 220  Engineering Physics I*.............................5
          Prerequisite or corequisite: MATH 242
PHYS 221  Engineering Physics II*............................5
          Prerequisites: PHYS 220 and MATH 242
PSCI 120  Physical Science...................................4
*Prerequisite/Corequisite required
^Also meets Cultural Diversity Requirement
```

Any remaining hours for this requirement beyond the
one math and one lab science requirement may be
satisfied by taking additional courses from the approved
math and lab science courses.

Health and/or Physical Education - 1 hour

```
HPER      Any Activity Course................................1
EMS  121  CPR I - Basic Life Support for Healthcare Provider...1
HMEC 151  Nutrition and Meal Planning........................3
HPER 192  Wellness for Life..................................1
HPER 200  First Aid and CPR..................................2
HPER 202  Personal Community Health..........................3
HPER 205  Individual Lifetime Sports.........................2
HPER 240  Lifetime Fitness I.................................1
HPER 255  Introduction to Physical Education.................3
```

Cultural Diversity Requirement - 1 course

```
ANTH 125  Cultural Anthropology~.............................3
ANTH 130  World Cultures~....................................3
ANTH 134  Native Americans...................................3
ANTH 135  American Indian Artistic Tradition.................3
ANTH 142  World Prehistory...................................3
ANTH 150  People and Cultures of Mesoamerica.................3
ARTH 186  Art History: Introduction to Asian Art.............3
BUS  235  Introduction to International Business.............3
ENGL 215  U.S. Latino and Latina Literature*~...............3
```

```
            Prerequisite or corequisite: ENGL 122
FL   145   Field Study in Russian Language & Culture............2
GEOS 145   World Regional Geography~...........................3
HC   125   International Awareness Field Study..................2
HIST 135   Eastern Civilization~...............................3
HIST 137   African American Studies~...........................3
HIST 150   Islam: Religion & Civilization......................3
HIST 151   World History I: Traditional World~.................3
HIST 152   World History II: Modern World~.....................3
HIST 160   Modern Russian History~.............................3
HIST 162   Modern Latin America~...............................3
HIST 195   History of the Middle East..........................3
HUM  137   Introduction to Russian Culture.....................3
HUM  145   Introduction to World Humanities I~.................3
HUM  146   Introduction to World Humanities II~................3
HUM  150   Islam: Religion & Civilization......................3
INTR 145   Introduction to the Deaf Community..................3
            Prerequisite: Acceptance to interpreter training program
            and
            Prerequisite or corequisite: ANTH 125 and SPD 120 for
            Interpreter Training Program
            Corequisites for Interpreter Training Prog: INTR 122 and
            INTR 126 and INTR 130 and INTR 147
            all with a grade of "C" or higher
            Note: Prerequisite or corequisite of INTR 120 or ASL 120
            or FL 180
            required for students in the American Sign Language
            Studies Certificate
MUS  126   Introduction to World Music~........................3
POLS 132   Introduction to Comparative Government...............3
POLS 135   International Relations~.............................3
POLS 200   Model United Nations................................3
PSYC 205   Human Sexuality*....................................3
            Prerequisite: PSYC 130
REL  120   Exploring World Religions~..........................3
REL  125   Religions of the East~..............................3
REL  126   Religions of the West~..............................3
REL  150   Islam: Religion & Civilization......................3
SOC  122   Introduction to Sociology~..........................3
SOC  125   Social Problems~....................................3
SOC  146   Introduction to Social Work and Social Welfare......3
SOC  165   Chinese Society: Past and Present...................3
SOC  200   Intercultural Applications..........................3
            Prerequisite or corequisite:  SPD 180
SPD  180   Intercultural Communication~........................3
WGS  201   Global Women's Studies~.............................3
WGS  220   The Many Women of Islam.............................3
*Prerequisite/Corequisite required
~also meets a General Education requirement
```

Associate of Applied Science

The associate of applied science degree from JCCC
- is designed with an emphasis in a specific career program.
- requires completion of a minimum of 64 college-level credit hours within specified course distribution areas, including emphasis of study, with a 2.0 GPA.

The 64 hours of credit necessary to complete the associate of applied science degree include 15 credits of general education requirements plus the courses listed for the specific career program. At a minimum, the distribution must include:
- Communications (3 hours)
- Humanities (3 hours)
- Social Science and/or Economics (3 hours)

- Science and Mathematics (3 hours)
- 3 additional credit hours to be selected from one of the above categories
- Health and/or Physical Education (1 hour)

Specific courses that meet the associate of applied science degree requirements are:

General Education Requirements

(available for career programs only)

A.   Communications - 3 hours

```
ENGL 121  Composition I*.....................................3
          Prerequisite: ENGL 106
          or appropriate placement test score or EAP 113 and
          EAP 117
*Prerequisite/Corequisite required


If your specific degree program requires a communications
elective, choose three hours from the following:

ENGL 122  Composition II*....................................3
          Prerequisite: ENGL 121
ENGL 123  Technical Writing I*...............................3
          Prerequisite: ENGL 121
ENGL 140  Writing for Interactive Media*.....................3
          Prerequisite: ENGL 121
BUS  150  Business Communications*...........................3
          Prerequisite: ENGL 121
SPD  120  Interpersonal Communication.........................3
SPD  121  Public Speaking.....................................3
SPD  125  Personal Communication..............................3
SPD  180  Intercultural Communication.........................3
*Prerequisite/Corequisite required
```

Humanities - 3 hours

```
One course from any of the following categories
may count toward the three required hours.
```

A.   Literature/Theater

```
ENGL 130  Introduction to Literature*.........................3
          Prerequisite: ENGL 121
ENGL 215  U.S. Latino and Latina Literature*..................3
          Prerequisite or corequisite: ENGL 122
ENGL 227  Introduction to Poetry*.............................3
          Prerequisite: ENGL 122
ENGL 230  Introduction to Fiction*............................3
          Prerequisite: ENGL 122
ENGL 231  American Prose*.....................................3
          Prerequisite: ENGL 122
ENGL 235  Drama as Literature*................................3
          Prerequisite: ENGL 122
ENGL 241  British Writers*....................................3
ENGL 250  World Masterpieces*.................................3
          Prerequisite: ENGL 122
ENGL 254  Masterpieces of the Cinema*.........................3
          Prerequisite: ENGL 122
ENGL 256  American Poetry*....................................3
          Prerequisite: ENGL 122
THEA 120  Introduction to Theater.............................3
```

B. Foreign Language

```
FL    178   Intermediate Russian I*................................3
            Prerequisite: FL 151 or two years of high school Russian
FL    179   Intermediate Russian II*..............................3
            Prerequisite: FL 178
            or three years of high school Russian
FL    192   Intermediate Chinese I*...............................3
            Prerequisite: FL 166 or equivalent
FL    193   Intermediate Chinese II*..............................3
            Prerequisite: FL 192 or equivalent
FL    220   Intermediate German I*................................3
            Prerequisite: FL 121 or two years of high school German
FL    221   Intermediate German II*...............................3
            Prerequisite: FL 220 or three years of high school German
FL    230   Intermediate Spanish I*...............................3
            Prerequisites: FL 131 with a grade of C or higher or
            three years of high school Spanish or the appropriate
            score on the placement test
FL    231   Intermediate Spanish II*..............................3
            Prerequisite: FL 230 with a grade of C or higher or
            or four years of high school Spanish or the appropriate
            score on the placement test
FL    240   Intermediate French I*................................3
            Prerequisite: FL 141 or two years of high school French
FL    241   Intermediate French II*...............................3
            Prerequisite: FL 240 or three years of high school French
```

C. History

```
HIST 125   Western Civilization: Readings and Discussion I......3
HIST 126   Western Civilization: Readings and Discussion II.....3
HIST 128   Medieval History.....................................3
HIST 129   Early Modern Europe 1500-1789........................3
HIST 130   European History Since 1789..........................3
HIST 135   Eastern Civilization.................................3
HIST 137   African American Studies.............................3
HIST 140   U.S. History to 1877.................................3
HIST 141   U.S. History Since 1877..............................3
HIST 151   World History I: Traditional World...................3
HIST 152   World History II: Modern World.......................3
HIST 160   Modern Russian History...............................3
HIST 162   Modern Latin America.................................3
```

D. Humanities

```
ARTH 180   Art History: Ancient to Renaissance..................3
ARTH 182   Art History: Renaissance to Modern...................3
ARTH 184   Art History: Twentieth Century.......................3
ARTH 188   History of Photography...............................3
HUM  122   Introduction to Humanities...........................3
HUM  145   Introduction to World Humanities I...................3
HUM  146   Introduction to World Humanities II..................3
HUM  155   Classical Mythology..................................3
HUM  164   Civilization.........................................3
MUS  121   Introduction to Music Listening......................3
MUS  125   Introduction to Jazz Listening.......................3
MUS  126   Introduction to World Music..........................3
REL  120   Exploring World Religions............................3
REL  125   Religions of the East................................3
REL  126   Religions of the West................................3
```

E. Philosophy

```
PHIL 121   Introduction to Philosophy...........................3
```

```
PHIL 124   Logic and Critical Thinking..........................3
PHIL 143   Ethics...............................................3
PHIL 154   History of Ancient Philosophy........................3
PHIL 176   Philosophy of Religion...............................3
```

Social Science/Economics - 3 hours

```
One course from any of the following categories
may count toward the three required hours.
```

A. Anthropology

```
ANTH 125   Cultural Anthropology................................3
ANTH 126   Physical Anthropology................................3
ANTH 130   World Cultures.......................................3
ANTH 142   World Prehistory.....................................3
```

B. Economics

```
ECON 132   Survey of Economics..................................3
ECON 230   Economics I..........................................3
ECON 231   Economics II.........................................3
```

C. Political Science

```
POLS 122   Political Science....................................3
POLS 124   American National Government.........................3
POLS 126   State and Local Government...........................3
POLS 132   Introduction to Comparative Government...............3
POLS 135   International Relations..............................3
```

D. Psychology

```
PSYC 121   Applied Psychology...................................3
PSYC 130   Introduction to Psychology...........................3
```

E. Sociology

```
SOC  122   Introduction to Sociology............................3
SOC  125   Social Problems......................................3
SOC  131   Marriage and the Family..............................3
```

F. Gender and Ethnic Studies

```
WGS  201   Global Women's Studies...............................3
```

Science and/or Mathematics - 3 hours

```
Any mathematics course except Fundamentals of Mathematics or
Elementary Algebra will satisfy this requirement, or
the requirement can be satisfied by any of the following
courses.
```

A. Life Science

```
BIOL 122   Principles of Biology................................3
BIOL 123   Principles of Biology Lab*...........................1
           Prerequisite or corequisite: BIOL 122 or
           consent of the assistant dean
BIOL 124   Oceanus: Essentials of Oceanography..................3
BIOL 125   General Botany.......................................5
```

```
BIOL 127   General Zoology.........................................5
BIOL 130   Environmental Science...................................3
BIOL 131   Environmental Science Lab*..............................1
           Prerequisite or corequisite: BIOL 130
BIOL 140   Human Anatomy...........................................4
BIOL 144   Human Anatomy and Physiology............................5
BIOL 150   Biology of Organisms*...................................5
           Prerequisite: BIOL 135 or
           consent of the assistant dean
BIOL 225   Human Physiology*.......................................4
           Prerequisites: CHEM 122 and either BIOL 140 or BIOL 144
BIOL 230   Microbiology*...........................................3
           Prerequisite: CHEM 122 or
           one year of high school chemistry
BIOL 231   Microbiology Lab*.......................................2
           BIOL 231 students must be currently enrolled in BIOL 230
           or have successfully completed BIOL 230 within the
           last three years.
*Prerequisite/Corequisite required
```

B. Physical Science

```
ASTR 120   Fundamentals of Astronomy...............................3
ASTR 122   Astronomy...............................................4
CHEM 120   Chemistry in Society....................................4
CHEM 122   Principles of Chemistry.................................5
CHEM 124   General Chemistry I Lecture*............................4
           Prerequisite or corequisite: MATH 171 or assessment test
           and
           Corequisite: CHEM 125
CHEM 125   General Chemistry I Lab*................................1
           Prerequisite or Corequisite: CHEM 124
           Students who withdraw from GENERAL CHEMISTRY I
           LECTURE must
           also withdraw from the corresponding laboratory
           GENERAL CHEMISTRY I LABORATORY
           Students may not withdraw from the laboratory course
           GENERAL CHEMISTRY I LABORATORY without withdrawing from
           CHEMISTRY I LECTURE.
CHEM 131   General Chemistry II Lecture*...........................4
           Prerequisites: CHEM 124 and CHEM 125 and
           Corequisite: CHEM 132
CHEM 132   General Chemistry II Lab*...............................1
           Prerequisites: CHEM 124 and CHEM 125 and
           Corequisite: CHEM 131
           Students
           who withdraw from GENERAL CHEMISTRY II LECTURE
           must also withdraw from the corresponding
           laboratory GENERAL CHEMISTRY II LABORATORY.
           Students may not withdraw from the laboratory
           course GENERAL CHEMISTRY II LABORATORY without
           withdrawing from CHEMISTRY II LECTURE.
CHEM 140   Principles of Organic & Biological Chemistry*...........5
           Prerequisites: BIOL 135
           and CHEM 122 or permission of the assistant dean
GEOS 130   General Geology.........................................5
GEOS 140   Physical Geography......................................3
GEOS 141   Physical Geography Lab*.................................2
           Prerequisite or Corequisite: GEOS 140 or the equivalent
GEOS 145   World Regional Geography................................3
PHYS 130   General Physics I*......................................5
           Prerequisite: MATH 171 or assessment scores
PHYS 131   General Physics II*.....................................5
           Prerequisite: PHYS 130
PHYS 220   Engineering Physics I*..................................5
           Prerequisite or corequisite: MATH 242
PHYS 221   Engineering Physics II*.................................5
           Prerequisites: PHYS 220 and MATH 242
PSCI 120   Physical Science........................................4
*Prerequisite/Corequisite required
```

```
Note: MATH 173 is not available for credit to students
who have completed  MATH 171 and/or MATH 172.
Students who have credit in MATH 173 will not receive
credit for MATH 171 and/or MATH 172.
```

Health and/or Physical Education - 1 hour

```
HPER       Any Activity Course....................................1
EMS  121   CPR I - Basic Life Support for Healthcare Provider...1
HMEC 151   Nutrition and Meal Planning..........................3
HPER 192   Wellness for Life....................................1
HPER 200   First Aid and CPR....................................2
HPER 202   Personal Community Health............................3
HPER 205   Individual Lifetime Sports...........................2
HPER 240   Lifetime Fitness I...................................1
HPER 255   Introduction to Physical Education...................3
```

Associate of General Studies

The associate of general studies degree from JCCC

- is designed for students who do not plan to transfer to a traditional baccalaureate institution, but wish to receive recognition for completion of a more general program of study
- requires completion of 64 college-level credit hours within specified course distribution areas with a 2.0 or higher GPA.

The 64 hours of credit necessary to complete the associate of general studies degree include the following:
General Education Requirements (26 credit hours)

- The Arts (3 hours)
- Communication Skills (6 hours)
- Culture and Ethics (6 hours)
- Health, Physical Education, Recreation (2 hours)
- Mathematics (3 hours)
- Modes of Inquiry (6 hours)

Computer Skills (3 credit hours)

Global Issues/Diversity (3 credit hours)

College level electives (32 credit hours)
Courses may not be used to satisfy requirements in more than one category.

The Arts - 3 hours

```
ARTH 180   Art History: Ancient to Renaissance..................3
ARTH 182   Art History: Renaissance to Modern...................3
ARTH 184   Art History: Twentieth Century.......................3
ARTH 188   History of Photography...............................3
FL   178   Intermediate Russian I*..............................3
           Prerequisite: FL 151 or two years of high school Russian
FL   179   Intermediate Russian II*.............................3
           Prerequisite: FL 178
           or three years of high school Russian
FL   192   Intermediate Chinese I*..............................3
           Prerequisite: FL 166 or equivalent
FL   193   Intermediate Chinese II*.............................3
```

```
                    Prerequisite: FL 192 or equivalent
FL   220    Intermediate German I*...............................3
            Prerequisite: FL 121 or two years of high school German
FL   221    Intermediate German II*..............................3
            Prerequisite: FL 220 or three years of high school German
FL   230    Intermediate Spanish I*..............................3
            Prerequisites: FL 131 with a grade of C or higher or
            three years of high school Spanish or the appropriate
            score on the placement test
FL   231    Intermediate Spanish II*.............................3
            Prerequisite: FL 230 with a grade of C or higher or
            or four years of high school Spanish or the appropriate
            score on the placement test
FL   240    Intermediate French I*...............................3
            Prerequisite: FL 141 or two years of high school French
FL   241    Intermediate French II*..............................3
            Prerequisite: FL 240 or three years of high school French
HUM  122    Introduction to Humanities...........................3
HUM  145    Introduction to World Humanities I...................3
HUM  146    Introduction to World Humanities II..................3
HUM  155    Classical Mythology..................................3
HUM  164    Civilization.........................................3
MUS  121    Introduction to Music Listening......................3
MUS  125    Introduction to Jazz Listening.......................3
MUS  126    Introduction to World Music..........................3
THEA 120    Introduction to Theater..............................3
*Prerequisite/Corequisite required
```

Culture and Ethics - 6 hours

Historical Perspective - 3 hours

```
ENGL 130    Introduction to Literature*..........................3
            Prerequisite: ENGL 121
ENGL 230    Introduction to Fiction*.............................3
            Prerequisite: ENGL 122
ENGL 231    American Prose*......................................3
            Prerequisite: ENGL 122
ENGL 235    Drama as Literature*.................................3
            Prerequisite: ENGL 122
ENGL 241    British Writers*.....................................3
ENGL 250    World Masterpieces*..................................3
            Prerequisite: ENGL 122
ENGL 256    American Poetry*.....................................3
            Prerequisite: ENGL 122
GEOS 130    General Geology......................................5
GEOS 140    Physical Geography...................................3
GEOS 141    Physical Geography Lab*..............................2
            Prerequisite or Corequisite: GEOS 140 or the equivalent
HIST 125    Western Civilization: Readings and Discussion I......3
HIST 126    Western Civilization: Readings and Discussion II.....3
HIST 128    Medieval History.....................................3
HIST 130    European History Since 1789..........................3
HIST 135    Eastern Civilization.................................3
HIST 137    African American Studies.............................3
HIST 140    U.S. History to 1877.................................3
HIST 141    U.S. History Since 1877..............................3
HIST 151    World History I: Traditional World...................3
HIST 152    World History II: Modern World.......................3
HIST 160    Modern Russian History...............................3
HIST 162    Modern Latin America.................................3
PHIL 154    History of Ancient Philosophy........................3
POLS 124    American National Government.........................3
POLS 126    State and Local Government...........................3
*Prerequisite/Corequisite required
```

Cultural Perspective - 3 hours

```
ANTH 125   Cultural Anthropology................................3
ANTH 130   World Cultures......................................3
ENGL 130   Introduction to Literature*.........................3
           Prerequisite: ENGL 121
ENGL 230   Introduction to Fiction*............................3
           Prerequisite: ENGL 122
ENGL 231   American Prose*.....................................3
           Prerequisite: ENGL 122
ENGL 235   Drama as Literature*................................3
           Prerequisite: ENGL 122
ENGL 241   British Writers*....................................3
ENGL 250   World Masterpieces*.................................3
           Prerequisite: ENGL 122
ENGL 254   Masterpieces of the Cinema*.........................3
           Prerequisite: ENGL 122
ENGL 256   American Poetry*....................................3
           Prerequisite: ENGL 122
FL   178   Intermediate Russian I*.............................3
           Prerequisite: FL 151 or two years of high school Russian
FL   179   Intermediate Russian II*............................3
           Prerequisite: FL 178
           or three years of high school Russian
FL   192   Intermediate Chinese I*.............................3
           Prerequisite: FL 166 or equivalent
FL   193   Intermediate Chinese II*............................3
           Prerequisite: FL 192 or equivalent
FL   220   Intermediate German I*..............................3
           Prerequisite: FL 121 or two years of high school German
FL   221   Intermediate German II*.............................3
           Prerequisite: FL 220 or three years of high school German
FL   230   Intermediate Spanish I*.............................3
           Prerequisites: FL 131 with a grade of C or higher or
           three years of high school Spanish or the appropriate
           score on the placement test
FL   231   Intermediate Spanish II*............................3
           Prerequisite: FL 230 with a grade of C or higher or
           or four years of high school Spanish or the appropriate
           score on the placement test
FL   240   Intermediate French I*..............................3
           Prerequisite: FL 141 or two years of high school French
FL   241   Intermediate French II*.............................3
           Prerequisite: FL 240 or three years of high school French
GEOS 145   World Regional Geography............................3
PHIL 121   Introduction to Philosophy..........................3
PHIL 143   Ethics..............................................3
PHIL 154   History of Ancient Philosophy.......................3
PHIL 176   Philosophy of Religion..............................3
POLS 122   Political Science...................................3
POLS 124   American National Government........................3
POLS 135   International Relations..............................3
REL  120   Exploring World Religions...........................3
REL  125   Religions of the East...............................3
REL  126   Religions of the West...............................3
SOC  122   Introduction to Sociology...........................3
SOC  131   Marriage and the Family.............................3
*Prerequisite/Corequisite required
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Computer Skills - 3 hours

```
CIS  124  Introduction to Computer Concepts and Applications...3


          OR


Three hours from the following courses:

          any CPCA* course....................................1
          any CWEB* course....................................1
          any CDTP* course....................................1
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LIBR 125   Introduction to Library Research.....................1


           OR


MATH 181   Statistics*........................................3
           Prerequisite: MATH 171 or MATH 173
           or an equivalent course with a grade of "C" or higher
           or appropriate score on the math assessment test
*Prerequisite/Corerequisite required
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Communication Skills - 6 hours

```
Writing - 3 hours
ENGL 121   Composition I*.....................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
*Prerequisite/Corequisite required
Speaking - 3 hours
SPD  120   Interpersonal Communication........................3
SPD  121   Public Speaking....................................3
SPD  125   Personal Communication.............................3
SPD  180   Intercultural Communication........................3
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Global Issues/Diversity - 3 hours

```
ADMJ 127   Criminology........................................3
ANTH 125   Cultural Anthropology..............................3
ANTH 130   World Cultures.....................................3
ANTH 134   Native Americans...................................3
ARTH 186   Art History: Introduction to Asian Art.............3
BIOL 130   Environmental Science..............................3
BIOL 131   Environmental Science Lab*.........................1
           Prerequisite or corequisite: BIOL 130
BUS  235   Introduction to International Business..............3
FL   116   Elementary Latin I.................................3
FL   117   Elementary Latin II*...............................3
           Prerequisite: FL 116 or one year of high school Latin
FL   120   Elementary German I................................5
FL   121   Elementary German II*..............................5
           Prerequisite: FL 120 or one year of high school German
FL   130   Elementary Spanish I...............................5
FL   131   Elementary Spanish II*.............................5
           Prerequisite: FL 130 with a grade of C or higher
           or two years of high school Spanish;
           or the appropriate score on the placement test
FL   133   Basic Spanish for Hospitality Management............2
FL   140   Elementary French I................................5
FL   141   Elementary French II*..............................5
           Prerequisite: FL 140 or one year of high school French
FL   150   Elementary Russian I...............................5
FL   151   Elementary Russian II*.............................5
           Prerequisite: FL 150 or one year of high school Russian
FL   160   Elementary Italian I...............................5
FL   161   Elementary Italian II*.............................5
           Prerequisite: FL 160 or one year of high school Italian
FL   165   Elementary Chinese I...............................5
FL   166   Elementary Chinese II*.............................5
           Prerequisite: FL 165
           or equivalent college-level course with
           a grade of "D" or higher
           or one year of high school Chinese with a grade
           of "D" or higher
FL   170   Elementary Japanese I..............................5
FL   171   Elementary Japanese II*............................5
           Prerequisite: FL 170 or one year of high school Japanese
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FL   175  Elementary Brazilian Portuguese I....................5
FL   176  Elementary Brazilian Portuguese II*..................5
          Prerequisite: FL 175
FL   205  Conversational Japanese*.............................2
          Prerequisite: FL 171 or two years of high school Japanese
FL   223  Conversational German*..............................2
          Prerequisite: FL 121 or two years of high school German
FL   234  Conversational Spanish*.............................2
          Prerequisite: FL 230 with a grade of B or higher;
          or FL 231 with a grade of "C" or higher;
          or four years of high school Spanish;
          or the score equivalent to FL 231 on the placement test
FL   243  Conversational French*..............................2
          Prerequisite: FL 141 or two years of high school French
FL   246  Conversational Russian*.............................2
          Prerequisite: FL 151 or two years of high school Russian
HC   125  International Awareness Field Study..................2
HIST 128  Medieval History....................................3
HIST 135  Eastern Civilization................................3
HIST 137  African American Studies............................3
HIST 151  World History I: Traditional World..................3
HIST 152  World History II: Modern World......................3
HIST 160  Modern Russian History..............................3
HIST 162  Modern Latin America................................3
HUM  137  Introduction to Russian Culture.....................3
HUM  145  Introduction to World Humanities I..................3
HUM  146  Introduction to World Humanities II.................3
INTR 145  Introduction to the Deaf Community*.................3
          Prerequisite: Acceptance to interpreter training program
          and
          Prerequisite or corequisite: ANTH 125 and SPD 120 for
          Interpreter Training Program
          Corequisites for Interpreter Training Prog: INTR 122 and
          INTR 126 and INTR 130 and INTR 147
          all with a grade of "C" or higher
          Note: Prerequisite or corequisite of INTR 120 or ASL 120
          or FL 180
          required for students in the American Sign Language
          Studies Certificate
MUS  126  Introduction to World Music.........................3
POLS 122  Political Science...................................3
POLS 132  Introduction to Comparative Government..............3
POLS 135  International Relations.............................3
POLS 200  Model United Nations................................3
RDG  127  College Reading Skills..............................3
          Prerequisite: RDG 126
          or appropriate assessment score
REL  120  Exploring World Religions...........................3
REL  125  Religions of the East...............................3
REL  126  Religions of the West...............................3
SOC  125  Social Problems.....................................3
SOC  165  Chinese Society: Past and Present...................3
SOC  200  Intercultural Applications*.........................3
          Prerequisite or corequisite:  SPD 180
SPD  128  Business and Professional Speech....................3
SPD  180  Intercultural Communication.........................3
*Prerequisite/Corequisite required
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Modes of Inquiry - 6 hours

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Scientific - 3 hours
ANTH 126  Physical Anthropology...............................3
ASTR 120  Fundamentals of Astronomy...........................3
ASTR 122  Astronomy...........................................4
BIOL 122  Principles of Biology...............................3
BIOL 123  Principles of Biology Lab*..........................1
          Prerequisite or corequisite: BIOL 122 or
          consent of the assistant dean
BIOL 124  Oceanus: Essentials of Oceanography.................3
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BIOL 125    General Botany........................................5
BIOL 127    General Zoology.......................................5
BIOL 130    Environmental Science.................................3
BIOL 131    Environmental Science Lab*............................1
            Prerequisite or corequisite: BIOL 130
BIOL 140    Human Anatomy.........................................4
BIOL 144    Human Anatomy and Physiology..........................5
BIOL 150    Biology of Organisms*.................................5
            Prerequisite: BIOL 135 or
            consent of the assistant dean
BIOL 225    Human Physiology*.....................................4
            Prerequisites: CHEM 122 and either BIOL 140 or BIOL 144
BIOL 230    Microbiology*.........................................3
            Prerequisite: CHEM 122 or
            one year of high school chemistry
BIOL 231    Microbiology Lab*.....................................2
            BIOL 231 students must be currently enrolled in BIOL 230
            or have successfully completed BIOL 230 within the
            last three years.
CHEM 120    Chemistry in Society..................................4
CHEM 122    Principles of Chemistry...............................5
CHEM 124    General Chemistry I Lecture*..........................4
            Prerequisite or corequisite: MATH 171 or assessment test
            and
            Corequisite: CHEM 125
CHEM 125    General Chemistry I Lab*..............................1
            Prerequisite or Corequisite: CHEM 124
            Students who withdraw from GENERAL CHEMISTRY I
            LECTURE must
            also withdraw from the corresponding laboratory
            GENERAL CHEMISTRY I LABORATORY
            Students may not withdraw from the laboratory course
            GENERAL CHEMISTRY I LABORATORY without withdrawing from
            CHEMISTRY I LECTURE.
CHEM 131    General Chemistry II Lecture*.........................4
            Prerequisites: CHEM 124 and CHEM 125 and
            Corequisite: CHEM 132
CHEM 132    General Chemistry II Lab*.............................1
            Prerequisites: CHEM 124 and CHEM 125 and
            Corequisite: CHEM 131
            Students
            who withdraw from GENERAL CHEMISTRY II LECTURE
            must also withdraw from the corresponding
            laboratory GENERAL CHEMISTRY II LABORATORY.
            Students may not withdraw from the laboratory
            course GENERAL CHEMISTRY II LABORATORY without
            withdrawing from CHEMISTRY II LECTURE.
CHEM 140    Principles of Organic & Biological Chemistry*........5
            Prerequisites: BIOL 135
            and CHEM 122 or permission of the assistant dean
GEOS 130    General Geology.......................................5
GEOS 140    Physical Geography....................................3
GEOS 141    Physical Geography Lab*...............................2
            Prerequisite or Corequisite: GEOS 140 or the equivalent
PHIL 124    Logic and Critical Thinking...........................3
PHYS 130    General Physics I*....................................5
            Prerequisite: MATH 171 or assessment scores
PHYS 131    General Physics II*...................................5
            Prerequisite: PHYS 130
PHYS 220    Engineering Physics I*................................5
            Prerequisite or corequisite: MATH 242
PHYS 221    Engineering Physics II*...............................5
            Prerequisites: PHYS 220 and MATH 242
PSCI 120    Physical Science......................................4
PSYC 130    Introduction to Psychology............................3
*Prerequisite/Corequisite required
Social - 3 hours
ECON 132    Survey of Economics...................................3
ECON 230    Economics I...........................................3
ECON 231    Economics II..........................................3
GEOS 145    World Regional Geography..............................3
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POLS 126   State and Local Government...........................3
POLS 132   Introduction to Comparative Government...............3
PSYC 121   Applied Psychology..................................3
PSYC 130   Introduction to Psychology..........................3
SOC  122   Introduction to Sociology...........................3
SOC  125   Social Problems.....................................3
SOC  131   Marriage and the Family.............................3
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Mathematics - 3 hours

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MATH 120   Business Math and higher*...........................3
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
PHYS 220   Engineering Physics I*..............................5
           Prerequisite or corequisite: MATH 242
PHYS 221   Engineering Physics II*.............................5
           Prerequisites: PHYS 220 and MATH 242
*Prerequisite/Corequisite required
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Health, Physical Education, Recreation - 2 hours

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HPER       Any Activity Course.................................1
EMS  121   CPR I - Basic Life Support for Healthcare Provider...1
HMEC 151   Nutrition and Meal Planning.........................3
HPER 192   Wellness for Life...................................1
HPER 200   First Aid and CPR...................................2
HPER 202   Personal Community Health...........................3
HPER 205   Individual Lifetime Sports..........................2
HPER 240   Lifetime Fitness I..................................1
HPER 241   Lifetime Fitness II*................................1
           Prerequisite: HPER 240
HPER 255   Introduction to Physical Education..................3
*Prerequisite/Corequisite required
```

Transfer Guides

University Transfer Program for Undecided Students

If you are planning to transfer but have not decided upon a major or chosen a four-year school, you should select courses from the general education requirement areas and under the associate of arts degree requirements.

In general, a total of 124 to 128 hours are required for most four-year degrees. If you are still undecided about a major in your second year, you should work closely with a counselor in making a decision that will enable you to transfer without loss of time or credit.

University Transfer Programs for Specific Majors

Copies of university transfer programs are available in the Success Center on campus or on the transfer information Web site.

Individual Transfer Program

If you plan to attend a four-year college or university that is not local or if you choose a major not listed under local university transfer programs, you may work with a counselor to develop your own individual transfer program.

Credit Career and Certificate Program List

Programs, degrees and certificates are listed in alphabetical order (by 1st letter of title). Additionally, degrees and certificates are included under their program area.

ABLE

Accounting

Accounting, A.A.S.

Bookkeeping Entrepreneurship Certificate

Tax Preparation Entrepreneurship Certificate

Administration of Justice/Law Enforcement

Administration of Justice, A.A.

Police Academy Certificate

Agriculture (see Horticulture)

Animation

Animation, A.A.S.

Area Vocational Schools and Technical Colleges Completion

Kansas AVS/TC Articulated, A.A.S.

Administrative Assistant (see Business Office Technology)

Admin Asst-Legal Emphasis (see Business Office Technology)

Admin Asst-Medical Emphasis (see Business Office Technology)

Admin Support Specialist Certificate (see Bus Office Tech)

American Sign Language Studies Cert (see Interpreter Train)

Automotive Technology

Automotive Technology, A.A.S.

Automotive Technology Certificate

Automotive Technology Entrepreneurship Certificate

Bed and Breakfast Entrepreneur Cert (see Hospitality Mgmt)

Biotechnology

Biotechnology, A.A.S.

Biotechnology, A.S.

Biotechnology Certificate

Bookkeeping Entrepreneurship Cert (see Accounting)

Business Administration

Business Administration, A.A.S.

Business Logistics Management

Business-Logistics Mgt, A.A.S.

Business Office Technology

Administrative Assistant, A.A.S.

Administrative Assistant with Legal Emphasis, A.A.S.

Administrative Assistant with Medical Emphasis, A.A.S.

Administrative Support Specialist Certificate

Business Administrative Assistant Entrep Certificate

Medical Administrative Assistant Entrepreneurship Cert

Medical Office Assistant Certificate

Medical Transcription Certificate

Office Careers Certificate

Owning/Managing a Virtual Home Office Certificate

Virtual Home Office Certificate

Virtual Medical Office Certificate

Catering Entrepreneurship Certificate (see Hospitality Mgmt)

Certified Medication Aide (see Health Occupations)

Cert Medication Aide Update (see Health Occupations)

Certified Nurse Aide (see Health Occupations)

Certified Nurse Aide Refresher (see Health Occupations)

Chef Apprenticeship (see Hospitality Management)

Civil Engineering Technology

Civil Engineering Technology, A.A.S.

Construction Management Certificate

Engineered Plumbing Systems Certificate

Commercial Wiring (see Electrical Technology)

Communication Design (see Graphic Design)

Computer-aided Drafting-Design Tech (see Drafting Tech)

Computer-aided Drafting Certificate (see Drafting Tech)

Computer Information Systems

Computer Information Systems, A.A.S.

Database Certificate

Desktop Publishing Applications Specialist Certificate

Microcomputer Programmer Analyst Certificate

Personal Computer Application Specialist

Web Applications Certificate

Web Developer Advanced Certificate

Construction Management (see Civil Engineering Technology)

Cosmetology

Advanced Esthetics Certificate

Cosmetology, A.A.S.

Cosmetology Certificate

Cosmetology Instructor Training Certificate

Esthetics Certificate

Nail Technology Certificate

Database Certificate (see Computer Information Systems)

Data Processing (see Computer Information Systems)

Dental Assisting (see Health Occupations)

Dental Hygiene

Dental Hygiene, A.A.S.

Desktop Publishing Certif (see Computer Information Systems)

Drafting Technology

Computer-aided Drafting and Design Technology, A.A.S.

Computer-aided Drafting Certificate

Early Childhood Education

Early Childhood Education, A.S.

Early Childhood Education Certificate

Electrical Technology

Commercial Wiring Certificate

Electrical Technology, A.A.S.

Electrical Technology Certificate

Industrial Electrical Wiring Certificate

Residential Wiring Certificate

Electronics Technology

Electronics Technology, A.A.S.

Industrial Controls Certificate

Microcomputer Technical Support Certificate

Smart House Technology Integrator Certificate

Emergency Medical Science (EMS)

Emergency Medical Science, A.A.S.

Mobile Intensive Care Technician Certificate

Emergency Medical Technician Certificate

Engineered Plumbing Systems Certif (see Civil Engineer Tech)

Entrepreneurship

Entrepreneurship, A.A.S.

Entrepreneurship Certificate

Business Plan Certificate

Automotive Technology Entrepreneurship Cert(see Automotive)

Bed and Breakfast Entrepreneurship Certificate (see Hospitality Mgmt)

Bookkeeping Entrepreneurship Cert (see Accounting)

Business Admin Asst Entrepren Cert (see Busin Office Tech)

Catering Entrepreneurship Certificate (see Hospitality Mgmt)

Fashion Design Entrepreneurship Cert (see Fash Merch-Design)

Fashion Merchandising Entrepren Cert (see Fash Merch-Design)

Floral Design Entrepreneurship Certificate (see Horticulture)

Game Entrepreneurship Advanced Certificate (see Game)

Health Care Interpreting Entrepreneurship Certificate (see Interpreter Training)

Horticulture Entrepreneurship Certificate (see Horticulture)

Hospitality Entrepreneurship Cert (see Hospitality Manage)

Interior Design and Merch Entrepren (see Interior Design)

Landscape Technician Entrepreneurship (see Horticulture)

Legal Nurse Consultant Entrepreneur. Cert.(see Legal Nurse)

Marketing Specialist Entrepren Cert (see Marketing)

Medical Admin Asst Entrepren Cert (see Business Office Tech)

Multimedia Design Entrepreneur. Cert.(see Interactive Media)

Pastry/Baking Entrepreneur Cert.(see Hospitality Management)

Tax Preparation Entrepreneurship Cert (see Accounting)

Visual Merchandising Entre. Cert.(see Fashion Merchandising)

Web Design Entrepreneurship Cert. (see Interactive Media)

Esthetics Certificate (see Cosmetology)

Esthetics Advanced Training (see Cosmetology)

Fashion Merchandising and Design

Fashion Merchandising, A.A.S.

Fashion Design Entrepreneurship Certificate

Fashion Design, A.A.S.

Fashion Merchandising Entrep Certificate

Visual Merchandising Certificate

Visual Merchandising Entrepreneurship Certificate

Fire Services Administration

Fire Services Administration, A.A.

Floral Design Entrepreneurship (see Horticulture)

Food and Beverage Management (see Hospitality Management)

Game

Game Animation & Music Advanced Certificate

Game Business Advanced Certificate

Game Development, A.A.S.

Game Entrepreneurship Advanced Certificate

Game Narrative Advanced Certificate

Game Programming Advanced Certificate

Geographic Information Systems

Geographic Info Systems Cert

Graphic Design

Graphic Design, A.A.S.

Health Care Interpreting (see Interpreter Training)

Health Information Technology

Health Information Tech, A.A.S

Health Occupations

Certified Medication Aide Certificate

Certified Medication Aide Update Certificate

Certified Nurse Aide Certificate

Certified Nurse Aide Refresher Certificate

Dental Assisting, A.A.S.

Dental Assisting Certificate

Dental Hygiene (see listing for Dental Hygiene)

Emergency Medical Science (see listing Emerg Medical Sci)

Home Health Aide Certificate

IV Therapy for LPN's Certificate

Nursing (see listing for Nursing)

Occupatnl Therapy Asst, A.A.S.

Physical Therapist Asst, A.A.S

Polysomnography/Sleep Technology (see Polysomnography)

Radiologic Technology, A.A.S.

Rehabilitative Aide Certificate

Respiratory Care (see listing for Respiratory Care)

Surgical Technology Cert

Health Care Interpreting (see Interpreter Training)

Heating, Ventilation and Air Conditioning Technology

General Basic HVAC Certificate

General Basic HVAC Installation and Duct Fabrication Cert.

General Basic HVAC Maintenance Certificate

General Basic HVAC Sales, Design and Estimating Cert.

HVAC Commercial Service Technician, A.A.S.

HVAC Commercial Service Technician Certificate

HVAC Installation Technician Certificate

HVAC Residential Service Technician, A.A.S.

HVAC Residential Service Technician Certificate

Home Health Aide Certificate (see Health Occupations)

Horticulture

Floral Design Entrepreneurship Certificate

Horticulture, A.A.S.

Horticulture Certificate

Horticulture Entrepreneurship Certificate

Landscape Technician Certificate

Landscape Technician Entrepreneurship Certificate

Hospitality Management

Bed & Breakfast Entrepreneurship Certificate

Catering Entrepreneurship Certificate

Chef Apprenticeship, A.A.S.

Food and Beverage Management, A.A.S.

Food and Beverage Management Certificate

Hospitality Entrepreneurship Certificate

Hotel & Lodging Management, A.A.S.

Pastry/Baking Certificate

Pastry/Baking Entrepreneurship Certificate

Industrial Controls Certificate (see Electronics Technology)

Industrial Electrical Wiring Cert(see Electrical Technology)

Industrial Maintenance

Industrial Maintenance, A.A.S.

Industrial Maintenance Certificate

Information Systems (see Computer Information Systems)

Information Technology

Information Technology, A.A.S.

Networking Administration: UNIX Certificate

Networking Administration: Windows Certificate

Network Connectivity Certificate

Interactive Media

Interactive Media, A.A.S.

Multimedia Design Certificate

Multimedia Design Entrepreneurship Certificate

Web Design Certificate

Web Design Entrepreneurship Certificate

Interior Design

Floral Design Entrepreneurship Certificate (see Horticulture)

Interior Design, A.A.S.

Interior Design Advanced Certificate

Interior Design Retail Sales/Manufacturing Rep Certificate

Interior Design & Merchandising Entrep Certificate

Interior Entrepreneurship, A.A.S.

Interior Merchandising, A.A.S.

Interior Products Sales Representative Certificate

Interpreter Training

Interpreter Training, A.A.S.

American Sign Language Studies Certificate

Health Care Interpreting Certificate

Health Care Interpreting Entrepreneurship Certificate

IV Therapy for LPN Certificate (see Health Occupations)

Land Surveying

Land Surveying, A.A.S.

Land Surveying Certificate

Landscape Technician (see Horticulture)

Legal Studies

Paralegal, A.A.

Legal Nurse Consultant Certificate

Legal Nurse Consultant Entrepreneurship Certificate

Paralegal Certificate

Marketing and Management

Marketing and Management, A.A.S.

Marketing Specialist Entrepreneurship Certificate

Retail Sales Representative Certificate

Sales and Customer Relations Certificate

Supervision Management Certificate

Teleservice Representative Certificate

Teletrac Certificate

Medical Office Assistant Certif (see Business Office Tech)

Medical Transcription Certificate (see Business Office Tech)

Metal Fabrication/Welding

Metal Fabrication Technology, A.A.S.

Metal Fabrication Technology Certificate

Combination Welder I Certificate

Combination Welder II Certificate

Combination Welder/Machinist I Certificate

General Basic Welding Certificate

Welder Fabricator Advanced Certificate

Microcomputer Programmer Analyst Cert(see Computer Info Sys)

Microcomputer Technical Support Certif (see Electronics Tech

Mobile Intensive Care Technician Certificate (see EMS)

Multimedia Design Certificate (see Interactive Media)

Multimedia Design Entrepreneur. Cert.(see Interactive Media)

Nail Technology Certificate (see Cosmetology)

Network Administration:UNIX Certif (see Information Tech)

Network Administration:Windows Certif (see Information Tech)

Network Connectivity Certificate (see Information Tech)

Nursing

Nursing - Registered Nurse, A.A.S.

PN to RN Transition, A.A.S

Practical Nursing Day Certificate

Practical Nursing Evening Weekend Certificate

Occupational Therapy Assistant (see Health Occupations)

Office Careers Certificate (see Business Office Technology)

Office Systems Technology (see Business Office Technology)

Own/Manage Virtual Home Office Cert(see Bus Office Tech)

Paralegal (see Legal Studies)

Pastry/Baking Certificate (see Hospitality Management)

Personal Computer Applications Cert (see Computer Infor Sys)

Physical Therapy Assistant (see Health Occupations)

PN to RN Transition (see Nursing)

Polysomnography/Sleep Technology

Polysomnography/Sleep Technology, A.A.S.

Practical Nursing (see Nursing)

Professional Paraeducator

Professional Paraeducator Program, A.A.

Radiologic Technology (see Health Occupations)

Railroad Electronics

Railroad Electronics, A.A.S.

Railroad Electronics Certificate

Railroad Industrial Technology

Railroad Carman Welding Certificate

Railroad Machinist Welding Certificate

Railroad Structural Welding Certificate

Railroad Track Welding Certificate

Railroad Operations

Railroad Operations - Conductor Option, A.A.S.

Railroad Conductor Certificate

Railroad Operations - General Option, A.A.S.

Railroad Operations - Mechanical Option, A.A.S.

Railroad Operations - Welding Option, A.A.S.

Rehabilitative Aide Cert (see Health Occupations)

Residential Wiring Certificate (see Electrical Technology)

Respiratory Care

Respiratory Care, A.A.S.

Retail Sales Representative Cert (see Marketing and Manage)

Sales and Customer Service Cert (see Marketing and Manage)

Science Technology (see Biotechnology)

Sign Language Communication Cert (see Interpreter Training)

Smart House Technology Integrator (see Electronics)

Supervision Management Cert (see Marketing and Management)

Surgical Technology (see Health Occupations)

Tax Preparation Entrepreneurship Cert (see Accounting)

Teleservice Technology (see Marketing and Management)

Teletrac Certificate (see Marketing and Management)

Veterinary Technology

Veterinary Technology, A.A.S.

Virtual Home Office Certificate (see Business Office Tech)

Virtual Medical Office Cert (see Business Office Technology)

Visual Merchandising Cert (see Fashion Merch and Design)

Web Application Certificate (see Interactive Media)

Web Design Certificate (see Interactive Media)

Web Developer Advanced Certificate (see Computer Info Sys)

Welding (see Metal Fabrication or Railroad)

ABLE

Academic Bridges to Learning Effectiveness (ABLE)
The Academic Bridges to Learning Effectiveness (ABLE) program is granted by

Metropolitan Community College, but coordinated at JCCC.

This nationally recognized program teaches students with neurological disabilities (learning disabilities, traumatic brain injuries, autism spectrum disorders, ADHD, etc.) how to become independent learners.

Students take courses with supplemental workshops as well as attend weekly support group meetings to build skills and confidence for college and vocational programs.

An educational specialist works with each student to design an individualized course plan. For more information, call Longview Community College ABLE program, 816-672-2053, or Penn Valley Community College ABLE program, 816-759-4089.

Note: Johnson County Community College students should seek specific counsel from the MCC program personnel for the appropriate course plan and numbers.

Johnson County Community College students should refer to Cooperative Program Information.

Accounting, A.A.S.

Accounting is a crucial part of every business operation and the language that businesses speak. The associate of applied science degree program focuses on practical skills often required for entry-level paraprofessional positions. The internship course gives the graduate on-the-job experience working in an approved business. Two-year graduates may find positions as accounting assistants, accounting clerks and general bookkeepers.

The accounting career program (see: www.jccc.net/home/depts/1202) is accredited by the Association of Collegiate Business Schools and Programs (ACBSP). For students wishing to transfer to a four-year college accounting or business program, this accreditation makes the transfer a smoother process. For more information, please contact the career facilitator (skleiner@jccc.edu) or a JCCC counselor.

(Major Code 2400; CIP Code 52.0302)

Accounting Careers

Associate of Applied Science Degree

First Semester

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ENGL 121   Composition I*.......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
           Social Science and/or Economics Electives............3
ACCT 121   Accounting I.........................................3
MATH 120   Business Mathematics*................................3
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
           or
MATH 171   College Algebra or higher*...........................3
           Prerequisite: MATH 116 with a grade of "C" or higher
           or MATH 134 with a grade of "C" or higher
           or appropriate score on the math assessment test
           Note: Not available to students with credit in MATH 173
BOT  101   Computerized Keyboarding.............................1
           Business Electives...................................3
           Total Semester Credit Hours.........................16
```

Second Semester

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ACCT 122   Accounting II*.......................................3
           Prerequisite: ACCT 121
BUS  150   Business Communications*.............................3
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                Prerequisite: ENGL 121
BUS  261    Business Law I........................................3
            Business Electives....................................6
BOT  115    Electronic Calculators................................1
            Total Semester Credit Hours..........................16
```

Third Semester

```
ACCT 222    Managerial Accounting*^..............................3
            Prerequisite: ACCT 122
            or
ACCT 231    Intermediate Accounting I*^..........................3
            Prerequisite: ACCT 122
ACCT 278    Accounting Internship*...............................1
            Prerequisites: ACCT 121 plus 12 additional ACCT hours
            beyond ACCT 121 and Assistant Dean's Approval
ACCT 140    Computerized Accounting Problems*....................3
            Prerequisite or corequisite: ACCT 122
BUS  225    Human Relations......................................3
PHIL 138    Business Ethics......................................1
HIST 141    U.S. History Since 1877..............................3
            Business Electives...................................2
            Total Semester Credit Hours.........................16
```

Fourth Semester

```
ACCT 215    Accounting for Nonprofit Organizations*^.............3
            Prerequisite: ACCT 121
            or
ACCT 221    Cost Accounting*^....................................3
            Prerequisite: ACCT 122
            or
ACCT 232    Intermediate Accounting II*^.........................3
            Prerequisite: ACCT 122
ACCT 131    Federal Income Taxes I...............................3
ACCT 135    Computerized Accounting Applications*................3
            Prerequisite: ACCT 121 or ACCT 111
ACCT 285    Accounting Capstone*.................................3
            Prerequisites: ACCT 121 and ACCT 122
            plus 15 hours of accounting courses
            and Assistant Dean's Approval
            Business Electives...................................3
            Health and/or Physical Education Elective............1
            Total Semester Credit Hours.........................16
            TOTAL PROGRAM CREDIT HOURS..........................64
Note: Business electives are any courses with the BUS,
ENTR or ECON prefix.


*Prerequisite/Corequisite required
Note: ^The student is required to complete two of the five
following accounting courses: ACCT 215, 221, 222,
231 or 232.
```

Bookkeeping Entrepreneurship Certificate

The bookkeeping entrepreneurship certificate prepares students to open their own service business providing bookkeeping assistance to small businesses. This certificate is designed to provide the student with basic accounting skills and the basic skills in small business development and management.

(Major Code 4050; CIP Code 52.0302)

Accounting Careers

Career Certificate

Suggested/Sample Course Sequence

The sequence taken by the student may vary depending
on prerequisites, course availability, and personal/
professional responsibilities.

First Semester

```
ENGL 121   Composition I*.......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
ACCT 121   Accounting I.........................................3
ENTR 120   Introduction to Entrepreneurship.....................2
ENTR 180   Opportunity Analysis.................................2
           Total Semester Credit Hours.........................10
```

Second Semester

```
BUS  150   Business Communications*.............................3
           Prerequisite: ENGL 121
ACCT 135   Computerized Accounting Applications*................3
           Prerequisite: ACCT 121 or ACCT 111
ACCT 122   Accounting II*.......................................3
           Prerequisite: ACCT 121
ACCT 140   Computerized Accounting Problems*....................3
           Prerequisite or corequisite: ACCT 122
           Total Semester Credit Hours.........................12
```

Third Semester

```
ENTR 142   Fast Trac Business Plan..............................3
ACCT 222   Managerial Accounting*...............................3
           Prerequisite: ACCT 122
           or
ACCT 215   Accounting for Nonprofit Organizations*..............3
           Prerequisite: ACCT 121
           or
ACCT 231   Intermediate Accounting I*...........................3
           Prerequisite: ACCT 122
ACCT 285   Accounting Capstone*.................................3
           Prerequisites: ACCT 121 and ACCT 122
           plus 15 hours of accounting courses
           and Assistant Dean's Approval
           Total Semester Credit Hours..........................9
           TOTAL PROGRAM CREDIT HOURS..........................31
*Prerequisite/Corequisite required
```

Students may be interested in taking additional courses, as
noted below, to complement their certificate study. These
courses are NOT part of the certificate requirements.

```
ENTR 160   Legal Issues for Small Business......................2
ENTR 195   Franchising*.........................................3
           Prerequisite: BUS 230
ENTR 220   Entrepreneurial Marketing*...........................2
           Prerequisite: BUS 230
```

Tax Preparation Entrepreneurship Certificate

The tax preparation entrepreneurship certificate prepares students to open their
own service business providing tax preparation services for simple individual tax
returns. This certificate is designed to provide the student with basic accounting
skills and small business development and management. Further academic
coursework and/or certifications would be necessary to prepare more advanced
tax forms.

(Major Code 4310; CIP Code 52.1601)

Career Certificate

Prerequisite for Required Courses

```
BUS  230   Marketing.........................................3
```

Required Courses

```
ACCT 121   Accounting I......................................3
ACCT 131   Federal Income Taxes I............................3
ENTR 120   Introduction to Entrepreneurship..................2
ENTR 180   Opportunity Analysis..............................2
ENTR 160   Legal Issues for Small Business...................2
ACCT 122   Accounting II*....................................3
           Prerequisite: ACCT 121
ACCT 135   Computerized Accounting Applications*.............3
           Prerequisite: ACCT 121 or ACCT 111
ACCT 140   Computerized Accounting Problems*.................3
           Prerequisite or corequisite: ACCT 122
ACCT 285   Accounting Capstone*..............................3
           Prerequisites: ACCT 121 and ACCT 122
           plus 15 hours of accounting courses
           and Assistant Dean's Approval
ACCT 278   Accounting Internship*............................1
           Prerequisites: ACCT 121 plus 12 additional ACCT hours
           beyond ACCT 121 and Assistant Dean's Approval
ENTR 142   Fast Trac Business Plan...........................3
ENTR 220   Entrepreneurial Marketing*........................2
           Prerequisite: BUS 230
           TOTAL PROGRAM CREDIT HOURS.......................30
*Prerequisite/Corequisite required


Students may be interested in taking an additional course,
as noted below, to complement their certificate study.  This
course is NOT part of the certificate requirements.

ENTR 195   Franchising*......................................3
           Prerequisite: BUS 230
```

Administration of Justice, A.A.

More than 1 million people are employed in the administration of justice/law enforcement fields in the United States. Employment opportunities are expected to grow as fast as or slightly faster than average for all occupations in the field.

JCCC's administration of justice/law enforcement program provides you the opportunity to study various aspects of the criminal justice fields. Successful completion of 64 hours of credit in this two-year program leads to an associate of arts degree. You should contact a counselor when developing a program plan.

(Major Code 2120; CIP Code 43.0107)

Administration of Justice

Associate of Arts Degree

```
Students graduating with an Associate of Arts degree or an
Associate of Science degree must complete an approved
cultural diversity course.  Some of these courses are able
to meet both a diversity requirement and a general education
requirement.
```

First Semester

```
ENGL 121   Composition I*.......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
           Social Science Course**..............................3
ADMJ 121   Introduction to Administration of Justice+...........3
ADMJ 124   Criminal Justice and Corrections.....................3
ADMJ 127   Criminology..........................................3
           Total Semester Credit Hours.........................15
```

Second Semester

```
SPD  120   Interpersonal Communication..........................3
ENGL 122   Composition II*......................................3
           Prerequisite: ENGL 121
PHIL 143   Ethics...............................................3
ADMJ 140   Constitutional Case Law+.............................3
ADMJ 230   Criminal Behavior*...................................3
           Prerequisite:  PSYC 130
           ADMJ Program Electives...............................3
           Total Semester Credit Hours.........................18
```

Third Semester

```
FL   130   Elementary Spanish I.................................5
ADMJ 220   Writing for Criminal Justice*........................1
           Prerequisites: ENGL 121 and ENGL 122
           ADMJ Program Electives...............................3
           Science and/or Math Elective***......................6
           Total Semester Credit Hours.........................15
```

Fourth Semester

```
           Humanities Course....................................3
           (cannot be a philosophy course)
           Social Science Course**..............................3
ADMJ 280   Criminal Justice and the Public*.....................3
           Prerequisites: ADMJ 121 and ADMJ 124
           and ADMJ 127 and ADMJ 220
           and at least five (5) additional credit hours of
           Administration of Justice course work
           Science and/or Math Elective***......................3
           Health and/or Physical Education Elective............1
           ADMJ  Program Electives..............................3
           Total Semester Credit Hours.........................16
           TOTAL PROGRAM CREDIT HOURS..........................64
```

Required Program Electives

```
9 hours - any three courses
ADMJ 130   Crime Prevention.....................................3
ADMJ 133   Juvenile Delinquency.................................3
ADMJ 141   Criminal Law*+.......................................3
           Prerequisite:  ADMJ 121 or LAW 121
ADMJ 143   Crime Analysis.......................................3
ADMJ 145   Fundamentals Private Security........................3
ADMJ 146   Retail Security......................................3
ADMJ 148   Family Violence/Sexual Abuse.........................3
ADMJ 154   Fundamentals of Criminal Investigation*+.............3
           Prerequisite:  ADMJ 124
ADMJ 170   Introduction to Substance Use and Abuse..............3
ADMJ 180   Correctional Casework................................3
ADMJ 201   Police Interrogation.................................3
           Prerequisite: Suggested course: ENGL 121
ADMJ 221   Introduction to Forensics............................3
ADMJ 224   Introduction to Terrorism............................3
ADMJ 235   Community Based Corrections..........................3
ADMJ 281   Readings in Police Science*..........................3
```

```
                Prerequisite: 15 credit hours in ADMJ courses
ADMJ 285   Administration of Justice Internship*................3
                Prerequisites:  Fifteen credit hours in ADMJ courses or
                program facilitator approval and a grade point
                average of 2.0 or higher


*Prerequisite/Corequisite required
** You must take two courses from the following list, but
not more than one course from each group may count
toward the required 6 hours.
```

Group 1:

```
POLS 124   American National Government.........................3
POLS 126   State and Local Government...........................3
```

Group 2:

```
PSYC 130   Introduction to Psychology...........................3
Note: This is a prerequisite for ADMJ 230.
```

Group 3:

```
SOC  122   Introduction to Sociology^..........................3
SOC  125   Social Problems^....................................3
^Meets Cultural Diversity requirement


NOTE:*** You must complete a minimum of 9 hours in math and
science.  See associate of arts general education
requirements.


NOTE:  + If you are certified under the Kansas Law
Enforcement Training Act, you are eligible to
receive assessment of prior learning credit for some
or all of these courses.
```

Police Academy Certificate

This course consists of 60 clock hours of law enforcement training provided in addition to the 540 hours required by the Kansas Minimum Standards Training Act for recruits attending the Police Academy. While the required 600-hour curriculum is provided without fee, enrollment in advanced training is required of all those attending the academy. The curriculum covers law, criminal investigations, patrol procedures, defensive tactics, report writing and specialized training required by local law enforcement agencies.

Prerequisite: Selective Admissions - open only to currently employed full-time police officers attending the Police Academy under sponsorship of a law enforcement agency

(Major Code 4880; CIP Code 43.0103)

Certificate of Completion

Required Course

```
ADMJ 265   Advanced Police Training*...........................12
                Prerequisite: Selective Admissions - open only to
                currently employed full-time
                police officers attending the Police Academy under
                sponsorship of a law enforcement agency
                TOTAL PROGRAM CREDIT HOURS.........................12
*Prerequisite/Corequisite required
```

Animation, A.A.S.

The Associate of Applied Science Degree Animation program provides instruction for creating animation, 3D modeling and special effects for applications such as animated shorts and movies and games, and rendering 3D environments. Fundamental interactive concepts, the development of assets and screen design will be covered. Depending on individual choices and talents, students who complete the Animation program should be prepared for employment as an animator, a game art creator, a 3D visual artist, and/or a special effects artist. (Major Code 2630; CIP Code 10.0304)

Associate of Applied Science Degree

Prerequisites for Required Courses

Prior to the beginning of the program, the student must take the following prerequisites, or have taken the equivalent transfer courses, or have passed the waiver test

(where applicable), or have obtained a waiver from the

program administrator.

```
CDTP 135   Desktop Photo Manipulation I: Photoshop..............1
CDTP 145   Desktop Illustration I: Illustrator.................1
CWEB 105   Introduction to Web Pages: Dreamweaver*.............1
           Prerequisite: CWEB 101
CWEB 130   Introduction to Flash*.............................1
           Prerequisite: CPCA 161 or CWEB 105 or CWEB 106
ANI  120   Conceptual Art for Animation.......................1
           Prerequisite: CDTP 135
```

First Semester

```
CIM  130   Interactive Media Concepts.........................2
CIM  140   Interactive Media Assets*..........................4
           Prerequisites: CDTP 135 and CDTP 145 and CWEB 105
           and CWEB 130
           Prerequisite or corequisite: CIM 130
CIM  133   Screen Design*.....................................4
           Prerequisite: CDTP 135
ANI  145   Introduction to 3D Animation*......................3
           Prerequisites: CDTP 135 and ANI 120
ENGL 121   Composition I*.....................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
           Total Semester Credit Hours........................16
```

Second Semester

```
ANI  245   Character Animation*...............................3
           Prerequisite: ANI 145
ENGL 140   Writing for Interactive Media*.....................3
           Prerequisite: ENGL 121
           Animation Elective.................................3
           Elective...........................................3
           Humanities Electives...............................3
           Science and/or Math Elective*......................3
           Total Semester Credit Hours........................18
```

Third Semester

```
ANI  255   Advanced Animation and Effects*....................3
           Prerequisite: ANI 245
```

```
ENGL 150   Digital Narratives*..................................3
           Prerequisite: ENGL 121
MUS  156   MIDI Music Composition...............................3
BUS  141   Principles of Management.............................3
           Elective.............................................3
           Health and/or Physical Education Elective............1
           Total Semester Credit Hours.........................16
```

Fourth Semester

```
ANI  260   Animation Capstone*..................................3
           Prerequisite: ANI 255
ANI  273   Career Preparation*..................................4
           Prerequisite or corequisite: ANI 260
           Animation Elective...................................3
           Elective.............................................3
           Social Science and/or Economics Elective.............3
           Total Semester Credit Hours.........................16
           TOTAL PROGRAM CREDIT HOURS..........................66
```

Animation Electives

```
GAME 101   Computer Game Creation...............................4
GAME 110   Flash Gaming*........................................4
GAME 200   Game Design..........................................3
CIS  134   Programming Fundamentals.............................4
CIS  162   Database Programming*................................4
           Prerequisite: CIS 134 or the equivalent
CS   180   Introduction to Artificial Intelligence*.............3
           Prerequisite: CIS 145 or CIS 148 or
           CIS 150 or CS 200
CIM  135   Digital Imaging and Video*...........................3
           Prerequisite: CDTP 135
           Recommended: PHOT 121
CIM  154   Interactive Authoring I: Director*...................4
           Prerequisite: CIM 130 and
           Prerequisite or corequisite: CIM 140
CIM  156   Interactive Authoring I: Web*........................4
           Prerequisite: CIM 130
           Prerequisite or corequisite: CIM 140
CIM  200   Interactive Communication Form*......................3
           Prerequisite or corequisite: CIM 130
CIM  235   Advanced Digital Video*..............................3
           Prerequisite: CIM 135
CIM  254   Interactive Authoring II: Director*..................4
           Prerequisite: CIM 154
ART  130   Drawing I............................................3
ART  131   Drawing II*..........................................3
           Prerequisite: ART 130
ART  231   Life Drawing I*......................................3
           Prerequisite: ART 130
ART  232   Life Drawing II*.....................................3
           Prerequisite: ART 231
PHOT 121   Fundamentals of Photography..........................3
PHOT 128   Digital Photography..................................3
*Prerequisite/Corequisite required
```

Kansas AVS/TC Articulated, A.A.S.

This degree is designed to facilitate student transfer of technical education programs under the provisions outlined in the Transfer Agreement and Articulation Guide for Kansas Community Colleges, Area Technical Schools and Colleges for the Associate in Applied Science, dated September 1999.

Beginning Fall 1999, this degree may be earned by a student wishing to transfer from a Kansas Area Vocational Technical School or Kansas Technical College with the following criteria:

- Completion of an eligible technical program of 1080 hours or more from a Kansas Vocational Technical School or Kansas Technical College.
- Official transcript from the technical institution documenting the number of hours and certificate or degree awarded.
- The student must have 15 credits from JCCC in order to receive this degree from JCCC.
- The 1080 documented hours will be transferred to JCCC as 45 transfer credit hours and will be placed on the student's JCCC transcript when the student applies for graduation from JCCC.
- Students must also meet general JCCC admissions, residency and graduation requirements.
- Interested students should contact a JCCC counselor for further information prior to transfer and enrollment.

Kansas AVS/TC Articulated

```
Associate of Applied Science Degree
Sequence of Courses
TransferredAVS/TC Program.....................................45
ENGL 121   Composition I*......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
           Communication Elective..............................3
           Humanities Elective.................................3
           Social Science and/or Economics Electives...........3
           Science and/or Math Elective*.......................3
           Electives...........................................3
           Health and/or Physical Education Elective...........1
TOTAL      PROGRAM CREDIT HOURS................................64
*Prerequisite/Corequisite required
```

Automotive Technology, A.A.S.

Automotive technicians generally begin their careers in service repair shops, with continually expanding industrial and service career advancement opportunities. Technicians work with experienced professionals and have frequent contact with the public. This field requires good mechanical aptitude and manual dexterity skills.

The two-year associate of applied science degree, which is certified by the ASE, covers all major areas, including diagnosis and tune-up, chassis, electrical/electronic and hydraulic systems, automatic transmissions, engines, and emissions. Students work on developing the skills needed to advance to a supervisory position, such as customer relations, estimating materials and labor costs, and managing the work of others.

In the Kansas City area, the anticipated job growth is 32 percent by 2008. About 239 annual openings are expected to occur each year. The average hourly wage in 2002 was $16.22.

(Major Code 2420; CIP Code 47.0604)

Automotive Technology

Associate of Applied Science Degree

```
Prior to beginning the automotive technology associate
of applied science degree program, the student must have:

AUTO 125   Introduction to Automotive Shop Practices............3
           or
           Approval of career program facilitator

Note: MFAB 120-MFAB Tools and Equipment is a prerequisite/
```

corequisite to MFAB 127. Students who may have the skills
needed for MFAB 120 may contact the career program
facilitator for a waiver or may contact the Testing Center
for prior learning credit.

First Semester

```
AUTO 163   Automotive Steering and Suspension*..................3
           Prerequisite or corequisite: AUTO 125 or
           approval of program facilitator
AUTO 234   Automotive Electrical Systems*.......................4
           Prerequisite or corequisite: AUTO 125 or
           approval of program administrator
INDT 125   Industrial Safety....................................3
MATH 120   Business Mathematics*................................3
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
ENGL 121   Composition I*.......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
           Total Semester Credit Hours.........................16
```

Second Semester

```
AUTO 165   Automotive Engine Repair*............................4
           Prerequisite or corequisite: AUTO 125 or
           approval of the program administrator
AUTO 167   Automotive Brake Systems*............................2
           Prerequisite or corequisite: AUTO 125 or
           approval of program administrator
AUTO 168   Automotive Manual Drivetrain and Axles*..............3
           Prerequisite or corequisite: AUTO 125 or
           approval of program administrator
ENGL 123   Technical Writing I*.................................3
           Prerequisite: ENGL 121
           Technical/Related Electives.........................3
           Health and/or Physical Education Elective...........1
           Total Semester Credit Hours.........................16
```

Third Semester

```
AUTO 250   Automatic Transmissions and Transaxles*..............4
           Prerequisite or corequisite: AUTO 125 or
           approval of program administrator
AUTO 254   Automotive Engine Performance*.......................5
           Prerequisites or corequisites: AUTO 165 and AUTO 234
MFAB 127   Welding Processes*...................................2
           Prerequisite or Corequisite: MFAB 120 or program
           facilitator approval or contact testing office for Prior
           Learning Assessment
           Humanities Elective.................................3
           Social Science and/or Economics Elective............3
           Total Semester Credit Hours.........................17
```

Fourth Semester

```
AUTO 230   Automotive Heating and Air Conditioning*.............3
           Prerequisite or corequisite: AUTO 125 or
           approval of program administrator
AUTO 260   Automotive Service Management*.......................3
           Prerequisite: AUTO 254
AUTO 261   Automotive Service Techniques*.......................3
           Prerequisite: AUTO 254
BUS  140   Principles of Supervision...........................3
           Technical/Related Electives.........................3
           Total Semester Credit Hours.........................15
           TOTAL PROGRAM CREDIT HOURS..........................64
```

Technical/Related Electives

```
AUTO 121    Small Engine Service................................3
AUTO 122    Introduction to Automotive Glass....................3
AUTO 123    Motorcycle Maintenance and Repair...................2
AUTO 128    Automotive Parts Specialist.........................2
AUTO 130    Diesel Fundamentals*................................2
            Prerequisite or corequisite: AUTO 125
AUTO 201    ASE Certification Seminar...........................1
AUTO 210    Advanced Engine Repair*.............................3
            Prerequisite: AUTO 165
AUTO 271    Automotive Technology Internship*...................3
            Prerequisite: Program facilitator approval
            required
AUTO 291    Independent Study.................................1-7
MATH 133    Technical Mathematics I*............................4
            Prerequisite: MATH 111 with a grade of "C" or higher
            or appropriate score on the math assessment test
PHYS 133    Applied Physics*....................................5
            Prerequisite: MATH 133 or higher
ENTR 142    Fast Trac Business Plan.............................3
CIS  124    Introduction to Computer Concepts and Applications...3
CPCA 105    Introduction to Personal Computers: Windows.........1
ELEC 120    Introduction to Electronics.........................3
RRT  165    Railroad Safety, Quality and Environment............3
INDT 155    Workplace Skills....................................1
*Prerequisite/Corequisite required
```

Automotive Technology Certificate

The automotive technology certificate program is designed to meet the needs of today's beginning and experienced auto technicians. With the completion of the certificate program, the student will have a well-rounded background in the repair required for dealership and independent service personnel. Completion of courses should assist students in preparing for ASE certification tests. Most automotive trades expect applicants to pass one or more of the ASE tests, which will enable them to qualify for technical positions in service repair.

(Major Code 4710; CIP Code 47.0604)

Automotive Technology

Career Certificate

```
Prior to beginning the automotive technology career
certificate program, the student must have:

AUTO 125    Introduction to Automotive Shop Practices............3
            or
            Approval of career program facilitator


Note: MFAB 120-MFAB Tools and Equipment is a prerequisite/
corequisite to MFAB 127.  Students who may have the skills
needed for MFAB 120 may contact the career program
facilitator for a waiver or may contact the Testing Center
for prior learning credit.
```

Fall Semester

```
INDT 125    Industrial Safety...................................3
INDT 155    Workplace Skills....................................1
AUTO 163    Automotive Steering and Suspension*.................3
            Prerequisite or corequisite: AUTO 125 or
            approval of program facilitator
AUTO 165    Automotive Engine Repair*...........................4
            Prerequisite or corequisite: AUTO 125 or
            approval of the program administrator
AUTO 167    Automotive Brake Systems*...........................2
```

```
                  Prerequisite or corequisite: AUTO 125 or
                  approval of program administrator
AUTO 168    Automotive Manual Drivetrain and Axles*..............3
                  Prerequisite or corequisite: AUTO 125 or
                  approval of program administrator
AUTO 234    Automotive Electrical Systems*.......................4
                  Prerequisite or corequisite: AUTO 125 or
                  approval of program administrator
AUTO 250    Automatic Transmissions and Transaxles*..............4
                  Prerequisite or corequisite: AUTO 125 or
                  approval of program administrator
AUTO 254    Automotive Engine Performance*.......................5
                  Prerequisites or corequisites: AUTO 165 and AUTO 234
AUTO 230    Automotive Heating and Air Conditioning*.............3
                  Prerequisite or corequisite: AUTO 125 or
                  approval of program administrator
MFAB 127    Welding Processes*..................................2
                  Prerequisite or Corequisite: MFAB 120 or program
                  facilitator approval or contact testing office for Prior
                  Learning Assessment
                  TOTAL CREDIT HOURS................................34
*Prerequisite/Corequisite required
```

Automotive Technology Entrepreneurship Certificate

This 31 credit-hour certificate is designed to prepare students to open their own automotive service business. This certificate is designed to provide the student with basic skills in automotive technology and small business development and management.

(Major Code 4180; CIP Code 47.0604)

Automotive Technology

Career Certificate

Prerequisites for Required Courses

```
AUTO 125    Introduction to Automotive Shop Practices............3
AUTO 165    Automotive Engine Repair*...........................4
                  Prerequisite or corequisite: AUTO 125 or
                  approval of the program administrator
AUTO 234    Automotive Electrical Systems*......................4
                  Prerequisite or corequisite: AUTO 125 or
                  approval of program administrator
```

Required Courses

```
INDT 125    Industrial Safety...................................3
AUTO 163    Automotive Steering and Suspension*.................3
                  Prerequisite or corequisite: AUTO 125 or
                  approval of program facilitator
AUTO 167    Automotive Brake Systems*...........................2
                  Prerequisite or corequisite: AUTO 125 or
                  approval of program administrator
AUTO 168    Automotive Manual Drivetrain and Axles*.............3
                  Prerequisite or corequisite: AUTO 125 or
                  approval of program administrator
INDT 155    Workplace Skills....................................1
ENTR 120    Introduction to Entrepreneurship....................2
ENTR 180    Opportunity Analysis................................2
AUTO 250    Automatic Transmissions and Transaxles*.............4
                  Prerequisite or corequisite: AUTO 125 or
                  approval of program administrator
AUTO 254    Automotive Engine Performance*......................5
                  Prerequisites or corequisites: AUTO 165 and AUTO 234
AUTO 230    Automotive Heating and Air Conditioning*............3
                  Prerequisite or corequisite: AUTO 125 or
```

```
                approval of program administrator
ENTR 142   Fast Trac Business Plan...............................3
                TOTAL PROGRAM CREDIT HOURS........................31
```

Students may be interested in taking additional courses, as noted below, to complement their certificate study. These courses are NOT part of the certificate requirements.

```
ENTR 131   Financial Management for Small Business*.............2
                Prerequisite: ACCT 111 or ACCT 121
ENTR 160   Legal Issues for Small Business......................2
ENTR 195   Franchising*.........................................3
                Prerequisite: BUS 230
ENTR 220   Entrepreneurial Marketing*...........................2
                Prerequisite: BUS 230
*Prerequisite/Corequisite required
```

Biotechnology, A.A.S.

The greater Kansas City area and specifically Johnson County have numerous biological-, pharmaceutical- and chemical-related formulating, manufacturing, research and testing companies. Many of these facilities employ scientific technicians to support the endeavors of their professional scientists and engineers.

JCCC's science technology program is designed to develop scientific support personnel for the metropolitan area.

This program offers specific knowledge and training designed to provide you with entry-level skills for employment as a technician. It also provides the breadth of background sufficient to encourage change and flexibility.

The biotechnology associate of applied science degree program will prepare students to work in biotechnology laboratories associated with universities, medical centers, private research institutions, and a variety of industrial applications. Upon completion of this 66-68 hour degree, students will be able to find entry-level or higher positions in diverse fields of biotechnology. Along with basic and more advanced science courses, students will take specialized courses such as laboratory safety and biotechnology methods.

Note: Metropolitan Community College students should seek specific counsel from the JCCC program personnel for the appropriate course plan and numbers.

Metropolitan Community College students should refer to Cooperative Program Information.

(Major Code 2110; CIP Code 41.0101)

Science Department

Associate of Applied Science Degree

First Semester

```
BIOL 135   Principles of Cell and Molecular Biology.............4
BIOT 160   Introduction to Biotechnology*.......................2
                Prerequisite: CHEM 122 and
                Prerequisite or corequisite: BIOL 135 or consent of
                assistant dean
BIOT 165   Laboratory Safety*...................................1
                Prerequisite: CHEM 122 and
                Prerequisite or corequisite: BIOL 135 or consent of
                assistant dean
CHEM 122   Principles of Chemistry..............................5
MATH 133   Technical Mathematics I or higher*.................3-5
                Prerequisite: MATH 111 with a grade of "C" or higher
                or appropriate score on the math assessment test
                Total Semester Credit Hours.....................15-17
Note: CHEM 122 must be taken before BIOT 160 and BIOT 165
```

Second Semester

```
BIOL 230   Microbiology*......................................3
           Prerequisite: CHEM 122 or
           one year of high school chemistry
           Physical Education Elective..........................1
ENGL 121   Composition I*.....................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
CHEM 140   Principles of Organic & Biological Chemistry*........5
           Prerequisites: BIOL 135
           and CHEM 122 or permission of the assistant dean
PHYS 133   Applied Physics*...................................5
           Prerequisite: MATH 133 or higher
           Total Semester Credit Hours........................17
```

Third Semester

```
BIOL 144   Human Anatomy and Physiology........................5
CIS  124   Introduction to Computer Concepts and Applications...3
BIOL 205   General Genetics*..................................4
           Prerequisite: BIOL 122 or the equivalent introductory
           college-level biology course
           Social Science/Economics Elective...................3
ENGL 123   Technical Writing I*...............................3
           Prerequisite: ENGL 121
           Total Semester Credit Hours........................18
```

Fourth Semester

```
BIOT 260   Biotechnology Methods*.............................5
           Prerequisites: Either BIOT 160 or BIOL 160 and either
           BIOT 165 or BIOL 165 and
           Prerequisite or corequisite: BIOL 230 or consent of
           assistant dean
BIOL 145   Human Anatomy and Physiology Dissection*.............1
           Prerequisites: BIOL 144 and
           Assistant Dean's Approval
BIOT 265   Biotechnology Internship*..........................4
           Prerequisites: BIOT 260 and either BIOT 160 or BIOL 160
           and either BIOT 165 or BIOL 165
           and Assistant Dean's Approval
BIOL 155   Introduction to Bioethics*.........................3
           Prerequisite: BIOL 122 or BIOL 135 or equivalent, or
           permission of the assistant dean
           Humanities Elective................................3
           Total Semester Credit Hours........................16
           TOTAL PROGRAM CREDIT HOURS.......................66-68
*Prerequisite/Corequisite required
```

Biotechnology, A.S.

The greater Kansas City area and specifically Johnson County have numerous biological-, pharmaceutical- and chemical-related formulating, manufacturing, research and testing companies. Many of these facilities employ scientific technicians to support the endeavors of their professional scientists and engineers.

JCCC's science technology program is designed to develop scientific support personnel for the metropolitan area.

This program offers specific knowledge and training designed to provide you with entry-level skills for employment as a technician. It also provides the breadth of background sufficient to encourage change and flexibility.

The biotechnology associate of science degree program will prepare students who wish to pursue a baccalaureate degree in the biological sciences. Upon completion of this 78-hour degree, students will be able to find entry-level or

higher positions in the diverse field of biotechnology. Along with basic and more advanced science courses, students will take specialized courses in subjects such as laboratory safety and biotechnology methods.

Note: Metropolitan Community College students should seek specific counsel from the JCCC program personnel for the appropriate course plan and numbers.

Metropolitan Community College students should refer to Cooperative Program Information.

(Major Code 2130; CIP Code 41.0101)

Science Department

Associate of Science Degree

Students graduating with an Associate of Arts degree or an Associate of Science degree must complete a specific course from the approved cultural diversity list. This course may meet both a diversity requirement and general education requirement.

First Semester

```
MATH 181  Statistics*........................................3
          Prerequisite: MATH 171 or MATH 173
          or an equivalent course with a grade of "C" or higher
          or appropriate score on the math assessment test
BIOL 135  Principles of Cell and Molecular Biology............4
CHEM 124  General Chemistry I Lecture*........................4
          Prerequisite or corequisite: MATH 171 or assessment test
          and
          Corequisite: CHEM 125
CHEM 125  General Chemistry I Lab*.............................1
          Prerequisite or Corequisite: CHEM 124
          Students who withdraw from GENERAL CHEMISTRY I
          LECTURE must
          also withdraw from the corresponding laboratory
          GENERAL CHEMISTRY I LABORATORY
          Students may not withdraw from the laboratory course
          GENERAL CHEMISTRY I LABORATORY without withdrawing from
          CHEMISTRY I LECTURE.
SPD  120  Interpersonal Communication.........................3
          or
SPD  121  Public Speaking.....................................3
          or
SPD  125  Personal Communication..............................3
          or
SPD  180  Intercultural Communication^........................3
ENGL 121  Composition I*......................................3
          Prerequisite: ENGL 106
          or appropriate placement test score or EAP 113 and
          EAP 117
          Total Semester Credit Hours........................18
```

Second Semester

```
BIOT 160  Introduction to Biotechnology*......................2
          Prerequisite: CHEM 122 and
          Prerequisite or corequisite: BIOL 135 or consent of
          assistant dean
BIOL 150  Biology of Organisms*...............................5
          Prerequisite: BIOL 135 or
          consent of the assistant dean
CHEM 131  General Chemistry II Lecture*.......................4
          Prerequisites: CHEM 124 and CHEM 125 and
          Corequisite: CHEM 132
CHEM 132  General Chemistry II Lab*...........................1
          Prerequisites: CHEM 124 and CHEM 125 and
          Corequisite: CHEM 131
```

```
               Students
               who withdraw from GENERAL CHEMISTRY II LECTURE
               must also withdraw from the corresponding
               laboratory GENERAL CHEMISTRY II LABORATORY.
               Students may not withdraw from the laboratory
               course GENERAL CHEMISTRY II LABORATORY without
               withdrawing from CHEMISTRY II LECTURE.
ENGL 123   Technical Writing I*.................................3
               Prerequisite: ENGL 121
               Humanities Elective..................................3
               Total Semester Credit Hours.........................18
```

Summer

```
BIOL 230   Microbiology*.......................................3
               Prerequisite: CHEM 122 or
               one year of high school chemistry
               Social Science/Economics Elective...................3
               Total Semester Credit Hours..........................6
```

Third Semester

```
BIOT 165   Laboratory Safety*..................................1
               Prerequisite: CHEM 122 and
               Prerequisite or corequisite: BIOL 135 or consent of
               assistant dean
CHEM 220   Organic Chemistry I*................................5
               Prerequisites: CHEM 131 and CHEM 132
PHYS 130   General Physics I*..................................5
               Prerequisite: MATH 171 or assessment scores
BIOL 205   General Genetics*...................................4
               Prerequisite: BIOL 122 or the equivalent introductory
               college-level biology course
               Humanities Elective..................................3
               Total Semester Credit Hours.........................18
```

Fourth Semester

```
BIOT 260   Biotechnology Methods*..............................5
               Prerequisites: Either BIOT 160 or BIOL 160 and either
               BIOT 165 or BIOL 165 and
               Prerequisite or corequisite: BIOL 230 or consent of
               assistant dean
CHEM 250   Biochemistry*......................................4
               Prerequisites: CHEM 131 and CHEM 132 and CHEM 140 or
               CHEM 220
PHYS 131   General Physics II*.................................5
               Prerequisite: PHYS 130
               Social Science/Economics Elective...................3
               Physical Education Elective..........................1
               Total Semester Credit Hours.........................18
               TOTAL PROGRAM CREDIT HOURS..........................78
```

Optional Course

```
BIOT 265   Biotechnology Internship-Optional*..................4
               Prerequisites: BIOT 260 and either BIOT 160 or BIOL 160
               and either BIOT 165 or BIOL 165
               and Assistant Dean's Approval
with the optional course
               TOTAL PROGRAM CREDIT HOURS..........................82
*Prerequisite/Corequisite required
^Meets Cultural Diversity requirement
```

Biotechnology Certificate

Greater Kansas City and specifically Johnson County have numerous biological-, pharmaceutical- and chemical-related formulating, manufacturing, research and testing companies. Many of these facilities employ scientific technicians to support the endeavors of their professional scientists and engineers.

JCCC's science technology program is designed to develop scientific support personnel for the metropolitan area.

This program offers specific knowledge and training designed to provide you with entry-level skills for employment as a technician. It also provides the breadth of background sufficient to encourage change and flexibility.

The biotechnology vocational certificate is for students seeking employment in the biotechnology industry either in private or academic research laboratories. This certificate will demonstrate to potential employers that the student has experience in performing a variety of techniques necessary for the day-to-day operation.

Note: Metropolitan Community College students should seek specific counsel from the JCCC program personnel for the appropriate course plan and numbers.

Metropolitan Community College students should refer to Cooperative Program Information.

(Major Code 6150; CIP Code 41.0101)

Science Department

Career Certificate

First Semester

```
BIOL 135   Principles of Cell and Molecular Biology.............4
BIOT 160   Introduction to Biotechnology*.......................2
           Prerequisite: CHEM 122 and
           Prerequisite or corequisite: BIOL 135 or consent of
           assistant dean
BIOT 165   Laboratory Safety*...................................1
           Prerequisite: CHEM 122 and
           Prerequisite or corequisite: BIOL 135 or consent of
           assistant dean
CHEM 122   Principles of Chemistry..............................5
MATH 133   Technical Mathematics I or higher*.................3-5
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
           Total Semester Credit Hours......................15-17
Note: CHEM 122 must be taken before BIOT 160 and BIOT 165
```

Second Semester

```
BIOL 230   Microbiology*........................................3
           Prerequisite: CHEM 122 or
           one year of high school chemistry
BIOT 260   Biotechnology Methods*...............................5
           Prerequisites: Either BIOT 160 or BIOL 160 and either
           BIOT 165 or BIOL 165 and
           Prerequisite or corequisite: BIOL 230 or consent of
           assistant dean
CHEM 140   Principles of Organic & Biological Chemistry*........5
           Prerequisites: BIOL 135
           and CHEM 122 or permission of the assistant dean
PHYS 133   Applied Physics*.....................................5
           Prerequisite: MATH 133 or higher
           Total Semester Credit Hours.........................18
```

Third Semester

```
BIOT 265   Biotechnology Internship - optional*.................4
           Prerequisites: BIOT 260 and either BIOT 160 or BIOL 160
           and either BIOT 165 or BIOL 165
           and Assistant Dean's Approval
           TOTAL PROGRAM CREDIT HOURS.......................33-39
*Prerequisite/Corequisite required
```

Business Administration, A.A.S.

Business is more competitive than ever before. People running businesses will be judged by how well they manage change, stay ahead of trends and learn the latest theories. JCCC's business administration career program can train you in the many skills required to manage a variety of businesses.

Focusing on the development of decision-making, organizational and supervisory skills, the program offers professional courses in management, marketing, economics, accounting, finance, communications, business law and data processing. These are combined with a core of general education courses to ensure that students receive a well-rounded curriculum.

Graduates have opportunities in entry-level management and supervisory positions in a variety of businesses. Johnson County's continued growth as the business center for the area means job opportunities are available.

(Major Code 2430; CIP Code 52.0201)

Business Administration

Associate of Applied Science Degree

First Semester

```
ENGL 121  Composition I*......................................3
          Prerequisite: ENGL 106
          or appropriate placement test score or EAP 113 and
          EAP 117
MATH 120  Business Math or higher*.............................3
          Prerequisite: MATH 111 with a grade of "C" or higher
          or appropriate score on the math assessment test
BUS  121  Introduction to Business.............................3
BUS  225  Human Relations......................................3
CIS  124  Introduction to Computer Concepts and Applications...3
          and
          CPCA/CDTP elective...................................1
Note: CPCA 105/106 will not meet this one hour requirement.


          or
          CPCA/CDTP electives..................................4
          or
CIS  134  Programming Fundamentals.............................4
          Total Semester Credit Hours........................16
```

Second Semester

```
ACCT 121  Accounting I.........................................3
BUS  141  Principles of Management.............................3
          or
BUS  145  Small Business Management............................3
BUS  150  Business Communications*.............................3
          Prerequisite: ENGL 121
ECON 230  Economics I..........................................3
HIST 141  U.S. History Since 1877..............................3
          Health and/or Physical Education Elective............1
          Total Semester Credit Hours........................16
```

Third Semester

```
ACCT 122  Accounting II*.......................................3
          Prerequisite: ACCT 121
PHIL 138  Business Ethics......................................1
ECON 231  Economics II.........................................3
BUS  230  Marketing............................................3
BUS  261  Business Law I.......................................3
HUM  122  Introduction to Humanities...........................3
          Total Semester Credit Hours........................16
```

Fourth Semester

```
ACCT 222   Managerial Accounting*..............................3
           Prerequisite: ACCT 122
BUS  123   Personal Finance....................................3
           or
BUS  215   Savings and Investments.............................3
BUS  263   Business Law II*....................................3
           Prerequisite: BUS 261
BUS  243   Human Resource Management...........................3
           or
BUS  235   Introduction to International Business..............3
BIOL 130   Environmental Science...............................3
           Elective............................................1
           Total Semester Credit Hours........................16
           TOTAL PROGRAM CREDIT HOURS.........................64
```

Recommended Electives

```
BUS  120   Management Attitudes and Motivation.................3
BUS  140   Principles of Supervision...........................3
*Prerequisite/Corequisite required
```

Business-Logistics Mgt, A.A.S.

The Business-Logistics Management, AAS degree program is granted by Metropolitan Community College, but coordinated at JCCC.

This program focuses not only on those who currently work in a logistics career but also those who wish to test their interest and want more knowledge about that field. The program stretches all employees, including management personnel, professionally. Students receive information and training that can lead them to one of hundreds of careers tied to logistics. In addition to classroom knowledge, students receive current insights from professionals in the field.

The JCCC business logistics management program is offered to Johnson County residents in cooperation with Metropolitan Community Colleges of Kansas City. Related courses are taken at JCCC. You must be accepted as a student to JCCC and accepted into the program by MCC. Students must be residents of Johnson County in order to receive in-state tuition rates. Consult with a JCCC counselor for more information.

Program courses and credit hours are subject to change because of requirement changes at the degree-granting institution. Contact MCC-Blue River at 816-220-6532 or visit www.mcckc.edu

For enrollment information regarding this cooperative program, go to Cooperative Program Information.

Associate of Applied Science

```
Degree Granted by Metropolitan Community College
```

General Education Requirements-can be taken at JCCC

```
ENGL 121   Composition I*......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
ECON 230   Economics I.........................................3
MATH 120   Business Mathematics*...............................3
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
           or
MATH 116   Intermediate Algebra or higher*.....................3
           Prerequisite: MATH 115 with a grade of "C" or higher
           or appropriate score on the math assessment test
PSYC 130   Introduction to Psychology..........................3
           or
```

```
SOC  122  Introduction to Sociology..............................3
SPD  121  Public Speaking.......................................3
          or
SPD  125  Personal Communication................................3
```

American Institutions

```
HIST 140  U.S. History to 1877..................................3
          or
HIST 141  U.S. History Since 1877...............................3
          or
POLS 122  Political Science.....................................3
          or
POLS 124  American National Government..........................3
          or
POLS 126  State and Local Government............................3
```

Specific Program Requirements taken at JCCC

```
          Specific Program Electives............................9
ACCT 121  Accounting I..........................................3
BUS  141  Principles of Management..............................3
BUS  230  Marketing.............................................3
BUS  150  Business Communications*..............................3
          Prerequisite: ENGL 121
BUS  261  Business Law I........................................3
CIS  124  Introduction to Computer Concepts and Applications...3
          or
CPCA 128  PC Applications: MS Office............................3
          Electives.............................................6
          Note: Electives may be any non-developmental courses.
```

Specific Program Requirements-taken at MCC

```
KSS  153  The Missouri Constitution.............................1
KSCL 210  Logistics Management..................................3
KSCL 211  Operations Management.................................3
KSCL 212  Transportation Operations and Management..............3
KSCL 213  Warehousing and Distribution Centers..................3
          TOTAL PROGRAM CREDIT HOURS...........................64
```

Specific Program Electives

```
ACCT 111  Small Business Accounting.............................3
ACCT 122  Accounting II*........................................3
          Prerequisite: ACCT 121
ACCT 135  Computerized Accounting Applications*.................3
          Prerequisite: ACCT 121 or ACCT 111
ACCT 221  Cost Accounting*......................................3
          Prerequisite: ACCT 122
ACCT 222  Managerial Accounting*................................3
          Prerequisite: ACCT 122
ACCT 231  Intermediate Accounting I*............................3
          Prerequisite: ACCT 122
BOT  103  Business English......................................3
BUS  121  Introduction to Business..............................3
BUS  123  Personal Finance......................................3
BUS  140  Principles of Supervision.............................3
BUS  145  Small Business Management.............................3
BUS  225  Human Relations.......................................3
BUS  243  Human Resource Management.............................3
BUS  263  Business Law II*......................................3
          Prerequisite: BUS 261
ENTR 120  Introduction to Entrepreneurship......................2
FASH 121  Fashion Fundamentals..................................3
JOUR 125  Fundamentals of Advertising...........................3
MKT  121  Retail Management.....................................3
MKT  133  Salesmanship..........................................3
```

```
SPD  128  Business and Professional Speech.....................3
```
*Prerequisite/Corequisite required

Administrative Assistant, A.A.S.

This degree program prepares students for positions as supervisors and managers in automated office environments. Emphasis is on the development of communications, decision-making, organizational and management skills; and knowledge of software options, hardware components, applications and concepts. This program is designed to prepare you to function in the electronic office by using a mix of vocational, technical and academic training.

(Major Code 2680; CIP Code 52.0401)

Business Office Technology

Associate of Applied Science Degree

Prerequisite for Required Courses

```
Note: Prior to beginning the program, the student
must take the following prerequisite, or have taken the
equivalent transfer course, or have passed the waiver test
(if applicable), or have obtained a waiver from the
program administrator.

BOT  105  Keyboarding and Formatting I........................3
```

First Semester

```
BOT  106  Intro to Business Computer Applications*.............3
          Prerequisite or corequisite: BOT 105 or keyboarding
          proficiency test
MATH 120  Business Mathematics*................................3
          Prerequisite: MATH 111 with a grade of "C" or higher
          or appropriate score on the math assessment test
ENGL 121  Composition I*......................................3
          Prerequisite: ENGL 106
          or appropriate placement test score or EAP 113 and
          EAP 117
BOT  110  Skillbuilding I*.....................................1
          Prerequisite:  BOT 105 or equivalent
BOT  103  Business English....................................3
BOT  130  Office Systems Concepts.............................3
          Health and/or Physical Education Elective............1
          Total Semester Credit Hours........................17
```

Second Semester

```
BOT  155  Word Processing Application I*.......................2
          Prerequisites:  BOT 105 or equivalent and BOT 106
BUS  225  Human Relations.....................................3
ACCT 121  Accounting I........................................3
BUS  121  Introduction to Business............................3
CPCA 141  Internet I*.........................................1
          Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or
          CIS 124 or an appropriate score on an assessment test
BOT  150  Records Management..................................3
          Total Semester Credit Hours........................15
```

Third Semester

```
LAW  121  Introduction to Law.................................3
BOT  125  Document Formatting*................................1
          Prerequisite:  BOT 155
BUS  140  Principles of Supervision...........................3
          or
```

```
BUS   141   Principles of Management.............................3
BOT   255   Word Processing Applications II*.....................2
            Prerequisite: BOT 155 or extensive experience using the
            same software with approval of the program facilitator
BUS   150   Business Communications*............................3
            Prerequisite: ENGL 121
            Humanities Elective.................................3
            Total Semester Credit Hours........................15
```

Fourth Semester

```
ECON 132   Survey of Economics.................................3
            or
ECON 230   Economics I.........................................3
BOT   275   Office Internship I*................................1
            Prerequisite: Admission to the business office technology
            program
BUS   243   Human Resource Management...........................3
BOT   265   Computerized Office Applications*...................3
            Prerequisites: BOT 106
            and also CPCA 141 and
            BOT 255 and BOT 130
            (This capstone course should be taken near the end of the
            degree or certificate program)
BOT   260   Desktop Publishing for the Office*.................3
            Prerequisite: BOT 155 or the equivalent
            BOT Electives......................................4
            Total Semester Credit Hours........................17
            TOTAL PROGRAM CREDIT HOURS.........................64
```

BOT Electives

```
BOT   118   Skillbuilding II*..................................1
            Prerequisite:  BOT 110
BOT   180   Business Spreadsheet Applications*.................1
            Prerequisite:  BOT 106 or
            CPCA 110 or extensive experience using
            Windows-based spreadsheets
BOT   185   Business Database Applications*....................1
            Prerequisite: BOT 106 or
            CPCA 114 or extensive experience using
            Windows-based databases
BOT   205   Professional Image Development......................1
BOT   210   Working in Teams...................................1
BOT   280   Office Internship II*..............................1
            Prerequisite: BOT 275
*Prerequisite/Corequisite required
```

Administrative Assistant with Legal Emphasis, A.A.S.

This degree program prepares students for administrative duties in the law office and other legal settings. The program combines training in the latest technical computer skills with specialized course work unique to the legal profession, including exposure to legal practices, preparation, and practical application of documents and terminology used in the legal office.

(Major Code 2780; CIP Code 22.0301)

Business Office Technology

Associate of Applied Science Degree

Prerequisite for Required Courses

```
Note: Prior to the beginning of the program, the student
must take the following prerequisite, or have taken the
equivalent transfer course, or have passed the waiver
test, or have obtained a waiver from the program
```

administrator.

```
BOT  105   Keyboarding and Formatting I........................3
```

First Semester

```
BOT  106   Intro to Business Computer Applications*.............3
           Prerequisite or corequisite: BOT 105 or keyboarding
           proficiency test
LAW  121   Introduction to Law.................................3
BOT  103   Business English...................................3
BOT  130   Office Systems Concepts............................3
ENGL 121   Composition I*.....................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
BOT  115   Electronic Calculators.............................1
           Health and/or Physical Education Elective............1
           Total Semester Credit Hours........................17
```

Second Semester

```
BOT  155   Word Processing Application I*......................2
           Prerequisites:  BOT 105 or equivalent and BOT 106
BOT  110   Skillbuilding I*...................................1
           Prerequisite:  BOT 105 or equivalent
BOT  150   Records Management.................................3
MATH 120   Business Mathematics*..............................3
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
BUS  150   Business Communications*...........................3
           Prerequisite: ENGL 121
ACCT 111   Small Business Accounting..........................3
           or
ACCT 121   Accounting I.......................................3
CPCA 141   Internet I*........................................1
           Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or
           CIS 124 or an appropriate score on an assessment test
           Total Semester Credit Hours........................16
```

Third Semester

```
LAW  223   Law Office Computing*..............................3
           Prerequisites: Paralegal program students - admission to
           the paralegal program and either CIS 124 or  CPCA 128
           or three hours of CPCA 108 and CPCA 110 and CPCA 114
BOT  160   Legal Transcription*...............................3
           Prerequisite:  BOT 155 or equivalent
BUS  225   Human Relations....................................3
BOT  255   Word Processing Applications II*....................2
           Prerequisite: BOT 155 or extensive experience using the
           same software with approval of the program facilitator
BOT  125   Document Formatting*...............................1
           Prerequisite:  BOT 155
           BOT Electives......................................3
           Total Semester Credit Hours........................15
```

Fourth Semester

```
ECON 132   Survey of Economics................................3
           or
ECON 230   Economics I........................................3
BOT  275   Office Internship I*...............................1
           Prerequisite: Admission to the business office technology
           program
BOT  265   Computerized Office Applications*..................3
           Prerequisites: BOT 106
           and also CPCA 141 and
```

```
                BOT 255 and BOT 130
                (This capstone course should be taken near the end of the
                degree or certificate program)
BUS  140   Principles of Supervision.............................3
                or
BUS  141   Principles of Management.............................3
                Humanities Elective..................................3
                General Electives....................................3
                Total Semester Credit Hours.........................16
                TOTAL PROGRAM CREDIT HOURS..........................64
```

BOT Electives

```
BOT  118   Skillbuilding II*.....................................1
                Prerequisite:  BOT 110
BOT  180   Business Spreadsheet Applications*...................1
                Prerequisite:  BOT 106 or
                CPCA 110 or extensive experience using
                Windows-based spreadsheets
BOT  185   Business Database Applications*......................1
                Prerequisite: BOT 106 or
                CPCA 114 or extensive experience using
                Windows-based databases
BOT  205   Professional Image Development.......................1
BOT  210   Working in Teams.....................................1
BOT  280   Office Internship II*................................1
                Prerequisite: BOT 275
*Prerequisite/Corequisite required
```

Administrative Assistant with Medical Emphasis, A.A.S.

This degree program prepares students to pursue an administrative career in the medical profession. The program combines training in the latest technical and computer skills with specialized course work unique to the medical profession. Beginning students and employed medical personnel will find this program invaluable for career advancement.

(Major Code 2790; CIP Code 51.0710)

Business Office Technology

Associate of Applied Science Degree

Prerequisite for Required Courses

```
Note: Prior to beginning the program, the student
must take the following prerequisite, or have taken the
equivalent transfer course, or have passed the waiver test,
or have have obtained a waiver from the program
administrator.

BOT  105   Keyboarding and Formatting I.........................3
```

First Semester

```
BOT  106   Intro to Business Computer Applications*.............3
                Prerequisite or corequisite: BOT 105 or keyboarding
                proficiency test
AAC  130   Medical Terminology..................................3
ENGL 121   Composition I*.......................................3
                Prerequisite: ENGL 106
                or appropriate placement test score or EAP 113 and
                EAP 117
BOT  103   Business English.....................................3
BOT  130   Office Systems Concepts..............................3
                Health and/or Physical Education Elective...........1
```

```
                    Total Semester Credit Hours........................16
```

Second Semester

```
BOT  155  Word Processing Application I*.......................2
          Prerequisites:  BOT 105 or equivalent and BOT 106
BOT  110  Skillbuilding I*.....................................1
          Prerequisite:  BOT 105 or equivalent
BOT  170  Medical Coding and Billing*..........................3
          Prerequisite:  AAC 130
BOT  150  Records Management...................................3
BOT  115  Electronic Calculators..............................1
MATH 120  Business Mathematics*...............................3
          Prerequisite: MATH 111 with a grade of "C" or higher
          or appropriate score on the math assessment test
BUS  225  Human Relations.....................................3
CPCA 141  Internet I*.........................................1
          Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or
          CIS 124 or an appropriate score on an assessment test
          Total Semester Credit Hours........................17
```

Third Semester

```
BOT  125  Document Formatting*................................1
          Prerequisite:  BOT 155
ACCT 111  Small Business Accounting...........................3
          or
ACCT 121  Accounting I........................................3
BOT  122  Medical Keyboarding*................................1
          Prerequisite:  BOT 105
LAW  121  Introduction to Law.................................3
BUS  150  Business Communications*............................3
          Prerequisite: ENGL 121
BOT  255  Word Processing Applications II*....................2
          Prerequisite: BOT 155 or extensive experience using the
          same software with approval of the program facilitator
          Humanities Elective................................3
          Total Semester Credit Hours........................16
```

Fourth Semester

```
ECON 132  Survey of Economics.................................3
          or
ECON 230  Economics I.........................................3
BOT  165  Medical Transcription*..............................3
          Prerequisites:  AAC 130 and BOT 155 or equivalent
BOT  265  Computerized Office Applications*...................3
          Prerequisites: BOT 106
          and also CPCA 141 and
          BOT 255 and BOT 130
          (This capstone course should be taken near the end of the
          degree or certificate program)
BOT  275  Office Internship I*................................1
          Prerequisite: Admission to the business office technology
          program
BUS  140  Principles of Supervision...........................3
          or
BUS  141  Principles of Management............................3
          BOT Electives......................................2
          Total Semester Credit Hours........................15
          TOTAL PROGRAM CREDIT HOURS.........................64
```

BOT Electives

```
BOT  118  Skillbuilding II*...................................1
          Prerequisite:  BOT 110
BOT  180  Business Spreadsheet Applications*..................1
          Prerequisite:  BOT 106 or
```

```
              CPCA 110 or extensive experience using
              Windows-based spreadsheets
    BOT  185  Business Database Applications*......................1
              Prerequisite: BOT 106 or
              CPCA 114 or extensive experience using
              Windows-based databases
    BOT  205  Professional Image Development......................1
    BOT  210  Working in Teams...................................1
    BOT  280  Office Internship II*..............................1
              Prerequisite: BOT 275
    *Prerequisite/Corequisite required
```

Administrative Support Specialist Certificate

The administrative support specialist certificate prepares students for executive and/or administrative assistant duties in the office. The program provides training in the latest technical, computer and software skills.

(Major Code 4690; CIP Code 52.0401)

Business Office Technology

Career Certificate

Prerequisite for Required Courses

```
Note: Prior to beginning the program, the student must take
the following prerequisite, or have taken an equivalent
transfer course, or have passed the waiver test, or have
obtained a waiver from the program administrator.


    BOT  105  Keyboarding and Formatting I.......................3
```

Required Courses

```
    BOT  110  Skillbuilding I*...................................1
              Prerequisite:  BOT 105 or equivalent
    BOT  130  Office Systems Concepts............................3
    BOT  125  Document Formatting*...............................1
              Prerequisite:  BOT 155
    BOT  103  Business English...................................3
    BOT  106  Intro to Business Computer Applications*...........3
              Prerequisite or corequisite: BOT 105 or keyboarding
              proficiency test
    BUS  225  Human Relations....................................3
    BOT  155  Word Processing Application I*.....................2
              Prerequisites:  BOT 105 or equivalent and BOT 106
    BOT  115  Electronic Calculators.............................1
    BOT  150  Records Management.................................3
    CPCA 141  Internet I*........................................1
              Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or
              CIS 124 or an appropriate score on an assessment test
    BOT  255  Word Processing Applications II*...................2
              Prerequisite: BOT 155 or extensive experience using the
              same software with approval of the program facilitator
    BOT  265  Computerized Office Applications*..................3
              Prerequisites: BOT 106
              and also CPCA 141 and
              BOT 255 and BOT 130
              (This capstone course should be taken near the end of the
              degree or certificate program)
    BOT  260  Desktop Publishing for the Office*.................3
              Prerequisite: BOT 155 or the equivalent
    BOT  275  Office Internship I*...............................1
              Prerequisite: Admission to the business office technology
              program
              TOTAL PROGRAM CREDIT HOURS.........................30
    *Prerequisite/Corequisite required
```

Business Administrative Assistant Entrep Certificate

The business administrative assistant entrepreneurship certificate will prepare students to open their own service business providing administrative assistance to businesses. This certificate is designed to provide the student with basic skills in business office technology and administration as well as basic skills in small business development and management.

(Major Code 4090; CIP Code 52.0401)

Business Office Technology

Career Certificate

Prerequisites for Required Courses

```
Note: Prior to beginning the program, the student must take
the following prerequisites, or have taken the equivalent
transfer courses, or have passed the waiver test (where
applicable), or have obtained a waiver from the
program administrator.


BOT  155   Word Processing Applications I or approval*..........2
           Prerequisites:  BOT 105 or equivalent and BOT 106
CPCA 110   Spreadsheet on Microcomputers I or approval*.........1
           Prerequisite: CPCA 105 or CPCA 106 or CIS 124
           or CPCA 128 or an appropriate score on a waiver test
CPCA 114   Databases on Microcomputers I or approval*...........1
           Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124
           or an appropriate score on a waiver test
CPCA 141   Internet I or approval*..............................1
           Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or
           CIS 124 or an appropriate score on an assessment test
BUS  230   Marketing...........................................3
```

Required Courses

```
BOT  105   Keyboarding and Formatting I.........................3
BOT  106   Intro to Business Computer Applications*.............3
           Prerequisite or corequisite: BOT 105 or keyboarding
           proficiency test
BOT  130   Office Systems Concepts..............................3
BOT  260   Desktop Publishing for the Office*...................3
           Prerequisite: BOT 155 or the equivalent
ENTR 120   Introduction to Entrepreneurship....................2
BOT  255   Word Processing Applications II*.....................2
           Prerequisite: BOT 155 or extensive experience using the
           same software with approval of the program facilitator
BOT  265   Computerized Office Applications*....................3
           Prerequisites: BOT 106
           and also CPCA 141 and
           BOT 255 and BOT 130
           (This capstone course should be taken near the end of the
           degree or certificate program)
BOT  110   Skillbuilding I*.....................................1
           Prerequisite:  BOT 105 or equivalent
BOT  125   Document Formatting*................................1
           Prerequisite:  BOT 155
BOT  180   Business Spreadsheet Applications*..................1
           Prerequisite:  BOT 106 or
           CPCA 110 or extensive experience using
           Windows-based spreadsheets
BOT  185   Business Database Applications*.....................1
           Prerequisite: BOT 106 or
           CPCA 114 or extensive experience using
           Windows-based databases
ENTR 180   Opportunity Analysis................................2
ENTR 142   Fast Trac Business Plan.............................3
BOT  275   Office Internship I*................................1
           Prerequisite: Admission to the business office technology
```

```
                 program
                 TOTAL PROGRAM CREDIT HOURS.........................29
        *Prerequisite/Corequisite required
```

Medical Administrative Assistant Entrepreneurship Cert

The medical administrative assistant entrepreneurship certificate prepares students to open their own service business providing administrative assistance to the medical profession. This certificate is designed to provide the student with basic skills in medical office administration and the basic skills in small business development and management.

(Major Code 4290; CIP Code 52.0710)

Business Office Technology

Career Certificate

Prerequisites for Required Courses

```
Note: Prior to beginning the program, the student must take
the following prerequisites, or have taken the equivalent
transfer courses, or have passed the waiver test (where
applicable), or have obtained a waiver from the
program administrator.


BOT  105   Keyboarding and Formatting I or approval.............3
BOT  155   Word Processing Applications I or approval*..........2
           Prerequisites:  BOT 105 or equivalent and BOT 106
CPCA 110   Spreadsheet on Microcomputers I or approval*.........1
           Prerequisite: CPCA 105 or CPCA 106 or CIS 124
           or CPCA 128 or an appropriate score on a waiver test
CPCA 114   Databases on Microcomputers I or approval*...........1
           Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124
           or an appropriate score on a waiver test
CPCA 141   Internet I or approval*..............................1
           Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or
           CIS 124 or an appropriate score on an assessment test
```

Required Courses

```
AAC  130   Medical Terminology..................................3
BOT  106   Intro to Business Computer Applications*.............3
           Prerequisite or corequisite: BOT 105 or keyboarding
           proficiency test
BOT  130   Office Systems Concepts..............................3
BOT  110   Skillbuilding I*.....................................1
           Prerequisite:  BOT 105 or equivalent
BOT  170   Medical Coding and Billing*..........................3
           Prerequisite:  AAC 130
ENTR 120   Introduction to Entrepreneurship....................2
ENTR 180   Opportunity Analysis................................2
BOT  255   Word Processing Applications II*....................2
           Prerequisite: BOT 155 or extensive experience using the
           same software with approval of the program facilitator
BOT  265   Computerized Office Applications*...................3
           Prerequisites: BOT 106
           and also CPCA 141 and
           BOT 255 and BOT 130
           (This capstone course should be taken near the end of the
           degree or certificate program)
BOT  180   Business Spreadsheet Applications*..................1
           Prerequisite:  BOT 106 or
           CPCA 110 or extensive experience using
           Windows-based spreadsheets
BOT  185   Business Database Applications*.....................1
```

```
                Prerequisite: BOT 106 or
                CPCA 114 or extensive experience using
                Windows-based databases
ENTR 142   Fast Trac Business Plan..............................3
BOT  275   Office Internship I*................................1
                Prerequisite: Admission to the business office technology
                program
                TOTAL PROGRAM CREDIT HOURS.........................28
*Prerequisite/Corequisite required
```

Students may be interested in taking additional courses, as
noted below, to complement their certificate study. These
courses are NOT part of the certificate requirements.

```
ENTR 160   Legal Issues for Small Business.....................2
ENTR 220   Entrepreneurial Marketing*..........................2
                Prerequisite: BUS 230
ENTR 195   Franchising*........................................3
                Prerequisite: BUS 230
ENTR 131   Financial Management for Small Business*............2
                Prerequisite: ACCT 111 or ACCT 121
```

Medical Office Assistant Certificate

This certificate program prepares students for work in doctors' offices and hospital
offices. The curriculum provides training for students in entry-level positions as
well as for those who are upgrading existing skills.

(Major Code 5400; CIP Code 51.0710)

Business Office Technology

Career Certificate

First Semester

```
BOT  103   Business English....................................3
BOT  105   Keyboarding and Formatting I........................3
BOT  106   Intro to Business Computer Applications*............3
                Prerequisite or corequisite: BOT 105 or keyboarding
                proficiency test
                (Prereq. or Coreq. BOT 105 or keyboarding
                proficiency exam)
AAC  130   Medical Terminology................................3
                Total Semester Credit Hours.......................12
```

Second Semester

```
BOT  110   Skillbuilding I*....................................1
                Prerequisite:  BOT 105 or equivalent
                (Prereq. BOT 105 or equivalent)
BOT  155   Word Processing Application I*......................2
                Prerequisites:  BOT 105 or equivalent and BOT 106
                (Prereq. BOT 105 and BOT 106)
BOT  122   Medical Keyboarding*...............................1
                Prerequisite:  BOT 105
                (Prereq. BOT 106)
BOT  125   Document Formatting*...............................1
                Prerequisite:  BOT 155
                (Prereq. BOT 155)
BOT  130   Office Systems Concepts............................3
BOT  170   Medical Coding and Billing*........................3
                Prerequisite:  AAC 130
                (Prereq. AAC 130)
                Total Semester Credit Hours.......................11
```

Third Semester

```
BOT  165  Medical Transcription*...............................3
           Prerequisites:  AAC 130 and BOT 155 or equivalent
           (Prereq. AAC 130 and BOT 155 or equivalent)
           Total Semester Credit Hours.........................3
           TOTAL PROGRAM CREDIT HOURS.........................26
*Prerequisite/Corequisite required
```

Medical Transcription Certificate

The certificate program will prepare the student for entry-level employment as a medical transcriptionist by providing the basic knowledge and skills required to transcribe medical dictation with accuracy and clarity, meet timelines, and apply the principles of professional and ethical conduct.

(Major Code 5410; CIP Code 51.0708)

Business Office Technology

Career Certificate

Prerequisite for Required Courses:

```
Note: Prior to beginning the program, the student must
take the prerequisite, or have taken the equivalent
transfer course, or have passed the waiver test
(if applicable), or have obtained a waiver from the
program administrator.


BOT  105  Keyboarding and Formatting I........................3
```

Required Courses

```
BOT  122  Medical Keyboarding*................................1
           Prerequisite:  BOT 105
BOT  106  Intro to Business Computer Applications*............3
           Prerequisite or corequisite: BOT 105 or keyboarding
           proficiency test
BOT  155  Word Processing Application I*......................2
           Prerequisites:  BOT 105 or equivalent and BOT 106
BOT  255  Word Processing Applications II*....................2
           Prerequisite: BOT 155 or extensive experience using the
           same software with approval of the program facilitator
BOT  103  Business English...................................3
AAC  130  Medical Terminology................................3
BOT  165  Medical Transcription*.............................3
           Prerequisites:  AAC 130 and BOT 155 or equivalent
BOT  270  Advanced Medical Transcription*.....................3
           Prerequisite: BOT 165
BOT  170  Medical Coding and Billing*.........................3
           Prerequisite:  AAC 130
BOT  220  Pharmacology Terminology*..........................2
           Prerequisite: AAC 130
BIOL 140  Human Anatomy......................................4
BOT  275  Office Internship I*...............................1
           Prerequisite: Admission to the business office technology
           program
           TOTAL PROGRAM CREDIT HOURS.........................30
*Prerequisite/Corequisite required
```

Office Careers Certificate

At the completion of this 18–credit-hour certificate, students demonstrate proficiency in office skills, including computer and word processing knowledge. This certificate program prepares students to enter an office career in a minimal time period.

(Major Code 4900; CIP Code 52.0401)

Business Office Technology

Career Certificate

First Semester

```
BOT  103  Business English.....................................3
BOT  105  Keyboarding and Formatting I.........................3
BOT  106  Intro to Business Computer Applications*.............3
          Prerequisite or corequisite: BOT 105 or keyboarding
          proficiency test
          (Prereq. or Coreq. BOT 105 or keyboarding
          proficiency exam)
BOT  130  Office Systems Concepts..............................3
          Total Semester Credit Hours.........................12
```

Second Semester

```
BOT  110  Skillbuilding I*.....................................1
          Prerequisite:  BOT 105 or equivalent
          (Prereq. BOT 105 or equiv.)
BOT  115  Electronic Calculators...............................1
BOT  155  Word Processing Application I*.......................2
          Prerequisites:  BOT 105 or equivalent and BOT 106
          (Prereq. BOT 105 and BOT 106)
BOT  180  Business Spreadsheet Applications*...................1
          Prerequisite:  BOT 106 or
          CPCA 110 or extensive experience using
          Windows-based spreadsheets
          (Prereq. BOT 106 or CPCA 110)
          or
BOT  185  Business Database Applications*......................1
          Prerequisite: BOT 106 or
          CPCA 114 or extensive experience using
          Windows-based databases
          (Prereq. BOT 106 or CPCA 114)
BOT  125  Document Formatting*.................................1
          Prerequisite:  BOT 155
          (Prereq. BOT 155)
          Total Semester Credit Hours.........................6
          TOTAL PROGRAM CREDIT HOURS.........................18
*Prerequisite/Corequisites required
```

Owning/Managing a Virtual Home Office Certificate

The certificate provides the opportunity for students to add competencies in the area of entrepreneurship, business planning and managing as well as Web page creation and desktop publishing skills.

(Major Code 5430; CIP Code 52.0401)

Business Office Technology

Certificate of Completion

Prerequisite: Completion of Virtual Home Office certificate

First Semester

```
ENTR 142  Fast Trac Business Plan..............................3
ENTR 180  Opportunity Analysis.................................2
BUS  230  Marketing............................................3
BUS  145  Small Business Management............................3
CPCA 161  Introduction to Web Pages using HTML*................1
          Prerequisite: CPCA 151 or an appropriate score on an
```

```
                    assessment test
                    (Prereq. CPCA 151 or appropriate score on assessment test)
BOT  260   Desktop Publishing for the Office*...................3
                    Prerequisite: BOT 155 or the equivalent
                    (Prereq. BOT 155)
                    TOTAL PROGRAM CREDIT HOURS..........................15
         *Prerequisite/corequisite required
```

Virtual Home Office Certificate

The certificate is designed for students conducting all or part of their job duties in a remote location or home office as well as students seeking career opportunities where they can work from a home office.

(Major Code 5420; CIP Code 52.0401)

Business Office Technology

Career Certificate

First Semester

```
BOT  103   Business English.....................................3
BOT  105   Keyboarding and Formatting I.........................3
BOT  106   Intro to Business Computer Applications*.............3
                    Prerequisite or corequisite: BOT 105 or keyboarding
                    proficiency test
                    (Prereq. or Coreq. BOT 105 or keyboarding
                    proficiency exam)
BOT  130   Office Systems Concepts..............................3
                    Total Semester Credit Hours........................12
```

Second Semester

```
BOT  155   Word Processing Application I*.......................2
                    Prerequisites:  BOT 105 or equivalent and BOT 106
                    (Prereq. BOT 105 and BOT 106)
CPCA 141   Internet I*.........................................1
                    Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or
                    CIS 124 or an appropriate score on an assessment test
                    (Prereq. CPCA 105 or CPCA 106 or CIS 124 or
                    CPCA 128 or appropriate score on assessment test)
ACCT 111   Small Business Accounting...........................3
                    Total Semester Credit Hours.........................6
```

Third Semester

```
BOT  255   Word Processing Applications II*.....................2
                    Prerequisite: BOT 155 or extensive experience using the
                    same software with approval of the program facilitator
                    (Prereq. BOT 155)
CPCA 151   Internet II*........................................1
                    Prerequisite: CPCA 141 or an appropriate score on an
                    assessment test
                    (Prereq. CPCA 141 or appropriate score on
                    assessment test)
BOT  275   Office Internship I*................................1
                    Prerequisite: Admission to the business office technology
                    program
                    Total Semester Credit Hours.........................4
                    TOTAL PROGRAM CREDIT HOURS..........................22
         *Prerequisite/Corequisite required
```

Virtual Medical Office Certificate

The certificate is designed for students working or planning to work in the medical

business office from a remote location or their home.
(Major Code 5440; CIP Code 52.0710)
Business Office Technology

Career Certificate

Prerequisite: Completion of Virtual Home Office certificate

First Semester

```
AAC  130   Medical Terminology..................................3
BIOL 140   Human Anatomy........................................4
           Total Semester Credit Hours..........................7
```

Second Semester

```
BOT  165   Medical Transcription*...............................3
           Prerequisites:  AAC 130 and BOT 155 or equivalent
           (Prereq. AAC 130 and BOT 155)
BOT  170   Medical Coding and Billing*..........................3
           Prerequisite:  AAC 130
           (Prereq. AAC 130)
           Total Semester Credit Hours..........................6
```

Third Semester

```
BOT  270   Advanced Medical Transcription*......................3
           Prerequisite: BOT 165
           (Prereq. BOT 165)
           Total Semester Credit Hours..........................3
           TOTAL PROGRAM CREDIT HOURS..........................16
*Prerequisite/Corequisite required
```

Civil Engineering Technology, A.A.S.

Civil engineering technicians use theory and practical application in planning, designing, constructing, inspecting and maintaining civil engineering projects. Job duties can include performing land surveys, creating civil engineering drawings using computer aided drafting, assisting engineers with design, and project management.

JCCC's civil engineering technology program offers a broad base of instruction in mathematics, engineering design, drawing interpretation, computer-aided drafting, construction methods and communication skills. The program will qualify graduates for a variety of entry-level positions in design firms, construction companies or public agencies. Successful completion of 64 hours from the civil engineering technology curriculum will lead to an associate of applied science degree.

(Major Code 2210; CIP Code 15.0201)
Civil Engineering Technology

Associate of Applied Science Degree

First Semester

```
DRAF 129   Interpreting Architectural Drawings..................2
ENGR 131   Engineering Graphics I*..............................4
           Corequisite: MATH 133 or MATH 171 or MATH 172 or
           MATH 173 or MATH 241
MATH 133   Technical Mathematics I*.............................4
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
CET  125   Construction Specifications*.........................2
           Prerequisite or corequisite: CET 105 or equivalent
```

```
CET  105   Construction Methods.................................3
INDT 155   Workplace Skills....................................1
           Total Semester Credit Hours.......................16
```

Second Semester

```
CET  129   Construction Management.............................3
DRAF 244   Land Development Desktop/CIVIL 3D*..................2
           Prerequisite: DRAF 230 or ENGR 131
           or approval of the program assistant dean
DRAF 225   Civil Drafting*.....................................3
           Prerequisite: DRAF 230 or ENGR 131
           Corequisite: MATH 134
ENGL 121   Composition I*......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
MATH 134   Technical Mathematics II*...........................5
           Prerequisite: MATH 133 or an equivalent course with a
           grade of "C" or higher
           Total Semester Credit Hours.......................16
```

Third Semester

```
CET  227   Construction Cost Estimating*.......................3
           Prerequisites: CET 105 and CET 125 or permission of
           program administrator and
           Prerequisite or corequisite: DRAF 129 or permission of
           program administrator
CET  211   Technical Statics and Design*.......................3
           Prerequisite: MATH 134 or MATH 172 or MATH 173 or
           MATH 241
ENGR 180   Engineering Land Surveying I*.......................3
           Corequisite: MATH 134 or MATH 172
ENGL 123   Technical Writing I*................................3
           Prerequisite: ENGL 121
PHIL 138   Business Ethics.....................................1
           Humanities Elective.................................3
           Total Semester Credit Hours.......................16
```

Fourth Semester

```
CET  140   Civil Engineering Materials*........................3
           Corequisite: MATH 133
CET  270   Fluid Mechanics*....................................3
           Prerequisites: MATH 172 or MATH 134
DRAF 252   Structural Drafting*................................3
           Prerequisite: DRAF 230 or ENGR 131
           Corequisite: MATH 134
CET  150   Construction Safety.................................3
           Health/Physical Education Elective..................1
           Social Science/Economics Elective...................3
           Total Semester Credit Hours.......................16
           TOTAL PROGRAM CREDIT HOURS........................64
*Prerequisite/Corequisite required
```

Construction Management Certificate

The construction management certificate is designed to address the management training needs of supervisors in the construction industry. Necessary management skills include construction methods, safety, estimating and management; personnel supervision; business management; and financial and data management. Construction management practices are directed toward those encountered by small- to medium-sized contractors.

(Major Code 4750; CIP Code 52.2001)

Civil Engineering Technology

Career Certificate

First Semester

```
CET   105   Construction Methods.................................3
CET   125   Construction Specifications*.........................2
            Prerequisite or corequisite: CET 105 or equivalent
CET   129   Construction Management..............................3
MATH  120   Business Math or higher*.............................3
            Prerequisite: MATH 111 with a grade of "C" or higher
            or appropriate score on the math assessment test
BUS   140   Principles of Supervision............................3
            Total Semester Credit Hours........................14
```

Second Semester

```
ACCT  111   Small Business Accounting............................3
            or
ACCT  121   Accounting I.........................................3
DRAF  129   Interpreting Architectural Drawings..................2
CET   227   Construction Cost Estimating*........................3
            Prerequisites: CET 105 and CET 125 or permission of
            program administrator and
            Prerequisite or corequisite: DRAF 129 or permission of
            program administrator
CET   150   Construction Safety..................................3
            Management Electives.................................2
INDT  155   Workplace Skills.....................................1
            Total Semester Credit Hours........................14
            TOTAL PROGRAM CREDIT HOURS.........................28
```

Management Electives

```
BUS   141   Principles of Management.............................3
BUS   145   Small Business Management............................3
BUS   243   Human Resource Management............................3
BUS   261   Business Law I.......................................3
ENTR  131   Financial Management for Small Business..............2
            Prerequisite: ACCT 111 or ACCT 121
ENTR  160   Legal Issues for Small Business......................2
*Prerequisite/Corequisite required
```

Engineered Plumbing Systems Certificate

This certificate is designed to address the needs of engineers and technicians in the plumbing design industry. Successful completion of this certificate will help the student prepare for the Certified in Plumbing Engineering (CIPE) examination.

(Major Code 6300; CIP Code 15.0201)

Civil Engineering Technology

Certificate of Completion

First Semester

```
CET   120   Engineered Plumbing Systems I........................3
            Total Semester Credit Hours.........................3
```

Second Semester

```
CET   122   Engineered Plumbing Systems II.......................3
CET   270   Fluid Mechanics*.....................................3
            Prerequisites: MATH 172 or MATH 134
            Total Semester Credit Hours.........................6
            TOTAL PROGRAM CREDIT HOURS..........................9
*Prerequisite/Corequisite required
```

Computer Information Systems, A.A.S.

Employment opportunities for programmer analysts continue to grow as the need for sophisticated information systems increases in the business environment. Increased demand will focus on the areas of object-oriented programming, database management and client-server applications.

JCCC's information systems program focuses on developing the skills needed for entry-level programmer analysts and related positions. The associate of applied science degree in information systems offers an integrated program of study designed to prepare professionals with skills that are applicable to different hardware systems. With its emphasis on practical experience and on currency in the areas of software and curriculum, the program has much to offer the information systems professional who wishes to upgrade or broaden his or her knowledge of the field.

The associate of applied science degree is awarded for successful completion of 69 credit hours.

(Major Code 2930; CIP Code 11.0201)

Information Systems

Associate of Applied Science Degree

Prerequisite for Required Courses

```
Note: Prior to beginning the information systems program,
the student must take the following prerequisite, or have
taken an equivalent transfer course, or have passed the
waiver test, or have obtained a waiver from the program
administrator:


CIS  134  Programming Fundamentals............................4
```

Required Courses

First Semester

```
CS   200  Concepts of Programming Algorithms Using C++*........4
          Prerequisite: CIS 134 or ENGR 171
          or equivalent experience
          or
CS   205  Concepts of Programming Algorithms using JAVA*.......4
          Prerequisite: CIS 134 or ENGR 171
          or equivalent experience
CIM  133  Screen Design*......................................4
          Prerequisite: CDTP 135
ACCT 121  Accounting I........................................3
ENGL 121  Composition I*......................................3
          Prerequisite: ENGL 106
          or appropriate placement test score or EAP 113 and
          EAP 117
MATH 171  College Algebra*....................................3
          Prerequisite: MATH 116 with a grade of "C" or higher
          or MATH 134 with a grade of "C" or higher
          or appropriate score on the math assessment test
          Note: Not available to students with credit in MATH 173
          or
          Any Precalculus/Calculus Course*....................3
          Total Semester Credit Hours........................17
```

Second Semester

```
          Level One Programming Language
          Option..............................................4
CS   210  Discrete Structures I*...............................3
          Prerequisites: MATH 171 or both MATH 116 and CIS 134
          or appropriate math assessment scores
CIS  162  Database Programming*................................4
```

```
        Prerequisite: CIS 134 or the equivalent
CIS   242  Introduction to System Design and Analysis*..........3
        Prerequisite: CIS 138 or CS 200 or CS 201 or
        CS205
SPD   125  Personal Communication...............................3
        or
ENGL  123  Technical Writing I*.................................3
        Prerequisite: ENGL 121
        Total Semester Credit Hours........................17
```

Third Semester

```
        Level Two Programming Language
        Option..............................................4
CIS   258  Operating Systems*...................................3
        Prerequisite: CIS 138 or CIS 162 or
        CS 200 or CS 201 or CS 205
        or
CIS   204  UNIX Operating System*...............................3
        Prerequisites: CS 200 or CS 205 or
        CS 201 and CPCA 139
        CIS Elective......................................3
        Humanities/Art Elective...........................3
        Social Science and/or Economic Electives............3
        Health and/or Physical Education Elective...........1
        Total Semester Credit Hours........................17
```

Fourth Semester

```
        Level Three Programming Language
        Option..............................................4
CIS   264  Application Development and Programming*.............4
        Prerequisites: CIS 242 and either CIS 260 or CIS 162
        Prerequisites or Corequisites: CIS 238 or CIS 253 or
        CIS 269 or CIS 240 and CIS 262
CIS   260  Database Management*.................................4
        Prerequisite: CS 250 or CS 255 or CIS 235 or
        CIS 238 or CIS 248
CIS   262  Project Management*.................................3
        Prerequisite: CIS 242
        CIS Elective......................................3
        Total Semester Credit Hours........................18
        TOTAL PROGRAM CREDIT HOURS.........................69
Each student should select one option area from
the following list.

All three levels of programming language must
be from the same option area.
```

Level One Programming Language Options:

```
Option in C++:

CIS   235  Object-Oriented Programming Using C++*...............4
        Prerequisite: CS 200 using C++
        or
CS    250  Basic Data Structures using C++*.....................4
        Prerequisite:CS 200
        Prerequisite or corequisite: CS 210
        for students transferring to most four-year
        computer science programs


Option in JAVA:

CS    255  Basic Data Structures using JAVA*....................4
        Prerequisite: CS 205
```

```
Option in VISUAL BASIC:

CIS  138  Visual Basic .Net*..................................4
          Prerequisite: CIS 134
```

Level Two Programming Language Options:

```
Option in C++:

CIS  235  Object-Oriented Programming Using C++*..............4
          Prerequisite: CS 200 using C++
          or
CS   250  Basic Data Structures using C++*....................4
          Prerequisite:CS 200
          Prerequisite or corequisite: CS 210
          for students transferring to most four-year
          computer science programs


Option in JAVA:

CIS  240  Advanced Topics in JAVA I*...........................4
          Prerequisite: CS 250 or CIS 235 or CS 255


Option in VISUAL BASIC:

CIS  238  Visual Basic Intermediate Topics*...................4
          Prerequisite: CIS 138
```

Level Three Programming Language Options:

```
Option in C++:

CIS  269  GUI Programming*....................................4
          Prerequisites: CIS 235 or CS 250


Option in JAVA:

CIS  280  Advanced Topics in JAVA II*.........................4
          Prerequisite: CIS 240


Option in VISUAL BASIC:

CIS  277  Active Server Pages.Net*............................4
          Prerequisites: CS 200 or CS 201 or CS 205 or CIS 162
          and either CPCA 139 or CIS 204 and either CPCA 161
          or CPCA 158


Six hours of computer information systems electives
are to be selected from the following list:

CS   180  Introduction to Artificial Intelligence*.............3
          Prerequisite: CIS 145 or CIS 148 or
          CIS 150 or CS 200
CS   200  Concepts of Programming Algorithms Using C++*........4
          Prerequisite: CIS 134 or ENGR 171
          or equivalent experience
CS   201  Concepts of Programming Algorithms using C#*.........4
          Prerequisite: CIS 134 or ENGR 171
          or equivalent experience
CS   205  Concepts of Programming Algorithms using JAVA*.......4
          Prerequisite: CIS 134 or ENGR 171
          or equivalent experience
CS   250  Basic Data Structures using C++*....................4
          Prerequisite:CS 200
          Prerequisite or corequisite: CS 210
          for students transferring to most four-year
          computer science programs
```

```
CS    255   Basic Data Structures using JAVA*....................4
            Prerequisite: CS 205
CS    211   Discrete Structures II*..............................3
            Prerequisite: CS 210
CIS   138   Visual Basic .Net*^..................................4
            Prerequisite: CIS 134
CIS   204   UNIX Operating System*^..............................3
            Prerequisites: CS 200 or CS 205 or
            CS 201 and CPCA 139
CIS   206   Programming in PERL*.................................4
            Prerequisites: CS 200 or CS 205 or CS 201 and
            CPCA 139
CIS   223   Law Office Computing*................................3
            Prerequisites: Paralegal program students – admission to
            the paralegal program and either CIS 124 or CPCA 128
            or three hours of CPCA 108 and CPCA 110 and CPCA 114
CIS   235   Object-Oriented Programming Using C++*...............4
            Prerequisite: CS 200 using C++
CIS   238   Visual Basic Intermediate Topics*....................4
            Prerequisite: CIS 138
CIS   240   Advanced Topics in JAVA I*...........................4
            Prerequisite: CS 250 or CIS 235 or CS 255
CIS   243   Object-Oriented Analysis and Design*^................4
            Prerequisite: One programming course using an
            object-oriented programming language
            or equivalent experience
CIS   244   Advanced Topics in C# I*.............................4
            Prerequisite: CS 250 or CIS 235 or CS 255
CIS   254   UNIX System Administration*..........................4
            Prerequisite: CIS 204
CIS   258   Operating Systems*^..................................3
            Prerequisite: CIS 138 or CIS 162 or
            CS 200 or CS 201 or CS 205
CIS   269   GUI Programming*.....................................4
            Prerequisites: CIS 235 or CS 250
CIS   270   Information Systems Internship*^.....................3
            Prerequisites: CS 250 or CS 255 or CIS 235 or
            CIS 238 or CIS 248 and
            program facilitator approval
CIS   275   Web-Enabled Database Programming*....................4
            Prerequisites: CS 200 or CS 201 or CS 205 or CIS 162
            and either
            CPCA 139 or CIS 204 and either CPCA 161 or CPCA 158
CIS   277   Active Server Pages.Net*.............................4
            Prerequisites: CS 200 or CS 201 or CS 205 or CIS 162
            and either CPCA 139 or CIS 204 and either CPCA 161
            or CPCA 158
CIS   280   Advanced Topics in JAVA II*..........................4
            Prerequisite: CIS 240
CFOR 150    Introduction to Computer Forensics*..................3
            Prerequisites: CIS 134 and CPCA 139 and asisstant dean's
            approval
CFOR 180    File Structure & Residual Artifacts*.................3
            Prerequisite: CFOR 150
IT    200   Networking Technologies..............................3
*Prerequisite/Corequisite required
^ recommended electives
```

Database Certificate

Completion of this certificate, offered through the computer information systems program, will help to prepare students for future careers as database specialists or for one of many other information systems careers in which knowledge of database concepts, products and technologies is important. Students will be able to design and build personal databases using Access. The student will acquire a strong foundational knowledge in an object-oriented programming language (Visual Basic) and will work with Web-enabled databases, SQL and other database products, as well as attaining formal systems analysis and design skills.

(Major Code 5190; CIP Code 11.0802)
Computing Sciences and Information Technology Department

Career Certificate

Note: Prior to beginning the database vocational certificate
program the student must take the following prerequisite
or have taken an equivalent transfer course, or have passed
the waiver test, or have obtained a waiver from the program
administrator.

```
CPCA 105   Introduction to Personal Computers: Windows..........1
```

First Semester

```
CIS  134   Programming Fundamentals.............................4
CPCA 114   Databases I: MS Access*..............................1
           Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124
           or an appropriate score on a waiver test
CPCA 115   Databases II: MS Access*.............................2
           Prerequisite: CPCA 114
CPCA 141   Internet I*..........................................1
           Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or
           CIS 124 or an appropriate score on an assessment test
           Total Semester Credit Hours..........................8
```

Second Semester

```
CPCA 138   Windows for Microcomputers*..........................1
           Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124
           or an appropriate score on an assessment
           test
CIS  138   Visual Basic .Net*...................................4
           Prerequisite: CIS 134
CWEB 136   Introduction to PHP*.................................1
           Prerequisites: CWEB 101 and CPCA 114
CWEB 146   PHP with MySQL*......................................1
           Prerequisite: CWEB 136
CPCA 117   Databases III: MS Access*............................1
           Prerequisite: CPCA 115
           Total Semester Credit Hours..........................8
```

Third Semester

```
CIS  238   Visual Basic Intermediate Topics*....................4
           Prerequisite: CIS 138
CIS  162   Database Programming*................................4
           Prerequisite: CIS 134 or the equivalent
           Total Semester Credit Hours..........................8
```

Fourth Semester

```
CIS  260   Database Management*.................................4
           Prerequisite: CS 250 or CS 255 or CIS 235 or
           CIS 238 or CIS 248
CIS  242   Introduction to System Design and Analysis*..........3
           Prerequisite: CIS 138 or CS 200 or CS 201 or
           CS205
           Total Semester Credit Hours..........................7
           TOTAL PROGRAM CREDIT HOURS...........................31
*Prerequisite/Corequisite required
```

Desktop Publishing Applications Specialist Certificate

An individual, with or without a college degree, with the goal to acquire or improve

computer desktop publishing application skills, will accomplish that goal in this certificate. Emphasis is placed upon the acquisition of results-oriented career business and industry skills.

The desktop publishing certificate is intended for those seeking entry-level positions, as well as for those currently employed, who desire to enhance their job skills. This certificate provides current or prospective employers with tangible evidence of desktop publishing competency, on the part of the certificate completer.

Application courses for the certificate will encourage students to develop a "cross-platform" mastery, which is made possible by offering most on-campus courses in a dual-platform Macintosh and Windows computing environment.

Required courses that cover skills a student already has may be replaced with other CDTP courses at the discretion of the Assistant Dean of Computing Sciences and Information Technology or a desktop publishing professor. An applicant must complete 14 credits at Johnson County Community College.

(Major Code 4830; CIP Code 11.0202)

Computing Sciences and Information Technology Department

Certificate of Completion

Required Courses

```
CPCA 134   Managing Your Macintosh*..............................1
           Prerequisite: CPCA 106 or an appropriate score on an
           assessment test
           or
CPCA 138   Windows for Microcomputers*...........................1
           Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124
           or an appropriate score on an assessment
           test
CDTP 135   Desktop Photo Manipulation I: Photoshop..............1
CDTP 155   Desktop Photo Manipulation II: Photoshop*............1
           Prerequisite: CDTP 135
CDTP 175   Desktop Photo Manipulation III: Photoshop*...........1
           Prerequisite: CDTP 155
CDTP 140   Desktop Publishing I: InDesign.......................1
CDTP 160   Desktop Publishing II: InDesign*.....................1
           Prerequisite: CDTP 140
CDTP 168   Desktop Publishing III: InDesign*....................1
           Prerequisite: CDTP 160
CDTP 145   Desktop Illustration I: Illustrator..................1
CDTP 165   Desktop Illustration II: Illustrator*................1
           Prerequisite: CDTP 145
CDTP 185   Desktop Illustration III: Illustrator*..............1
           Prerequisite: CDTP 165


Select four of the following twelve courses:

CDTP 131   Desktop Publishing I: QuarkXpress*...................1
CDTP 151   Desktop Publishing II: QuarkXpress*..................1
           Prerequisite: CDTP 131
CPCA 108   Word Processing I: MS Word*..........................1
           Prerequisites: CPCA 105 or CPCA 106 or CIS 124
           or CPCA 128 or appropriate score on a waiver test
CPCA 123   E-Presentation: MS PowerPoint*.......................1
           Prerequisite: CPCA 105 or CPCA 106
           or CIS 124 or CPCA 128 or an appropriate score on a
           waiver test
CPCA 125   Word Processing II: MS Word*.........................1
           Prerequisite: CPCA 108
CWEB 105   Introduction to Web Pages: Dreamweaver*..............1
           Prerequisite: CWEB 101
CWEB 106   Introduction to Microsoft FrontPage*................1
           Prerequisite: CWEB 101
CWEB 115   Intermediate Web Pages: Dreamweaver*................1
           Prerequisite: CWEB 105
CWEB 125   Introduction to Dynamic Web Pages: Dreamweaver*......1
```

```
          Prerequisites: CWEB 115 and CPCA 114
CWEB 130  Introduction to Flash*...............................1
          Prerequisite: CPCA 161 or CWEB 105 or CWEB 106
CWEB 140  Intermediate Flash*..................................1
          Prerequisite: CWEB 130
CWEB 150  Advanced Flash*......................................1
          Prerequisite: CWEB 140
          TOTAL PROGRAM CREDIT HOURS..........................14
*Prerequisite/Corequisite required
```

Microcomputer Programmer Analyst Certificate

The Microcomputer Programmer/Analyst Certificate provides a foundation in skills needed to analyze business problems and develop software solutions using current industry standard development tools. The certificate provides an academic credential reflecting enhanced job skills for those seeking advancement in their information services career or for individuals with a prior degree in another discipline seeking a career change.

(Major Code 5030; CIP Code 11.0201)

Computing Sciences and Information Technology Department

Career Certificate

Prerequisite for Required Courses

```
Note: Prior to beginning the program, the student must take
the following prerequisite, or have taken an equivalent
transfer course, or have passed the waiver test (if
applicable), or have obtained a waiver from the program
administrator.


CIS  134  Programming Fundamentals.............................4
```

First Semester

```
CS   200  Concepts of Programming Algorithms Using C++*^.......4
          Prerequisite: CIS 134 or ENGR 171
          or equivalent experience
          or
CS   205  Concepts of Programming Algorithms using JAVA*~......4
          Prerequisite: CIS 134 or ENGR 171
          or equivalent experience
CS   210  Discrete Structures I*...............................3
          Prerequisites: MATH 171 or both MATH 116 and CIS 134
          or appropriate math assessment scores
CIS  162  Database Programming*................................4
          Prerequisite: CIS 134 or the equivalent
          Total Semester Credit Hours........................11
```

Second Semester

```
CIS  235  Object-Oriented Programming Using C++*^..............4
          Prerequisite: CS 200 using C++
          or
CS   250  Basic Data Structures using C++*^...................4
          Prerequisite:CS 200
          Prerequisite or corequisite: CS 210
          for students transferring to most four-year
          computer science programs
          or
CS   255  Basic Data Structures using JAVA*~..................4
          Prerequisite: CS 205
CIS  242  Introduction to System Design and Analysis*.........3
          Prerequisite: CIS 138 or CS 200 or CS 201 or
          CS205
```

```
CIS  204   UNIX Operating System*...............................3
           Prerequisites: CS 200 or CS 205 or
           CS 201 and CPCA 139
           Total Semester Credit Hours........................10
```

Third Semester

```
CIS  269   GUI Programming*.....................................4
           Prerequisites: CIS 235 or CS 250
           or
CIS  240   Advanced Topics in JAVA I*...........................4
           Prerequisite: CS 250 or CIS 235 or CS 255
CIS  262   Project Management*..................................3
           Prerequisite: CIS 242
CIS  260   Database Management*.................................4
           Prerequisite: CS 250 or CS 255 or CIS 235 or
           CIS 238 or CIS 248
           Total Semester Credit Hours........................11
           TOTAL PROGRAM CREDIT HOURS.........................32
*Prerequisite/Corequisite required

Note: ^ CS 200 students must take either CS 250 or CIS 235
Note: ~ CS 205 students must take CS 255
```

Personal Computer Application Specialist

Individuals with or without a college degree whose goal is to acquire or improve their personal computer application skills will accomplish their goals in this program. Emphasis is on acquiring results-oriented career business and industry skills. The program is intended for those seeking entry-level positions as well as those currently employed who desire to enhance their job skills and take MOUS (Microsoft Office User Specialist) certification tests. It provides employers and current prospective employees with tangible evidence of computer competencies.
(Major Code 4730; CIP Code 11.0202)

Computing Sciences and Information Technology Department

Certificate of Completion

Required Courses

First Semester

```
CPCA 105   Introduction to Personal Computers: Windows..........1
CPCA 108   Word Processing I: MS Word*..........................1
           Prerequisites: CPCA 105 or CPCA 106 or CIS 124
           or CPCA 128 or appropriate score on a waiver test
CPCA 110   Spreadsheets I: MS Excel*............................1
           Prerequisite: CPCA 105 or CPCA 106 or CIS 124
           or CPCA 128 or an appropriate score on a waiver test
CPCA 114   Databases I: MS Access*..............................1
           Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124
           or an appropriate score on a waiver test
CPCA 138   Windows for Microcomputers*..........................1
           Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124
           or an appropriate score on an assessment
           test
           Total Semester Credit Hours.........................5
```

Second Semester

```
CPCA 111   Spreadsheets II: MS Excel*...........................1
           Prerequisite: CPCA 110 or CPCA 128
CPCA 115   Databases II: MS Access*.............................2
           Prerequisite: CPCA 114
CPCA 123   E-Presentation: MS PowerPoint*.......................1
```

```
                   Prerequisite: CPCA 105 or CPCA 106
                   or CIS 124 or CPCA 128 or an appropriate score on a
                   waiver test
CPCA 125    Word Processing II: MS Word*.........................1
                   Prerequisite: CPCA 108
CPCA 141    Internet I*..........................................1
                   Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or
                   CIS 124 or an appropriate score on an assessment test
                   CPCA Elective........................................1
                   Total Semester Credit Hours..........................7
                   TOTAL CREDIT HOURS..................................12
*Prerequisite/Corequisite required
```

CPCA Electives

```
CPCA 118    Groupware: Outlook*..................................1
                   Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124
                   or an appropriate score on a waiver test
CPCA 121    Introduction to Project Management*..................1
                   Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124
                   or an appropriate score on a waiver test
CPCA 151    Internet II*.........................................1
                   Prerequisite: CPCA 141 or an appropriate score on an
                   assessment test
CPCA 161    Introduction to Web Pages using HTML*................1
                   Prerequisite: CPCA 151 or an appropriate score on an
                   assessment test


NOTE: A student can elect to take CPCA 128,
Personal Computer Applications,
in lieu of CPCA 108, CPCA 110 and CPCA 123.
An additional elective can then be substituted for CPCA 105.
```

Web Applications Certificate

This certificate is designed for those seeking entry-level positions and those who are currently employed and want to improve their job skills and career opportunities relating to Web-oriented applications. This certificate gives an employer tangible evidence of Web-based software skills and competencies.

(Major Code 5610; CIP Code 11.0202)

Computing Sciences and Information Technology Department

Certificate of Completion

Prerequisite for Required Courses

```
Note: Prior to beginning the program, the student must take
the follow prerequisite, or have taken an equivalent
course, or have passed the waiver test, or have obtained
a waiver from the program administrator.

CPCA 105   Introduction to Personal Computers: Windows..........1
```

First Semester

```
CWEB 101   Introduction to the Web using Internet Explorer*.....1
                   Prerequisites: CPCA 105 or CPCA 106 or CPCA 128
                   or CIS 124 or an appropriate score on an assessment test
CWEB 111   Intermed Web Concepts/Techniques using Explorer*.....1
                   Prerequisite: CWEB 101
CPCA 114   Databases I: MS Access*..............................1
                   Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124
                   or an appropriate score on a waiver test
CWEB 106   Introduction to Microsoft FrontPage*.................1
                   Prerequisite: CWEB 101
```

```
CWEB 105    Introduction to Web Pages: Dreamweaver*..............1
            Prerequisite: CWEB 101
            and either
CWEB 116    Intermediate Microsoft FrontPage*...................1
            Prerequisite: CWEB 106
            or
CWEB 115    Intermediate Web Pages: Dreamweaver*................1
            Prerequisite: CWEB 105
CWEB 230    Introductory E-Commerce Applications*...............1
            Prerequisite: CWEB 101 or CPCA 141
            Total Semester Credit Hours.........................7
```

Second Semester

```
CWEB 136    Introduction to PHP*................................1
            Prerequisites: CWEB 101 and CPCA 114
CWEB 146    PHP with MySQL*.....................................1
            Prerequisite: CWEB 136
CWEB 240    Intermediate E-Commerce Applications*...............1
            Prerequisite: CWEB 230
```

Select two of the following three courses listed

```
CDTP 135    Desktop Photo Manipulation I: Photoshop.............1
CDTP 145    Desktop Illustration I: Illustrator................1
CWEB 130    Introduction to Flash*..............................1
            Prerequisite: CPCA 161 or CWEB 105 or CWEB 106
```

Select two of the following three courses listed

```
CPCA 161    Introduction to Web Pages using HTML*...............1
            Prerequisite: CPCA 151 or an appropriate score on an
            assessment test
CWEB 160    Introduction to JavaScript*.........................1
            Prerequisite: CWEB 105 or CWEB 106 or CPCA 161
CWEB 107    Web Tools: Microsoft Office*........................1
            Prerequisites: CWEB 101 and CPCA 110 or CPCA 114
            Total Semester Credit Hours.........................7
            TOTAL PROGRAM CREDIT HOURS.........................14
*Prerequisite/Corequisite required
```

Web Developer Advanced Certificate

The Web developer advanced certificate is for the computer professional who wants to acquire the necessary skills to enable clients to interface with databases on the World Wide Web.

(Major Code 5150; CIP Code 11.1004)

Computing Sciences and Information Technology Department

Career Certificate

Prerequisites for Required Courses

```
Note: Prior to beginning the program, the student must take
the following prerequisites, or have taken an equivalent
transfer course, or have passed the waiver test (if
applicable), or have obtained a waiver from the program
administrator.

CIS  134    Programming Fundamentals............................4
CPCA 161    Introduction to Web Pages using HTML*...............1
            Prerequisite: CPCA 151 or an appropriate score on an
            assessment test
CDTP 131    Desktop Publishing I: QuarkXpress*..................1
            or
```

```
CDTP  140   Desktop Publishing I: InDesign.......................1
            or
CDTP  135   Desktop Photo Manipulation I: Photoshop.............1
CIS   162   Database Programming*...............................4
            Prerequisite: CIS 134 or the equivalent
CS    200   Concepts of Programming Algorithms Using C++*........4
            Prerequisite: CIS 134 or ENGR 171
            or equivalent experience
            or
CS    205   Concepts of Programming Algorithms using JAVA*.......4
            Prerequisite: CIS 134 or ENGR 171
            or equivalent experience
CIS   235   Object-Oriented Programming Using C++*..............4
            Prerequisite: CS 200 using C++
            or
CS    255   Basic Data Structures using JAVA*...................4
            Prerequisite: CS 205
```

First Semester

```
CIM   133   Screen Design*......................................4
            Prerequisite: CDTP 135
CIS   204   UNIX Operating System*..............................3
            Prerequisites: CS 200 or CS 205 or
            CS 201 and CPCA 139
CIS   240   Advanced Topics in JAVA I*..........................4
            Prerequisite: CS 250 or CIS 235 or CS 255
CIS   260   Database Management*................................4
            Prerequisite: CS 250 or CS 255 or CIS 235 or
            CIS 238 or CIS 248
            Total Semester Credit Hours........................15
```

Second Semester

```
CIM   130   Interactive Media Concepts..........................2
CIS   254   UNIX System Administration*.........................4
            Prerequisite: CIS 204
CIS   275   Web-Enabled Database Programming*...................4
            Prerequisites: CS 200 or CS 201 or CS 205 or CIS 162
            and either
            CPCA 139 or CIS 204 and either CPCA 161 or CPCA 158
            or
CIS   277   Active Server Pages.Net*............................4
            Prerequisites: CS 200 or CS 201 or CS 205 or CIS 162
            and either CPCA 139 or CIS 204 and either CPCA 161
            or CPCA 158
CIS   280   Advanced Topics in JAVA II*.........................4
            Prerequisite: CIS 240
            Total Semester Credit Hours........................14
            TOTAL PROGRAM CREDIT HOURS.........................29
*Prerequisite/Corequisite required
```

Advanced Esthetics Certificate

This 100 contact hour course is designed to meet the educational requirements for licensure by the Missouri Board of Cosmetology for estheticians in the cosmetology sciences and meet the needs of students who desire exposure to advanced esthetics techniques. Students will attend 44 hours of lecture/discussion/demonstration, practice 44 hours of integrated lecture/clinical, complete 4 hours assisting in a salon and participate in 8 hours of community service. Topics covered include body treatments, theory of the day spa, airbrush, makeup, microderm abrasion, and manual lymphatic drainage.

Prerequisite: Must possess current esthetics license granted by the Kansas Board of Cosmetology or a current cosmetology license.

(Major Code 3760; CIP Code 12.0409)

Cosmetology/Esthetics/Nail Technology

Certificate of Completion

Required Course

```
AVCO 218   Advanced Esthetics Training*..........................6
           Prerequisite: Must possess current esthetics license
           granted by the Kansas Board of Cosmetology, a current
           cosmetology license, or the minimum of 500 hours of
           esthetics training from another institution.
           TOTAL PROGRAM CREDIT HOURS..........................6
*Prerequisite/Corequisite required
```

Cosmetology, A.A.S.

This degree may be earned only by a student who has completed the JCCC cosmetology certificate program. A student must have 19 additional credits in order to receive a degree from Johnson County Community College. Students who graduated with the certificate prior to conversion to credit hours will receive 45 hours of documented advanced standing credit, which will be placed on the student's record when the application for graduation is filed. Students must also meet JCCC admissions, residency and graduation requirements.

Interested students should contact the JCCC Student Success Center for further information prior to enrollment in the sequence of courses.

(Major Code 2090; CIP Code 12.0401)

Cosmetology/Esthetics/Nail Technology

Associate of Applied Science Degree

Sequence of Courses

```
Option 1 - No Professional Licensure
AVCO 110   Introduction to Cosmetology.........................21
           Prerequisite: Selective Admission Approval
AVCO 112   Clinical Cosmetology*...............................12
           Prerequisite: Selective Admission Approval
AVCO 114   Advanced Cosmetology*...............................12
           Prerequisites: AVCO 110 with a min grade of "C" or higher
           and selective admission approval
           or
Option 2 - With Nail Technology Licensure
AVCO 110   Introduction to Cosmetology.........................21
           Prerequisite: Selective Admission Approval
AVCO 112   Clinical Cosmetology*...............................12
           Prerequisite: Selective Admission Approval
AVCO 115   Cosmetology with Nail Technology License*...........12
           Prerequisites: AVCO 110 and current Kansas nail
           technology license
           or
Option 3 - With Esthetics Licensure
AVCO 110   Introduction to Cosmetology.........................21
           Prerequisite: Selective Admission Approval
AVCO 112   Clinical Cosmetology*...............................12
           Prerequisite: Selective Admission Approval
AVCO 116   Cosmetology with Esthetics License*.................12
           Prerequisites: AVCO 110 and current Kansas esthetics
           license
           or
Option 4 - With Both Nail Technology & Esthetics Licensure
AVCO 110   Introduction to Cosmetology.........................21
           Prerequisite: Selective Admission Approval
AVCO 115   Cosmetology with Nail Technology License*...........12
           Prerequisites: AVCO 110 and current Kansas nail
           technology license
AVCO 116   Cosmetology with Esthetics License*.................12
           Prerequisites: AVCO 110 and current Kansas esthetics
           license
```

```
ENGL 121   Composition I*......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
           Communication Elective...............................3
           Humanities Elective..................................3
           Social Science and/or Economics Electives............3
           Science and/or Math Elective.........................3
           Electives............................................3
           Health and/or Physical Education Elective............1
           TOTAL PROGRAM CREDIT HOURS..........................64
*Prerequisite/Corequisite required
```

Cosmetology Certificate

The field of cosmetology relies on creative people who use their ability to visualize shapes and forms for hair design and personal care. Cosmetologists need manual dexterity, an understanding of chemistry and superior client communication skills. This program provides theory and skill development in shampooing, cutting, shaping, curling and coloring hair, as well as manicuring and esthetics.

Employment opportunities are available in beauty salons, department stores, health care and hotel facilities. Entrepreneurship opportunities are also available for cosmetologists who choose to pursue this pathway. Additional employment choices include nail artist, complexion care, cosmetic or beauty supply sales and services, manufacturing technician and color chemist.

Enrollment is limited in the program. Admission requires an interview, testing and a physical examination. Contact the salon at 913-469-8500, ext. 4723 or 2390, for additional information.

(Major Code 370A; CIP Code 12.0401)

Cosmetology/Esthetics/Nail Technology

Career Certificate

```
Option 1 - No Professional Licensure
AVCO 110   Introduction to Cosmetology.........................21
           Prerequisite: Selective Admission Approval
AVCO 112   Clinical Cosmetology*...............................12
           Prerequisite: Selective Admission Approval
AVCO 114   Advanced Cosmetology*...............................12
           Prerequisites: AVCO 110 with a min grade of "C" or higher
           and selective admission approval
           TOTAL PROGRAM CREDIT HOURS..........................45


           or


Option 2 - With Nail Technology Licensure
AVCO 110   Introduction to Cosmetology.........................21
           Prerequisite: Selective Admission Approval
AVCO 112   Clinical Cosmetology*...............................12
           Prerequisite: Selective Admission Approval
AVCO 115   Cosmetology with Nail Technology License*...........12
           Prerequisites: AVCO 110 and current Kansas nail
           technology license
           TOTAL PROGRAM CREDIT HOURS..........................45


           or


Option 3 - With Esthetics Licensure
AVCO 110   Introduction to Cosmetology.........................21
           Prerequisite: Selective Admission Approval
AVCO 112   Clinical Cosmetology*...............................12
           Prerequisite: Selective Admission Approval
AVCO 116   Cosmetology with Esthetics License*.................12
           Prerequisites: AVCO 110 and current Kansas esthetics
```

```
                 license
                 TOTAL PROGRAM CREDIT HOURS.........................45


                 or

Option 4 - With Both Nail Technology & Esthetics Licensure
AVCO 110   Introduction to Cosmetology.........................21
                 Prerequisite: Selective Admission Approval
AVCO 115   Cosmetology with Nail Technology License*...........12
                 Prerequisites: AVCO 110 and current Kansas nail
                 technology license
AVCO 116   Cosmetology with Esthetics License*.................12
                 Prerequisites: AVCO 110 and current Kansas esthetics
                 license
                 TOTAL PROGRAM CREDIT HOURS.........................45
*Prerequisite/Corequisite required
```

Cosmetology Instructor Training Certificate

This 300 contact hour course is designed to meet the educational requirements for licensure by the Kansas Board of Cosmetology for instructors in the cosmetology sciences. Students will attend 40 hours of lecture and participate in 260 hours of observation, clinic supervision, and classroom teaching. Topics covered include instructor characteristics, student motivation, methods and evaluation.

(Major Code 3740; CIP Code 12.0401)

Cosmetology/Esthetics/Nail Technology

Certificate of Completion

Required Course

```
AVCO 212   Cosmetology Instructor Training*.....................9
                 Prerequisites: Current Kansas Cosmetology and Esthetics
                 or Nail Technology License. Minimum of one year of
                 practice in trained area and selective admission approval
                 TOTAL PROGRAM CREDIT HOURS..........................9
*Prerequisite/Corequisite required
```

Esthetics Certificate

Theory and skill development in sanitation, skin sciences, skin treatments, waxing, makeup and business practices are offered. Upon completion of this program, students are prepared for the Kansas State Board of Cosmetology for Estheticians licensure written and practical exams. Admission requires an interview, testing and a physical examination. Contact the salon at 913-469-8500, ext. 4721 or 2390, for additional information.

(Major Code 372A; CIP Code 12.0409)

Cosmetology/Esthetics/Nail Technology

Career Certificate

Required Course

```
AVCO 118   Esthetics*..........................................26
                 Prerequisite: selective admission approval
                 TOTAL PROGRAM CREDIT HOURS.........................26
*Prerequisite/Corequisite required
```

Nail Technology Certificate

The program provides theory and skill development in artistic application of artificial nail services which includes the application of fiberglass and silk wraps, tips with overlay, sculptured nails, and gels. Pedicures, manicures, and identifying the various diseases and disorders of the nails will also be taught. Upon completion of this program, students are prepared for the Kansas State Board of Cosmetology Onychology licensure written and practical exams. Admission requires an interview, testing and a physical examination. Contact the Salon at 913-469-8500, ext. 6402 or 2390, for additional information.

(Major Code 369A; CIP Code 12.0410)

Cosmetology/Esthetics/Nail Technology

Career Certificate

Required Course

```
AVCO 102   Nail Technology....................................17
           TOTAL PROGRAM CREDIT HOURS.........................17
```

Dental Hygiene, A.A.S.

A key member of the professional dental team, the licensed dental hygienist is on the "front line" of patient care, responsible for providing educational, clinical and therapeutic services that promote total health through good oral health. The growing public awareness of the benefits of oral health, combined with the growth of corporate dental plans, has significantly increased the demand for dental care and has made dental hygiene one of the country's fastest-growing careers. The demand for dental hygienists is expected to grow 46 percent by 2010. Competitive salaries and flexible work schedules are added benefits. Students in JCCC's dental hygiene program prepare for careers as preventive dental professionals who have a choice of working in a variety of settings. Upon successful completion of licensure requirements and board examinations, graduates get jobs in school systems, nursing homes and dental supply firms, as well as private dental offices.

Fully accredited by the American Dental Association Commission on Dental Accreditation, this 83-credit-hour program requires four semesters and one summer session of full-time study. Successful completion leads to an associate of applied science degree. All dental hygiene students gain important practical experience working in JCCC's state-of-the-art clinical facility under the supervision of licensed dental hygienists and dentists.

Enrollment is limited. The deadline for fall semester applications is December 1st. Fall course transcripts are due January 15th. For an application, call the dental hygiene program at 913-469-3808 or download a copy by clicking http://www.jccc.net/home/depts/001253

(Major Code 223A; CIP Code 51.0602)

Dental Hygiene Program

Associate of Applied Science Degree

Before beginning clinical courses

```
CHEM 122   Principles of Chemistry.............................5
ENGL 121   Composition I*.....................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
BIOL 140   Human Anatomy......................................4
PSYC 130   Introduction to Psychology.........................3
BIOL 230   Microbiology*......................................3
           Prerequisite: CHEM 122 or
           one year of high school chemistry
BIOL 231   Microbiology Lab*..................................2
           BIOL 231 students must be currently enrolled in BIOL 230
           or have successfully completed BIOL 230 within the
           last three years.
           Total Preclinical Hours...........................20
```

Note: CHEM 122 or BIOL 230 and one of the other
prerequisites must be completed by the end of the fall
semester. Transcripts from the fall semester are due
January 15. The application deadline is December 1.

First Semester

```
DHYG 121  Clinical Dental Hygiene I: Pre-Clinic*...............5
          Prerequisites: Admission to the Dental Hygiene Program,
          a minimum 2.0 GPA in curriculum courses
          and CHEM 122 and ENGL 121 and  BIOL 140 and PSYC 130
          and BIOL 230
          Corequisites: DHYG 125 and DHYG 138
          Prerequisite or corequisite: DHYG 135 and SOC 122
DHYG 125  Developmental Dentistry*.............................2
          Prerequisites: Admission to Dental Hygiene Program and
          CHEM 122 and ENGL 121 and BIOL 140 and PSYC 130 and
          BIOL 230 and
          Corequisites: DHYG 121 and DHYG 138 and
          Prerequisites or corequisites: SOC 122 and DHYG 135
DHYG 135  Dental Materials*....................................2
          Prerequisites: CHEM 122 and ENGL 121 and PSYC 130 and
          BIOL 140 and BIOL 230 and
          Prerequisite or corequisite: SOC 122
          Corequisites: DHYG 121 and DHYG 125 and DHYG 138
DHYG 138  Head and Neck Anatomy*...............................2
          Prerequisites: BIOL 230 and CHEM 122 and ENGL 121 and
          PSYC 130 and BIOL 140 and admission to the Dental Hygiene
          Program and
          Prerequisites or corequisites: SOC 122 and DHYG 135
          Corequisites: DHYG 121 and DHYG 125
SOC  122  Introduction to Sociology............................3
          Total Semester Credit Hours.........................14
```

Second Semester

```
DHYG 140  Clinical Dental Hygiene II*..........................4
          Prerequisite: DHYG 121
          Corequisites: DHYG 142 and DHYG 146
          and DHYG 148 and
          prerequisites or corequisites: BIOL 225 and DHYG 135
DHYG 142  Dental Radiology*....................................2
          Prerequisites: DHYG 121
          Corequisites: DHYG 140 and
          DHYG 146 and DHYG 148 and
          Prerequisites or corequisites: BIOL 225 and DHYG 135
DHYG 146  Periodontics*........................................3
          Prerequisite: DHYG 121
          Corequisites: DHYG 140 and
          DHYG 142 and DHYG 148
          Prerequisites or Corequisites: BIOL 225 and DHYG 135
DHYG 148  Dental Health Education*.............................2
          Prerequisite: DHYG 121
          Corequisites: DHYG 140 and
          DHYG 142 and DHYG 146
          Prerequisites or Corequisites: BIOL 225 and DHYG 135
BIOL 225  Human Physiology*....................................4
          Prerequisites: CHEM 122 and either BIOL 140 or BIOL 144
          Total Semester Credit Hours.........................15
```

Summer

```
BIOL 235  General Nutrition*...................................3
          Prerequisites: CHEM 122 and BIOL 144 or
          CHEM 122 and BIOL 140 and BIOL 225
Note: CHEM 122 and BIOL 144 or CHEM 122 and BIOL 140 and
BIOL 225 are prerequisites to BIOL 235


          Humanities Elective..................................3
```

```
                    Mathematics Elective*................................3
                    Total Semester Credit Hours.........................9
```

Third Semester

```
DHYG 221  Clinical Dental Hygiene III*.........................6
          Prerequisites: DHYG 140 and BIOL 235
          Corequisites: DHYG 225 and DHYG 230 and DHYG 240
DHYG 225  Pathology*..........................................3
          Prerequisites: DHYG 140 and BIOL 235
          Corequisites: DHYG 221 and DHYG 230 and DHYG 240
DHYG 230  Dental Therapeutics*................................3
          Prerequisites: DHYG 140
          and BIOL 235
          Corequisites: DHYG 221 and DHYG 225 and DHYG 240
DHYG 240  Community Dental Health*............................2
          Prerequisites: DHYG 140
          and BIOL 235
          Corequisites: DHYG 221 and DHYG 225 and DHYG 230
          Total Semester Credit Hours........................14
```

Fourth Semester

```
DHYG 245  Nitrous Oxide Analgesia*............................1
          Prerequisite: DHYG 221
          Corequisite: DHYG 250
DHYG 250  Clinical Dental Hygiene IV*.........................6
          Prerequisite: DHYG 221
          Corequisite: DHYG 245
SPD  120  Interpersonal Communication.........................3
          or
SPD  121  Public Speaking.....................................3
          or
SPD  125  Personal Communication..............................3
          Health and/or Physical Education Elective............1
          Total Semester Credit Hours........................11
          TOTAL PROGRAM CREDIT HOURS.........................83
*Prerequisite/Corequisite required
```

Computer-aided Drafting and Design Technology, A.A.S.

Drafting technicians are engineering communication specialists who apply mathematics, computer applications and manual skills to develop specifications and drawings for the manufacturing and construction of virtually everything made in the world. JCCC's drafting technology program offers students up-to-date equipment in facilities located in the Industrial Training Center on the JCCC campus. In addition, the program offers departmental specialty courses. The program provides students with the skills necessary to produce detailed shop drawings, land plats, erection drawings and designs for manufacturing, building, production, commercial building and site construction as well as detailed drawings and designs of components, assemblies and systems used in manufactured products.

Industrial growth and increasingly complex design problems will greatly increase the demand for design and drafting services, particularly using CAD equipment. Employers are most interested in applicants with drafting and mechanical skills, a background in CAD techniques and courses in math, science and engineering technology.

The two-year curriculum enables students to use the latest computer-aided design equipment. Course projects and laboratory procedures are similar to those used in industry.

An associate of applied science degree is awarded upon the successful completion of 67 credit hours.

(Major Code 2220; CIP Code 15.1302)

Computer Aided Drafting and Design

Associate of Applied Science Degree

Prerequisites for Required Courses

Note: Prior to beginning the program, the student must take the following prerequisite courses, or have taken an equivalent transfer course, or have passed the waiver test (if applicable), or have obtained a waiver from the program administrator.

```
DRAF 120   Introduction to Drafting.............................2
BOT  101   Computerized Keyboarding.............................1
DRAF 130   Introduction to CAD Concepts - AutoCAD: 2008*........3
           Prerequisite: DRAF 120
           or approval of the program assistant dean
CPCA 105   Introduction to Personal Computers: Windows..........1
CPCA 138   Windows for Microcomputers*..........................1
           Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124
           or an appropriate score on an assessment
           test
CPCA 141   Internet I*..........................................1
           Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or
           CIS 124 or an appropriate score on an assessment test
```

First Semester

```
DRAF 129   Interpreting Architectural Drawings..................2
DRAF 123   Interpreting Machine Drawings*.......................2
           Prerequisite or corequisite: DRAF 120
           or approval of the program assistant dean
DRAF 135   Graphic Analysis*....................................3
           Prerequisites: DRAF 120 and DRAF 130
           or approval of the program assistant dean
DRAF 230   Intermediate CAD: AutoCAD*...........................3
           Prerequisite: DRAF 130
           or approval of the program assistant dean
ENGL 121   Composition I*.......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
MATH 133   Technical Mathematics I*.............................4
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
           Total Semester Credit Hours........................17
```

Second Semester

```
DRAF 238   Architectural Drafting*..............................3
           Prerequisites: DRAF 129 and
           DRAF 230
DRAF 231   CAD 3-D*.............................................3
           Prerequisite: DRAF 230
DRAF 252   Structural Drafting*.................................3
           Prerequisite: DRAF 230 or ENGR 131
           Corequisite: MATH 134
           Technical Electives.................................3
MATH 134   Technical Mathematics II*............................5
           Prerequisite: MATH 133 or an equivalent course with a
           grade of "C" or higher
           Total Semester Credit Hours........................17
```

Third Semester

```
CET  211   Technical Statics and Design*........................3
           Prerequisite: MATH 134 or MATH 172 or MATH 173 or
           MATH 241
DRAF 222   Mechanical Drafting*.................................3
           Prerequisites: DRAF 123 and DRAF 230
```

```
           Prerequisite and/or corequisite: MATH 134
DRAF 250   Electrical Drafting*..................................3
           Prerequisites: MATH 133 and DRAF 230 or ENGR 131
           Health and/or Physical Education Elective............1
ENGL 123   Technical Writing I*.................................3
           Prerequisite: ENGL 121
CET  270   Fluid Mechanics*.....................................3
           Prerequisites: MATH 172 or MATH 134
           Total Semester Credit Hours.........................16
```

Fourth Semester

```
DRAF 228   Industrial Design Applications*......................3
           Prerequisites: CET 211 and DRAF 222 and DRAF 250
           and DRAF 252
DRAF 243   Architectural Desktop: Revit*........................2
           Prerequisite: DRAF 230 or ENGR 131
           or approval of the program assistant dean
           or
DRAF 244   Land Development Desktop/CIVIL 3D*...................2
           Prerequisite: DRAF 230 or ENGR 131
           or approval of the program assistant dean
           or
DRAF 245   Mechanical Desktop: Inventor*........................2
           Prerequisite: DRAF 230 or ENGR 131
           or approval of the program assistant dean
DRAF 225   Civil Drafting*......................................3
           Prerequisite: DRAF 230 or ENGR 131
           Corequisite: MATH 134
           Social Science and/or Economics Elective............3
           Humanities Elective.................................3
           Technical Electives.................................3
           Total Semester Credit Hours.........................17
           TOTAL PROGRAM CREDIT HOURS..........................67
```

Technical Electives

```
CPCA 108   Word Processing I: MS Word*..........................1
           Prerequisites: CPCA 105 or CPCA 106 or CIS 124
           or CPCA 128 or appropriate score on a waiver test
CPCA 110   Spreadsheets I: MS Excel*............................1
           Prerequisite: CPCA 105 or CPCA 106 or CIS 124
           or CPCA 128 or an appropriate score on a waiver test
CPCA 111   Spreadsheets II: MS Excel*...........................1
           Prerequisite: CPCA 110 or CPCA 128
CPCA 114   Databases I: MS Access*..............................1
           Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124
           or an appropriate score on a waiver test
CPCA 115   Databases II: MS Access*.............................2
           Prerequisite: CPCA 114
CPCA 117   Databases III: MS Access*............................1
           Prerequisite: CPCA 115
CPCA 121   Introduction to Project Management*..................1
           Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124
           or an appropriate score on a waiver test
CPCA 123   E-Presentation: MS PowerPoint*.......................1
           Prerequisite: CPCA 105 or CPCA 106
           or CIS 124 or CPCA 128 or an appropriate score on a
           waiver test
CPCA 125   Word Processing II: MS Word*.........................1
           Prerequisite: CPCA 108
CPCA 151   Internet II*.........................................1
           Prerequisite: CPCA 141 or an appropriate score on an
           assessment test
CPCA 158   Internet Application and Utilities*..................3
           Prerequisite: CPCA 141 or an appropriate score on an
           assessment test
CPCA 161   Introduction to Web Pages using HTML*................1
           Prerequisite: CPCA 151 or an appropriate score on an
           assessment test
```

```
DRAF 140   Topics in CAD I.........................................2
DRAF 232   CAD Applications Workstation Environment*............2
           Prerequisite: DRAF 230
           or approval of the program assistant dean
DRAF 233   CAD Administration......................................2
DRAF 240   Introduction to AutoLISP*............................2
           Prerequisite: DRAF 230
DRAF 242   Topics in CAD II*...................................2
           Prerequisite: DRAF 230
           or approval of the program assistant dean
DRAF 243   Architectural Desktop: Revit*........................2
           Prerequisite: DRAF 230 or ENGR 131
           or approval of the program assistant dean
DRAF 244   Land Development Desktop/CIVIL 3D*..................2
           Prerequisite: DRAF 230 or ENGR 131
           or approval of the program assistant dean
DRAF 245   Mechanical Desktop: Inventor*........................2
           Prerequisite: DRAF 230 or ENGR 131
           or approval of the program assistant dean
DRAF 271   Drafting Internship I*..............................3
           Prerequisite: assistant dean's approval
DRAF 272   Drafting Internship II*.............................3
           Prerequisites: DRAF 271 and
           assistant dean's approval
CET  105   Construction Methods................................3
CET  125   Construction Specifications*........................2
           Prerequisite or corequisite: CET 105 or equivalent
CET  129   Construction Management.............................3
CET  227   Construction Cost Estimating*.......................3
           Prerequisites: CET 105 and CET 125 or permission of
           program administrator and
           Prerequisite or corequisite: DRAF 129 or permission of
           program administrator
MFAB 152   Manufacturing Materials and Processes...............3
ENGR 180   Engineering Land Surveying I*.......................3
           Corequisite: MATH 134 or MATH 172
*Prerequisite/Corequisite required
```

Computer-aided Drafting Certificate

This certificate makes it possible for those students who already have a drafting or engineering degree, or those who have sufficient work experience, to obtain certification in CAD.

(Major Code 4800; CIP Code 15.1302)

Computer Aided Drafting and Design

Certificate of Completion

Sequence of Required Courses

```
CPCA 105   Introduction to Personal Computers: Windows..........1
CPCA 138   Windows for Microcomputers*.........................1
           Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124
           or an appropriate score on an assessment
           test
CPCA       Elective............................................1
DRAF 130   Introduction to CAD Concepts - AutoCAD: 2008*........3
           Prerequisite: DRAF 120
           or approval of the program assistant dean
DRAF 230   Intermediate CAD: AutoCAD*..........................3
           Prerequisite: DRAF 130
           or approval of the program assistant dean
DRAF 231   CAD 3-D*............................................3
           Prerequisite: DRAF 230
           TOTAL PROGRAM CREDIT HOURS.........................12
*Prerequisite/Corequisite required
```

Early Childhood Education, A.S.

The Early Childhood Education associate's degree program is for those students who currently are employed or aspire to work in early childhood care and education programs. Completion of JCCC's associate of science degree program provides students the credentials to advance in quality early childhood care and education settings. The program has four areas of specialization: administration, care and education of young children with special needs, infant/toddler care and education and school age programs. Credits will transfer to many Kansas universities. Excellent practical education opportunities are available to students in the program.

Prerequisite

Students must meet the requirements for employment in early childhood care and education centers in Kansas (stated in the Kansas Licensing Regulations for Preschools and Child Care Centers).

(Major Code 2100; CIP Code 19.0708)

Early Childhood Education Program

Associate of Science Degree

Students graduating with an Associate of Arts degree or an Associate of Science degree must complete an approved cultural diversity course. Some of these courses are able to meet both a diversity requirement and a general education requirement.

First Semester

```
EDUC 130   Foundations of Early Childhood Education.............3
ENGL 121   Composition I*.......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
           Math Elective*+......................................3
PSYC 130   Introduction to Psychology...........................3
SPD  121   Public Speaking......................................3
           Total Semester Credit Hours........................15
```

Second Semester

```
EDUC 131   Early Childhood Curriculum I*.........................3
           Prerequisite or corequisite: EDUC 130
EDUC 250   Child Health, Safety and Nutrition...................3
           Health/Physical Education**........................1-2
           Science course with Lab***.........................4-5
PSYC 215   Child Development*...................................3
           Prerequisite: PSYC 130
           or
PSYC 218   Human Development*...................................3
           Prerequisite: PSYC 130
           Total Semester Credit Hours.....................14-16
```

Summer

```
ENGL 122   Composition II*......................................3
           Prerequisite: ENGL 121
           Humanities Elective.................................3
           Total Semester Credit Hours.........................6
```

Third Semester

```
EDUC 231   Early Childhood Curriculum II*.......................3
           Prerequisite:  EDUC 131
EDUC 210   Creative Experiences for Young Children*.............3
           Prerequisites:  EDUC 130 and one of the following:
```

```
            PSYC 215 or PSYC 218 or EDUC 270
EDUC 260  Observing and Interacting with Young Children*.......3
            Prerequisite: EDUC 130 and
            Prerequisite or corequisite: PSYC 215 or PSYC 218
            or EDUC 270
ANTH 130  World Cultures^...................................3
            or
ANTH 125  Cultural Anthropology^............................3
            or
SOC  131  Marriage and the Family..........................3
            Science or Math................................4-5
            Total Semester Credit Hours....................16-17
```

Fourth Semester

```
EDUC 235  Parenting*.......................................2
            Prerequisite or corequisite:  PSYC 215 or PSYC 218 or
            EDUC 270
EDUC 284  Seminar: Early Childhood Education*...............3
            Prerequisite: Program Facilitator Approval
            Corequisite: EDUC 285
EDUC 285  Student Teaching: Early Childhood Education*.........3
            Prerequisite: Program Facilitator Approval
            Corequisite: EDUC 284
            Humanities Elective............................3
            Specialization courses.........................6
            Total Semester Credit Hours....................17
            TOTAL PROGRAM CREDIT HOURS.....................69-70
*Prerequisite/Corequisite required
^Meets Cultural Diversity requirement
```

Area of Specialization - select one:

Child Care Administration

```
ACCT 121  Accounting I.....................................3
EDUC 280  Administration of Early Childhood Program............3
```

Children with Special Needs

```
EDUC 220  Survey of the Exceptional Child....................3
EDUC 215  Young Children with Special Needs..................3
```

Infant and Toddler Care and Education

```
EDUC 270  Early Childhood Development........................3
EDUC 225  Infant and Toddler Education and Care*.............3
            Prerequisite:  EDUC 130
```

School-Age Programs

```
EDUC 240  School-Age Programs and Curriculum I*..............3
            Prerequisite: EDUC 130
EDUC 245  School-Age Programs and Curriculum II*.............3
            Prerequisite: EDUC 240
*Prerequisite/Corequisite required
```

+Recommended math course information

```
NOTE: The mathematics requirement will be satisfied by any
mathematics course except MATH 111, Fundamentals
of Mathematics, and MATH 115, Elementary Algebra.


Specific recommended course
MATH 171  College Algebra*..................................3
            Prerequisite: MATH 116 with a grade of "C" or higher
            or MATH 134 with a grade of "C" or higher
```

```
                or appropriate score on the math assessment test
                Note: Not available to students with credit in MATH 173
```

**Recommended HPER course, if not certified in CPR

```
HPER 200  First Aid and CPR..................................2
```

***Recommended courses for the science requirement

Life Science

```
BIOL 122  Principles of Biology................................3
BIOL 123  Principles of Biology Lab*...........................1
          Prerequisite or corequisite: BIOL 122 or
          consent of the assistant dean
BIOL 130  Environmental Science...............................3
BIOL 131  Environmental Science Lab*..........................1
          Prerequisite or corequisite: BIOL 130
```

Physical Science

```
ASTR 122  Astronomy...........................................4
GEOS 130  General Geology.....................................5
GEOS 140  Physical Geography..................................3
GEOS 141  Physical Geography Lab*.............................2
          Prerequisite or Corequisite: GEOS 140 or the equivalent
PSCI 120  Physical Science....................................4
*Prerequisite/Corequisite required
```

Early Childhood Education Certificate

This certificate is for students seeking employment in early childhood care and education programs and for current early childhood care and education teachers/administrators who want to upgrade their skills and increase their knowledge in this area of study. The program does not need to be completed in one year.

Students must be first aid/CPR certified to receive the early childhood education certificate. The first aid/CPR certification may be obtained through your center; you may also enroll in HPER 200 First Aid/CPR at JCCC. Students must meet the requirements for employment in early childhood care and education centers in Kansas (stated in the Kansas Licensing Regulations for Preschool and Child Care Centers).

(Major Code 6600; CIP Code 19.0708)

Early Childhood Education Program

Career Certificate

First Semester

```
EDUC 130  Foundations of Early Childhood Education.............3
EDUC 131  Early Childhood Curriculum I*.......................3
          Prerequisite or corequisite: EDUC 130
EDUC 270  Early Childhood Development.........................3
ENGL 121  Composition I*......................................3
          Prerequisite: ENGL 106
          or appropriate placement test score or EAP 113 and
          EAP 117
SPD  120  Interpersonal Communication**.......................3
          or
SPD  121  Public Speaking.....................................3
          Total Semester Credit Hours........................15
```

Summer Session

```
EDUC 210   Creative Experiences for Young Children*.............3
           Prerequisites:  EDUC 130 and one of the following:
           PSYC 215 or PSYC 218 or EDUC 270
           Total Semester Credit Hours..........................3
```

Second Semester

```
EDUC 231   Early Childhood Curriculum II*.......................3
           Prerequisite:  EDUC 131
EDUC 250   Child Health, Safety and Nutrition..................3
MATH 120   Business Mathematics*...............................3
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
EDUC 235   Parenting*..........................................2
           Prerequisite or corequisite:  PSYC 215 or PSYC 218 or
           EDUC 270
EDUC 283   Prof. Competencies: Early Childhood Education*.......1
           Prerequisite: Program Facilitator Approval
```

Plus one of the following EDUC courses below:

```
EDUC 205   Concepts in Early Childhood Education*^..............3
           Prerequisite or corequisite: EDUC 130
           for certificate only
EDUC 240   School-Age Programs and Curriculum I*...............3
           Prerequisite: EDUC 130
EDUC 280   Administration of Early Childhood Program............3
EDUC 215   Young Children with Special Needs...................3
EDUC 225   Infant and Toddler Education and Care*..............3
           Prerequisite:  EDUC 130
           Total Semester Credit Hours.........................15
           TOTAL PROGRAM CREDIT HOURS..........................33
*Prerequisite/Corequisite required
NOTE: **Course is not considered credit in the associate of
science early childhood education degree program.


NOTE: ^Course is not considered credit in associate of
science early childhood education degree program. Credit for
experience is available.
```

Commercial Wiring Certificate

The Electrical Technology Commercial Wiring Vocational Certificate is a 16 credit-hour program that students can complete in one semester. This certificate is designed to give the students the basic skills to gain employment as a commercial electrician.

(Major Code 4010; CIP Code 46.0302)

Electrical Technology Program

Career Certificate

Required Courses

```
ELTE 122   National Electrical Code I...........................4
ELTE 123   Electromechanical Systems...........................4
ELTE 200   Commercial Wiring Methods*..........................4
           Prerequisite or corequisite: HVAC 123 or ELTE 123
INDT 125   Industrial Safety...................................3
INDT 155   Workplace Skills....................................1
           TOTAL PROGRAM CREDIT HOURS..........................16
*Prerequisite/Corequisite required
```

Electrical Technology, A.A.S.

The use of electrical technology in residential, commercial and industrial applications continues to grow rapidly. Electricians install and maintain electrical systems for a variety of purposes, including lighting, appliances, climate control, security and communications.

JCCC offers a 65-credit-hour associate of applied science degree program and a 29-credit-hour vocational certificate program. Both programs emphasize hands-on training integrated with a knowledge of theory and study of the National Electrical Code that prepares students to take a national licensure exam.

The associate of applied science degree program prepares students to enter the electrical trade in four types of electrical occupations: residential, commercial, industrial and maintenance. The program also prepares students for continued education in electrical contracting/management, electrical design and industrial/electronic controls.

(Major Code 2260; CIP Code 46.0302)

Electrical Technology Program

Associate of Applied Science Degree

First Semester

```
ELTE 122   National Electrical Code I..........................4
ELTE 125   Residential Wiring Methods*........................4
           Prerequisite or corequisite: HVAC 123 or ELTE 123
ELTE 123   Electromechanical Systems..........................4
INDT 125   Industrial Safety..................................3
INDT 155   Workplace Skills...................................1
           Total Semester Credit Hours......................16
```

Second Semester

```
ELTE 200   Commercial Wiring Methods*.........................4
           Prerequisite or corequisite: HVAC 123 or ELTE 123
ENGL 121   Composition I*.....................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
MATH 133   Technical Mathematics I*...........................4
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
CPCA 105   Introduction to Personal Computers: Windows.........1
           Technical Electives................................4
           Total Semester Credit Hours......................16
```

Third Semester

```
DRAF 129   Interpreting Architectural Drawings.................2
ELTE 205   Industrial Electrical Wiring*......................4
           Prerequisite: ELTE 122 or ELTE 125 or ELTE 200
ELTE 210   Code Certification Review*.........................3
           Prerequisite: ELTE 122
ELTE 271   Electrical Internship I*...........................3
           Prerequisite: program facilitator approval
HPER 200   First Aid and CPR..................................2
           Social Science and/or Economics Elective...........3
           Total Semester Credit Hours......................17
```

Fourth Semester

```
ENGL 123   Technical Writing I*...............................3
           Prerequisite: ENGL 121
ELTE 215   Generators, Transformers and Motors*...............4
           Prerequisites:  ELTE 123 and one of the following:
           ELTE 122 or ELTE 125 or ELTE 200
           or equivalent experience
           and division administrator's approval
CET  105   Construction Methods...............................3
```

```
                Humanities Elective..................................3
                Technical Electives.................................3
                Total Semester Credit Hours........................16
                TOTAL PROGRAM CREDIT HOURS.........................65
```

Technical Electives

```
ELTE 291  Independent Study..................................1-7
CPCA 128  PC Applications: MS Office...........................3
DRAF 120  Introduction to Drafting.............................2
DRAF 130  Introduction to CAD Concepts - AutoCAD: 2008*........3
          Prerequisite: DRAF 120
          or approval of the program assistant dean
DRAF 250  Electrical Drafting*.................................3
          Prerequisites: MATH 133 and DRAF 230 or ENGR 131
ELEC 120  Introduction to Electronics..........................3
ELEC 125  Digital Electronics I................................4
ELEC 131  Introduction to Sensors and Actuators................3
ELEC 133  Programmable Controllers.............................3
ELEC 165  Advanced Programmable Controllers*...................3
          Prerequisite: ELEC 133
ELEC 185  LAN Cabling and Installation.........................3
ELTE 202  Electrical Estimating*...............................3
          Prerequisites: ELTE 122 and ELTE 125 or ELTE 200
          or permission from program facilitator
HVAC 121  Basic Principles of HVAC*............................4
          Prerequisite or corequisite: HVAC 123
MFAB 121  Introduction to Welding*^............................4
          Prerequisite or Corequisite: MFAB 120 or
          program facilitator approval or contact testing office
          for Prior Learning Assessment
BUS  140  Principles of Supervision............................3
BUS  145  Small Business Management............................3
ENTR 142  Fast Trac Business Plan..............................3
RRT  165  Railroad Safety, Quality and Environment.............3
*Prerequisite/Corequisite required

^Note: MFAB 120-MFAB Tools and Equipment is a prerequisite/
corequisite to MFAB 121.  Students who may have the skills
needed for MFAB 120 may contact the career program
facilitator for a waiver or may contact the Testing Center
for prior learning credit.
```

Electrical Technology Certificate

The electrical technology vocational certificate program is a one-year program that students can complete in two semesters. Designed to give students the basic skills to gain employment as a construction or maintenance electrician, the curriculum includes an internship with local employers.

(Major Code 5200; CIP Code 46.0302)

Electrical Technology Program

Career Certificate

First Semester

```
ELTE 122  National Electrical Code I...........................4
ELTE 125  Residential Wiring Methods*..........................4
          Prerequisite or corequisite: HVAC 123 or ELTE 123
ELTE 123  Electromechanical Systems............................4
INDT 125  Industrial Safety....................................3
          Total Semester Credit Hours.........................15
```

Second Semester

```
ELTE 200    Commercial Wiring Methods*..........................4
            Prerequisite or corequisite: HVAC 123 or ELTE 123
ELTE 210    Code Certification Review*..........................3
            Prerequisite: ELTE 122
ELTE 271    Electrical Internship I*............................3
            Prerequisite: program facilitator approval
            Technical Electives.................................3
INDT 155    Workplace Skills....................................1
            Total Semester Credit Hours........................14
            TOTAL PROGRAM CREDIT HOURS.........................29
```

Technical Electives

```
ELTE 205    Industrial Electrical Wiring*.......................4
            Prerequisite: ELTE 122 or ELTE 125 or ELTE 200
ELTE 291    Independent Study.................................1-7
ELTE 215    Generators, Transformers and Motors*................4
            Prerequisites:  ELTE 123 and one of the following:
            ELTE 122 or ELTE 125 or ELTE 200
            or equivalent experience
            and division administrator's approval
ELEC 185    LAN Cabling and Installation........................3
CET  105    Construction Methods................................3
DRAF 120    Introduction to Drafting............................2
DRAF 129    Interpreting Architectural Drawings.................2
ELEC 120    Introduction to Electronics.........................3
ELEC 126    Microcomputer A+ Preparation........................4
ELEC 125    Digital Electronics I...............................4
ELEC 131    Introduction to Sensors and Actuators...............3
ELEC 133    Programmable Controllers............................3
ELEC 165    Advanced Programmable Controllers*..................3
            Prerequisite: ELEC 133
ELTE 202    Electrical Estimating*..............................3
            Prerequisites: ELTE 122 and ELTE 125 or ELTE 200
            or permission from program facilitator
HVAC 121    Basic Principles of HVAC*...........................4
            Prerequisite or corequisite: HVAC 123
MFAB 121    Introduction to Welding*^...........................4
            Prerequisite or Corequisite: MFAB 120 or
            program facilitator approval or contact testing office
            for Prior Learning Assessment
*Prerequisite/Corequisite required
```

^Note: MFAB 120-MFAB Tools and Equipment is a prerequisite/
corequisite to MFAB 121. Students who may have the skills
needed for MFAB 120 may contact the career program
facilitator for a waiver or may contact the Testing Center
for prior learning credit.

Industrial Electrical Wiring Certificate

The electrical technology industrial electrical wiring vocational certificate is a program that students can complete in two semesters. This certificate is designed to give the students the basic skills to gain employment as an industrial electrician.

(Major Code 4020; CIP Code 46.0302)

Electrical Technology Program

Career Certificate

First Semester

```
ELTE 123    Electromechanical Systems...........................4
ELTE 122    National Electrical Code I..........................4
            or
```

```
ELTE 200    Commercial Wiring Methods*.........................4
            Prerequisite or corequisite: HVAC 123 or ELTE 123
INDT 125    Industrial Safety.................................3
INDT 155    Workplace Skills..................................1
            Total Semester Credit Hours.....................12
```

Second Semester

```
ELEC 133    Programmable Controllers..........................3
ELTE 205    Industrial Electrical Wiring*.....................4
            Prerequisite: ELTE 122 or ELTE 125 or ELTE 200
ELTE 210    Code Certification Review*........................3
            Prerequisite: ELTE 122
ELTE 215    Generators, Transformers and Motors*..............4
            Prerequisites:  ELTE 123 and one of the following:
            ELTE 122 or ELTE 125 or ELTE 200
            or equivalent experience
            and division administrator's approval
            Total Semester Credit Hours.....................14
            TOTAL PROGRAM CREDIT HOURS......................26
*Prerequisite/Corequisite
```

Residential Wiring Certificate

The Electrical Technology Residential Wiring Vocational Certificate is a 16-credit hour program that students can complete in one semester. This certificate is designed to give the students the basic skills to gain employment as a residential electrician (wireman).

(Major Code 4030; CIP Code 46.0302)

Electrical Technology Program

Career Certificate

Required Courses

```
ELTE 122    National Electrical Code I........................4
ELTE 123    Electromechanical Systems.........................4
ELTE 125    Residential Wiring Methods*.......................4
            Prerequisite or corequisite: HVAC 123 or ELTE 123
INDT 125    Industrial Safety.................................3
INDT 155    Workplace Skills..................................1
            TOTAL PROGRAM CREDIT HOURS......................16
*Prerequisite/Corequisite
```

Electronics Technology, A.A.S.

Electronics technology influences almost every aspect of modern life. Skilled electronics technicians are needed to support growth in this industry. These technicians must be able to fabricate, test, install, operate and maintain highly technical systems such as communications systems, computers and computer networks, and industrial process control systems. The program focuses on the underlying principles of electronic devices, circuit analysis and digital electronics and will provide a broad systems view of electronics.

Students in the electronics program will work with outstanding facilities and the latest laboratory equipment. Graduates of the program will have the opportunity for employment in one of today's most challenging and exciting career fields.

Program graduates also have the opportunity to pursue a baccalaureate degree (B.S.E.E.T.) in electronics engineering technology through the transfer of JCCC electronics technology and other courses to participating four-year institutions. Students contemplating this option should seek early counseling and prepare a program plan with specific course selections in anticipation of four-year institution requirements. Students should be prepared to enroll in higher-level math and physics courses when compared with current electronics technology program

requirements.

Students who are transferring to JCCC with significant numbers of electronic technology credits should be aware that at least 9 credit hours of approved electronic technology courses must be completed at JCCC before the A.A.S. degree will be awarded. In addition, because of changes in technology, students who desire to graduate using electronics technology courses completed more than seven years ago should seek counseling regarding the current relevance of those courses.

(Major Code 2690; CIP Code 47.0101)

Electronics Technology

Associate of Applied Science Degree

First Semester

```
ELEC 120   Introduction to Electronics...........................3
ELEC 126   Microcomputer A+ Preparation.........................4
ELEC 125   Digital Electronics I................................4
MATH 133   Technical Mathematics I or higher*...................4
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
ENGL 121   Composition I*.......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
           Total Semester Credit Hours.........................18
```

Second Semester

```
ELEC 122   Circuit Analysis I*..................................3
           Prerequisites:  ELEC 120 and MATH 133 or MATH 172
ELEC 225   Digital Electronics II*..............................3
           Prerequisite: ELEC 125
MATH 134   Technical Mathematics II or higher*..................5
           Prerequisite: MATH 133 or an equivalent course with a
           grade of "C" or higher
SPD  125   Personal Communication...............................3
           Humanities Elective..................................3
           Total Semester Credit Hours.........................17
```

Third Semester

```
ELEC 130   Electronic Devices I*................................4
           Prerequisite or corequisite: ELEC 140
ELEC 140   Circuit Analysis II*.................................3
           Prerequisites: ELEC 122 and MATH 134 or
           MATH 172 or MATH 173
ENGL 123   Technical Writing I*.................................3
           Prerequisite: ENGL 121
           Technical Elective...................................3
           Social Science/Economics Elective...................3
           Total Semester Credit Hours.........................16
```

Fourth Semester

```
ELEC 230   Electronic Devices II*...............................3
           Prerequisite: ELEC 130
ELEC 240   Electronic Communication Systems*....................4
           Prerequisite or corequisite: ELEC 230
           Technical Elective...................................3
PHYS 133   Applied Physics or higher*...........................5
           Prerequisite: MATH 133 or higher
           Health and/or Physical Education Elective............1
           Total Semester Credit Hours.........................16
           TOTAL PROGRAM CREDIT HOURS..........................67
```

Technical Electives

```
ELEC 127  Robots for Humans....................................4
ELEC 131  Introduction to Sensors and Actuators................3
ELEC 133  Programmable Controllers.............................3
ELEC 165  Advanced Programmable Controllers*...................3
          Prerequisite: ELEC 133
ELEC 175  Telecommunications*..................................3
          Prerequisite or corequisite: ELEC 130
ELEC 185  LAN Cabling and Installation.........................3
ELEC 245  Microprocessors*.....................................3
          Prerequisite: ELEC 225
ELEC 250  Microcomputer Maintenance*...........................3
          Prerequisite: ELEC 126
ELEC 271  Electronics Internship I*............................1
          Prerequisite: assistant dean's approval
ELEC 272  Electronics Internship II*...........................1
          Prerequisites: ELEC 271 and
          approval of the program assistant dean
*Prerequisite/Corequisite required
```

Industrial Controls Certificate

This certificate is designed to focus on programmable logic controllers and a variety of input and output devices. The certificate is a 9-credit-hour, 3-course sequence involving both the hardware and programming aspects of controllers used in industrial processes. Lectures provide a theoretical basis and laboratory projects offer experience in controller program planning, documentation and troubleshooting.

(Major Code 4720; CIP Code 47.0101)

Electronics Technology

Certificate of Completion

Required Courses

```
ELEC 131  Introduction to Sensors and Actuators................3
ELEC 133  Programmable Controllers.............................3
ELEC 165  Advanced Programmable Controllers*...................3
          Prerequisite: ELEC 133
          TOTAL PROGRAM CREDIT HOURS...........................9
*Prerequisite/Corequisite required
```

Microcomputer Technical Support Certificate

The microcomputer technical support vocational certificate is designed to provide an entry-level set of competencies that will allow the recipient to quickly perform satisfactorily in computer system help desk environment. This 6-course sequence will expose the student to significant aspects of computer hardware, computer networks and interconnection computer software, as well as interpersonal skills. Lectures will provide a theoretical foundation of microcomputer performance while a variety of laboratory projects will offer experience in system organization, interconnection and troubleshooting.

(Major Code 4980; CIP Code 47.0104)

Electronics Technology

Career Certificate

Required Courses

```
ELEC 126  Microcomputer A+ Preparation.........................4
CPCA 128  PC Applications: MS Office...........................3
ELEC 185  LAN Cabling and Installation.........................3
```

```
IT   205  Implementing Windows Client*.........................3
          Prerequisite: IT 200
ELEC 250  Microcomputer Maintenance*...........................3
          Prerequisite: ELEC 126
BUS  225  Human Relations......................................3
          or
SPD  125  Personal Communication...............................3
          TOTAL PROGRAM CREDIT HOURS..........................19
*Prerequisite/Corequisite required
```

Smart House Technology Integrator Certificate

This certificate documents training that the recipient has received to qualify for the area of installing and integrating a wide range of home networking, automation and remote control systems into homes.

(Major Code 4400; CIP Code 47.0199)

Electronics Technology

Career Certificate

```
ELEC 123  Smart House Technology...............................3
ELEC 126  Microcomputer A+ Preparation.........................4
ELTE 122  National Electrical Code I...........................4
ELTE 123  Electromechanical Systems............................4
          or
HVAC 123  Electromechanical Systems............................4
ELTE 125  Residential Wiring Methods*..........................4
          Prerequisite or corequisite: HVAC 123 or ELTE 123
IT   200  Networking Technologies..............................3
ELEC 185  LAN Cabling and Installation.........................3
INDT 155  Workplace Skills.....................................1
          TOTAL PROGRAM CREDIT HOURS..........................26
*Prerequisite/Corequisite required
```

Emergency Medical Science, A.A.S.

People who work in the field of emergency medical science (EMS) often enter people's lives during critical times of illness and injury. Their ability to act knowledgeably, compassionately, quickly and calmly can stabilize chaotic, frightening situations.

JCCC offers three progressively intensive options for learning the skills of emergency medical science. All three options prepare you for state certification examinations.

JCCC's financial aid program includes scholarships, grants and loans if you are eligible. Financial aid is particularly important in the MICT program, since long hours usually prohibit you from holding a full-time job.

EMS First Responder Course

EMS first responder students receive classroom and skills training in cardiopulmonary resuscitation (CPR), patient assessment, and fracture and airway management. This class is recommended for:

- people without a medical background who wish to enter the EMT program

- anyone who wishes to learn basics of emergency medical care

- firefighters, police officers, lifeguards and others from agencies involved in public safety

- employees involved in company safety programs

Students successfully completing this course will be allowed to sit for the certification examination administered by the Kansas Board of Emergency Medical Services.

The EMS First Responder class is offered as the need arises – in general, once each semester.

EMS 128   EMS First Responder..................5

TOTAL CREDIT HOURS....................5

Emergency Medical Technician Course

This program is designed for individuals interested in providing medical care to patients in the pre-hospital setting. It will provide the participants with opportunities to gain information, skills and attitudes necessary for certification and practice as an emergency medical technician (EMT) in the state of Kansas.

The program has been approved by the Kansas Board of Emergency Medical Services. It addresses information and techniques currently considered to be the responsibility of the EMT, according to the United States Department of Transportation, National Standard Curriculum. The program consists of lecture instruction, practical skill training and clinical experience.

Classroom instruction includes anatomy, physiology, recognition and care of actual medical emergencies and trauma-related injuries. Skills in performing CPR, bandaging, splinting, childbirth techniques and other emergency care procedures are taught. An extrication session will give students hands-on experience with auto accident situations and provide the opportunity to observe an air evacuation of a patient. Upon instructor recommendation, students will participate in a clinical observation in a hospital setting. Students participate in seven hours of lecture and five hours of lab a week (average). Students are also required to attend Saturday session(s) as necessary. Saturday dates and times will be announced during the first class session.

Students successfully completing this course with a "C" will be allowed to sit for the certification examinations administered by the Kansas Board of Emergency Medical Services.

EMS 130   Emergency Medical Technician Course*............9

*Prerequisite - EMS 128 or equivalent, or be an active member in a health-related occupation (firefighter, rescue, ambulance, law enforcement, industrial first-aid personnel or other health-related field), or attained the minimum of an associate's degree.

TOTAL PROGRAM CREDIT HOURS....................9

EMT Practicum

EMT Practicum is designed to give the EMT-B, recently certified or those with limited field experience, the additional skills and confidence needed to successfully compete for a position as an EMT-B with an EMS service. Skills will include ambulance operation, driving, map reading, insurance billing and unit maintenance. This course will also provide high-fidelity scenario training in all aspects of the EMS call, as well as extensive field lab time with a local EMS service.

Students will become directly involved in their own training by leading and participating in realistic medical emergency scenarios with "actors" playing life-like patients and bystanders. Numerous field internship shifts on a licensed ambulance are part of the training. Students will work through all phases of an ambulance call. They will be presented with complex patient-care situations that require the development of critical thinking and decision-making skills. Students will be tested on their ability to lead a team of pre-hospital caregivers in the diagnosis, proper treatment and evacuation of a patient. Scenario simulations will be set up to be as life-like as possible.

EMS 133   EMT Practicum*....................3

*Prerequisite - EMS 130 EMT-B or equivalent and a copy of current EMT-B card

TOTAL CREDIT HOURS.......3

Mobile Intensive Care Technician (Paramedic) Program

This advanced emergency medical care program consists of four courses, including a clinical rotation in a hospital setting and a field internship with an ambulance service. You learn emergency procedures such as cardiac monitoring and defibrillation and the administration of medications and IV fluids. Successful completion of this program and subsequent certification exams will enable graduates to work as skilled paramedics and to provide sophisticated, advanced pre-hospital life support.

JCCC's MICT program is fully accredited by the Committee on Accreditation of Educational Programs for the EMS Professions (CoAEMSP). If you are interested, contact the Admissions office for an application packet, which includes deadlines, admission requirements and options for meeting academic criteria.

This is a selective admission program with limited enrollment. If you are accepted into the program, you take classes in the spring, summer and fall, completing the program in December.

Students successfully completing this program with a "C" will be allowed to sit for the certification examinations administered by the Kansas Board of Emergency Medical Services.

(Major Code 248A; CIP Code 51.0904)

Emergency Medical Science

Associate of Applied Science Degree

Prior to beginning professional courses

```
Successful completion of an EMT course and successful
completion of the following courses:

BIOL 144   Human Anatomy and Physiology.........................5
           or
BIOL 140   Human Anatomy.......................................4
           and
BIOL 225   Human Physiology*...................................4
           Prerequisites: CHEM 122 and either BIOL 140 or BIOL 144
ENGL 121   Composition I*......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
SOC  125   Social Problems.....................................3
           or
           Social Science/Economics Elective...................3
PHIL 143   Ethics..............................................3
           or
           Humanities Elective.................................3
           Health/Physical Education Elective..................1
           Electives........................................0-2
           {depending on which science
           class(es) are taken}
           Total General Education Credit Hours............17-18
```

First Semester

```
EMS  220   MICT I*.............................................10
           Prerequisite: Admission to the MICT program
EMS  225   MICT II*............................................10
           Prerequisite: EMS 220 with a grade of "C" or higher
           Total Semester Credit Hours.........................20
```

Second Semester

```
EMS  230   MICT III Clinicals*................................12
           Prerequisite: EMS 225 with a grade of "C" or higher
           Total Semester Credit Hours.........................12
```

Third Semester

```
EMS  271   MICT IV Field Internship*..........................15
           Prerequisite: EMS 230 with a grade of "C" or higher
           Total Semester Credit Hours.........................15
           Total Professional Credit Hours.....................47
           TOTAL PROGRAM CREDIT HOURS.......................64-65
*Prerequisite/Corequisite required
```

Mobile Intensive Care Technician Certificate

Prior to beginning profession courses:

An associate's degree or higher, successful completion of an EMT course, and successful completion of a college-level anatomy/physiology course are required.

Mobile Intensive Care Technician (Paramedic) Program

This advanced emergency medical care program consists of four courses, including a clinical rotation in a hospital setting and a field internship with an ambulance service. You learn emergency procedures such as cardiac monitoring and defibrillation and the administration of medications and IV fluids. Successful completion of this program and subsequent certification exams will enable graduates to work as skilled paramedics and to provide sophisticated, advanced pre-hospital life support.

JCCC's MICT program is fully accredited by the Committee on Accreditation of Educational Programs for the EMS Professions (CoAEMSP). If you are interested, contact the Admissions office for an application packet, which includes deadlines, admission requirements and options for meeting academic criteria.

This is a selective admission program with limited enrollment. If you are accepted into the program, you take classes in the spring, summer and fall, completing the program in December.

Students successfully completing this program will be allowed to sit for the certification examinations administered by the Kansas Board of Emergency Medical Services.

(Major Code 486A; CIP Code 51.0904)

Emergency Medical Science

Career Certificate

First Semester

```
EMS   220   MICT I*............................................10
            Prerequisite: Admission to the MICT program
EMS   225   MICT II*...........................................10
            Prerequisite: EMS 220 with a grade of "C" or higher
            Total Semester Credit Hours........................20
```

Second Session

```
EMS   230   MICT III Clinicals*................................12
            Prerequisite: EMS 225 with a grade of "C" or higher
            Total Semester Credit Hours........................12
```

Third Semester

```
EMS   271   MICT IV Field Internship*..........................15
            Prerequisite: EMS 230 with a grade of "C" or higher
            Total Semester Credit Hours........................15
            TOTAL PROGRAM CREDIT HOURS.........................47
*Prerequisite/Corequisite required
```

Emergency Medical Technician Certificate

This certificate program is designed for individuals interested in providing medical care to patients in the pre-hospital setting and prepares the student to enter the workforce as a trained and certified Emergency Medical Technician. Successful graduates of this Kansas Board of Emergency Medical Services (BEMS) course are eligible to take Kansas State and national Certifying examinations.

(Major Code 4760; CIP 51.0904)

Emergency Medical Science

Certificate of Completion

Required Course

```
EMS  130   Emergency Medical Technician*.........................9
           Prerequisite: EMS 128 or equivalent, or be an active
           member in a health-related occupation (firefighter,
           rescue, ambulance, law enforcement, industrial first-aid
           personnel or other health-related field), or attained the
           minimum of an associate's degree
           TOTAL PROGRAM CREDIT HOURS.........................9
*Prerequisite/Corequisite required
```

Entrepreneurship, A.A.S.

The small business sector is one of the fastest growing in the nation's economy. With an ever-increasing number of adults today self-employed, many residents in Johnson County either work for a small business or plan to start their own. JCCC's entrepreneurship program can help prospective entrepreneurs launch new ventures or, if you are an entrepreneur who already has your business established, you can strengthen your managerial and business skills to grow your business.

You will learn the fundamentals of starting and operating your own business. The program includes basic business skills as well as specific courses in starting and managing an entrepreneurial business. Course work covers evaluating a business opportunity, preparing a business plan, legal issues for small business, planning advertising and sales promotions, marketing a product or service, developing an accounting system and financial management for the entrepreneurial company.

You also will complete two internships in a small business. You can apply what you learn in the classroom to your job and take your work experiences back to the classroom for analysis.

(Major Code 2340; CIP Code 52.0701)

Entrepreneurship

Associate of Applied Science Degree

First Semester

```
ENTR 120   Introduction to Entrepreneurship.....................2
BUS  230   Marketing...........................................3
BUS  225   Human Relations.....................................3
ENGL 121   Composition I*......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
MATH 120   Business Math or higher*............................3
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
           Health and/or Physical Education Elective............1
           Total Semester Credit Hours.......................15
```

Second Semester

```
ENTR 180   Opportunity Analysis................................2
ENTR 195   Franchising*........................................3
           Prerequisite: BUS 230
BUS  150   Business Communications*............................3
           Prerequisite: ENGL 121
MKT  134   Professional Selling................................3
ACCT 111   Small Business Accounting...........................3
           or
ACCT 121   Accounting I........................................3
ECON 132   Survey of Economics.................................3
           or
ECON 230   Economics I.........................................3
           or
ECON 231   Economics II........................................3
           Total Semester Credit Hours.......................17
```

Third Semester

```
ENTR 131   Financial Management for Small Business*.............2
           Prerequisite: ACCT 111 or ACCT 121
ENTR 160   Legal Issues for Small Business.....................2
ENTR 210   Entrepreneurship Internship I*......................1
           Prerequisite: Career program facilitator or
           assistant dean approval
BUS  140   Principles of Supervision...........................3
HIST 141   U.S. History Since 1877.............................3
CIS  124   Introduction to Computer Concepts and Applications...3
           and
           CPCA/CDTP elective..................................1
Note: CPCA 105/106 will not meet this one hour requirement.


           or
           CPCA/CDTP electives.................................4
ENTR 225   Family Business*....................................3
           Total Semester Credit Hours........................18
```

Fourth Semester

```
ENTR 220   Entrepreneurial Marketing*..........................2
           Prerequisite: BUS 230
ENTR 142   Fast Trac Business Plan.............................3
ENTR 215   Entrepreneurship Internship II*.....................1
           Prerequisites: ENTR 210 and Assistant Dean's Approval
ENTR 190   Small Business Analysis*............................2
           Prerequisites: BUSE 131 or ENTR 131 and BUSE 160 or
           ENTR 160 and BUS 230 or permission of division
           administrator
PHIL 138   Business Ethics.....................................1
           Humanities Elective.................................3
ENTR 240   Funding Acquisition for Entrepreneurs*..............2
           Prerequisite: ENTR 142
           Total Semester Credit Hours........................14
           TOTAL PROGRAM CREDIT HOURS.........................64
*Prerequisite/Corequisite required
```

Students may be interested in taking additional courses, as
noted below, to complement their degree study. These
courses are NOT part of the certificate requirements.

```
BUS  120   Management Attitudes and Motivation.................3
BUS  123   Personal Finance....................................3
BUS  235   Introduction to International Business...............3
BUS  141   Principles of Management............................3
BUS  243   Human Resource Management...........................3
BUS  261   Business Law I......................................3
BUS  263   Business Law II*....................................3
           Prerequisite: BUS 261
CPCA 105   Introduction to Personal Computers: Windows.........1
CPCA 108   Word Processing I: MS Word*.........................1
           Prerequisites: CPCA 105 or CPCA 106 or CIS 124
           or CPCA 128 or appropriate score on a waiver test
CPCA 110   Spreadsheets I: MS Excel*...........................1
           Prerequisite: CPCA 105 or CPCA 106 or CIS 124
           or CPCA 128 or an appropriate score on a waiver test
CPCA 111   Spreadsheets II: MS Excel*..........................1
           Prerequisite: CPCA 110 or CPCA 128
CPCA 114   Databases I: MS Access*.............................1
           Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124
           or an appropriate score on a waiver test
CPCA 115   Databases II: MS Access*............................2
           Prerequisite: CPCA 114
CPCA 141   Internet I*.........................................1
           Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or
           CIS 124 or an appropriate score on an assessment test
CPCA 151   Internet II*........................................1
```

```
                   Prerequisite: CPCA 141 or an appropriate score on an
                   assessment test
FASH 231   Merchandising Planning and Control*.................3
                   Prerequisite: MATH 120
HMGT 121   Perspectives of Hospitality Management..............3
MKT  121   Retail Management...................................3
MKT  202   Consumer Behavior..................................3
MKT  234   Services Marketing*................................3
                   Corequisite: BUS 230
```

Entrepreneurship Certificate

Students in entrepreneurship certificate programs learn the fundamentals of starting and operating their own businesses. Course work includes evaluating a business idea, preparing a business plan, financial management, legal issues, marketing a product or service and developing an accounting system.

(Major Code 5080; CIP Code 52.0701)

Entrepreneurship

Career Certificate

Prerequisites for Required Courses

```
BUS  230   Marketing..........................................3
ACCT 121   Accounting I.......................................3
                   or
ACCT 111   Small Business Accounting..........................3
```

Required Courses

```
ENTR 120   Introduction to Entrepreneurship...................2
ENTR 180   Opportunity Analysis...............................2
ENTR 160   Legal Issues for Small Business....................2
ENTR 210   Entrepreneurship Internship I*.....................1
                   Prerequisite: Career program facilitator or
                   assistant dean approval
CIS  124   Introduction to Computer Concepts and Applications...3
                   or
                   CPCA/CDTP electives................................3
ENTR 131   Financial Management for Small Business*...........2
                   Prerequisite: ACCT 111 or ACCT 121
ENTR 195   Franchising*.......................................3
                   Prerequisite: BUS 230
ENTR 220   Entrepreneurial Marketing*.........................2
                   Prerequisite: BUS 230
ENTR 142   Fast Trac Business Plan............................3
ENTR 190   Small Business Analysis*...........................2
                   Prerequisites: BUSE 131 or ENTR 131 and BUSE 160 or
                   ENTR 160 and BUS 230 or permission of division
                   administrator
MKT  134   Professional Selling...............................3
ENTR 225   Family Business....................................3
ENTR 240   Funding Acquisition for Entrepreneurs*.............2
                   Prerequisite: ENTR 142
                   TOTAL PROGRAM CREDIT HOURS.........................30
*Prerequisite/Corequesite required
```

```
Students may be interested in taking additional courses, as
noted below, to complement their certificate study.  These
courses are NOT part of the certificate requirements.
```

```
BUS  120   Management Attitudes and Motivation................3
BUS  123   Personal Finance...................................3
BUS  141   Principles of Management...........................3
BUS  235   Introduction to International Business..............3
BUS  243   Human Resource Management..........................3
```

```
BUS  261   Business Law I.......................................3
BUS  263   Business Law II*.....................................3
           Prerequisite: BUS 261
CPCA 105   Introduction to Personal Computers: Windows..........1
CPCA 108   Word Processing I: MS Word*..........................1
           Prerequisites: CPCA 105 or CPCA 106 or CIS 124
           or CPCA 128 or appropriate score on a waiver test
CPCA 110   Spreadsheets I: MS Excel*............................1
           Prerequisite: CPCA 105 or CPCA 106 or CIS 124
           or CPCA 128 or an appropriate score on a waiver test
CPCA 111   Spreadsheets II: MS Excel*...........................1
           Prerequisite: CPCA 110 or CPCA 128
CPCA 114   Databases I: MS Access*..............................1
           Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124
           or an appropriate score on a waiver test
CPCA 115   Databases II: MS Access*.............................2
           Prerequisite: CPCA 114
CPCA 141   Internet I*..........................................1
           Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or
           CIS 124 or an appropriate score on an assessment test
CPCA 151   Internet II*.........................................1
           Prerequisite: CPCA 141 or an appropriate score on an
           assessment test
FASH 231   Merchandising Planning and Control*..................3
           Prerequisite: MATH 120
HMGT 121   Perspectives of Hospitality Management...............3
MKT  121   Retail Management....................................3
MKT  202   Consumer Behavior....................................3
ENTR 215   Entrepreneurship Internship II*......................1
           Prerequisites: ENTR 210 and Assistant Dean's Approval
*Prerequisite/Corequesite required
```

Business Plan Certificate

The business plan certificate program focuses on evaluating an idea for a business and concludes with writing a business plan to start and/or grow a business.

(Major Code 4810; CIP Code 52.0701)

Entrepreneurship

Certificate of Completion

Required Courses

```
ENTR 120   Introduction to Entrepreneurship.....................2
ENTR 180   Opportunity Analysis.................................2
ENTR 142   Fast Trac Business Plan..............................3
           TOTAL PROGRAM CREDIT HOURS...........................7
```

Fashion Merchandising, A.A.S.

Rome, Paris, New York and Tokyo are centers of the fashion world. In today's fast-paced fashion market, these cities aren't that far ahead of your local shopping mall. Fashion is on the move -- in New York, Paris and Johnson County.

At JCCC, the fashion curriculum is designed to prepare you for a career in retail management, retail sales, apparel and textile design, promotion, display, illustration, and representative positions.

The program includes professional courses in merchandising, design, apparel construction, management, visual merchandising, creative selling and merchandise evaluation. To complement your education, you will also study important basic subjects such as business math, English, economics and marketing.

An associate of applied science degree is awarded after successful completion of

the 65-credit-hour curriculum in fashion merchandising or fashion design. The program also offers an 18-credit-hour certificate in visual merchandising. Seminars in career options and industry topics are available. Required work-study internships in the fashion business of your choice will give you experience in technical, creative and merchandising skills and make you more marketable in the industry.

With an associate's degree or certificate, you'll be ready to apply your energy and creativity in an industry that rewards both. Or, if you prefer to continue your education, you can complete a bachelor's degree through a transfer program to a college or university.

(Major Code 2520; CIP Code 52.1902)

Fashion Merchandising and Design

Associate of Applied Science Degree

First Semester

```
FASH 277   Fashion Seminar: Career Options......................2
FASH 283   Fashion Internship I.................................1
FASH 121   Fashion Fundamentals................................3
FASH 220   CAD Apparel Design..................................3
MKT  134   Professional Selling................................3
ENGL 121   Composition I*......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
FASH 135   Image Management....................................1
           Total Semester Credit Hours........................16
```

Second Semester

```
FASH 242   Consumer Product Evaluation.........................3
FASH 284   Fashion Internship II...............................1
           Health and/or Physical Education Elective...........1
MATH 120   Business Math or higher*............................3
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
FASH 150   Textiles............................................3
FASH 125   Visual Merchandising................................3
BUS  150   Business Communications*............................3
           Prerequisite: ENGL 121
           Total Semester Credit Hours........................17
```

Third Semester

```
BUS  225   Human Relations.....................................3
FASH 285   Fashion Internship III..............................1
FASH 132   Marketing Communications............................3
MKT  121   Retail Management...................................3
ECON 132   Survey of Economics.................................3
           or
ECON 230   Economics I.........................................3
           Electives...........................................3
           Total Semester Credit Hours........................16
```

Fourth Semester

```
FASH 286   Fashion Internship IV*..............................1
           Prerequisites: FASH 283 and FASH 284 and FASH 285 and
           45 hours toward degree in Fashion Merchandising
BUS  230   Marketing...........................................3
FASH 231   Merchandising Planning and Control*.................3
           Prerequisite: MATH 120
FASH 280   Capstone: Industry Topics*..........................3
           Prerequisites: FASH 283 and FASH 284
           Corequisite: FASH 231
           Humanities Elective.................................3
```

```
                  Electives...............................................2
                  Total Semester Credit Hours........................15
                  TOTAL PROGRAM CREDIT HOURS.........................64
```

Recommended Electives

```
FASH 123   Apparel Construction I..............................4
FASH 130   Fashion Illustration I..............................3
FASH 140   Garment Design I*...................................3
           Prerequisite: FASH 123
FASH 224   History of Costume..................................3
FASH 268   Field Study: The Market Center*.....................3
           Prerequisite: FASH 121
*Prerequisite/Corequisite required
```

Fashion Design Entrepreneurship Certificate

The fashion design entrepreneurship certificate prepares students to open their own fashion design business. This certificate is designed to provide the student with basic skills in fashion design and small business development and management.

(Major Code 4110; CIP Code 50.0407)

Fashion Merchandising and Design

Career Certificate

Required Courses

```
FASH 121   Fashion Fundamentals................................3
FASH 123   Apparel Construction I..............................4
FASH 130   Fashion Illustration I..............................3
FASH 150   Textiles............................................3
ENTR 120   Introduction to Entrepreneurship....................2
ENTR 180   Opportunity Analysis................................2
FASH 124   Apparel Construction II*............................4
           Prerequisite: FASH 123
           or two years of high school apparel construction training
           or division administrator approval
FASH 220   CAD Apparel Design..................................3
FASH 127   CAD: Pattern Design I*..............................4
           Prerequisite: FASH 123
           or
FASH 140   Garment Design I*...................................3
           Prerequisite: FASH 123
           or
FASH 143   Tailoring*..........................................4
           Prerequisite: FASH 124
ENTR 142   Fast Trac Business Plan.............................3
FASH 283   Fashion Internship I................................1
           TOTAL PROGRAM CREDIT HOURS......................31-32
*Prerequisite/Corequisite required
```

```
Students may be interested in taking additional courses, as
noted below, to complement their certificate study.  These
courses are NOT part of the certificate requirements.
```

```
ENTR 220   Entrepreneurial Marketing*..........................2
           Prerequisite: BUS 230
ENTR 195   Franchising*........................................3
           Prerequisite: BUS 230
ENTR 131   Financial Management for Small Business*.............2
           Prerequisite: ACCT 111 or ACCT 121
ENTR 160   Legal Issues for Small Business.....................2
```

Fashion Design, A.A.S.

Rome, Paris, New York and Tokyo are centers of the fashion world. In today's fast-paced fashion market, these cities aren't that far ahead of your local shopping mall. Fashion is on the move -- in New York, Paris and Johnson County.

At JCCC, the fashion curriculum is designed to prepare you for a career in retail management, retail sales, apparel and textile design, promotion, display, illustration, and representative positions.

The program includes professional courses in merchandising, design, apparel construction, management, visual merchandising, creative selling and merchandise evaluation. To complement your education, you will also study important basic subjects such as business math, English, economics and marketing.

An associate of applied science degree is awarded after successful completion of the 64-credit-hour curriculum in fashion merchandising or fashion design. The program also offers an 18-credit-hour certificate in visual merchandising. Seminars in career options and industry topics are available. Required work-study internships in the fashion business of your choice will give you experience in technical, creative and merchandising skills and make you more marketable in the industry.

With an associate's degree or certificate, you'll be ready to apply your energy and creativity in an industry that rewards both. Or, if you prefer to continue your education, you can complete a bachelor's degree through a transfer program to a college or university.

(Major Code 2600; CIP Code 50.0407)

Fashion Merchandising and Design

Associate of Applied Science Degree

First Semester

```
FASH 121   Fashion Fundamentals.................................3
FASH 123   Apparel Construction I..............................4
FASH 135   Image Management....................................1
FASH 220   CAD Apparel Design..................................3
FASH 277   Fashion Seminar: Career Options.....................2
ENGL 121   Composition I*......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
           Total Semester Credit Hours.........................16
```

Second Semester

```
FASH 124   Apparel Construction II*............................4
           Prerequisite: FASH 123
           or two years of high school apparel construction training
           or division administrator approval
FASH 130   Fashion Illustration I..............................3
FASH 150   Textiles............................................3
FASH 224   History of Costume..................................3
BUS  150   Business Communications*............................3
           Prerequisite: ENGL 121
           Health and/or Physical Education Elective............1
           Total Semester Credit Hours.........................17
```

Third Semester

```
FASH 127   CAD: Pattern Design I*..............................4
           Prerequisite: FASH 123
FASH 242   Consumer Product Evaluation.........................3
FASH 283   Fashion Internship I................................1
MATH 120   Business Math or higher*............................3
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
           Fashion Electives...................................3
```

```
                    Elective.................................................2
                    Total Semester Credit Hours.........................16
```

Fourth Semester

```
FASH 279   Fashion Portfolio Development*.........................2
           Prerequisites: FASH 121 and FASH 124 and FASH 127 and
           FASH 130 and FASH 150 and FASH 220
           Prerequisites or corequisites: FASH 280 and FASH 140
FASH 280   Capstone: Industry Topics*............................3
           Prerequisites: FASH 283 and FASH 284
           Corequisite: FASH 231
FASH 284   Fashion Internship II.................................1
FASH 140   Garment Design I*.....................................3
           Prerequisite: FASH 123
           Humanities Electives..................................3
           Social Science and/or Economics Elective.............3
           Total Semester Credit Hours..........................15
           TOTAL PROGRAM CREDIT HOURS...........................64
```

Fashion Electives

```
FASH 128   CAD: Pattern Design II*...............................4
           Prerequisite: FASH 127
FASH 141   Garment Alterations I*................................3
           Prerequisites: FASH 123 and
           Prerequisite or Corequisite: FASH 124
FASH 142   Garment Alterations II*...............................3
           Prerequisite: FASH 141 and
           Prerequisite or Corequisite: FASH 143
FASH 143   Tailoring*............................................4
           Prerequisite: FASH 124
FASH 230   Fashion Illustration II*..............................3
           Prerequisite: FASH 130
FASH 268   Field Study: The Market Center*.......................3
           Prerequisite: FASH 121
BUS  225   Human Relations.......................................3
MKT  134   Professional Selling..................................3
*Prerequisite/Corequisite required
```

Fashion Merchandising Entrep Certificate

The fashion merchandising entrepreneurship certificate prepares students to open their own fashion retail business. This certificate is designed to provide the student with basic skills in fashion merchandising and small business development and management.

(Major Code 4150; CIP Code 52.1902)

Fashion Merchandising and Design

Career Certificate

Prerequisite for Required Courses

```
MATH 120   Business Math or higher*..............................3
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
```

Required Courses

```
FASH 121   Fashion Fundamentals..................................3
FASH 125   Visual Merchandising..................................3
MKT  134   Professional Selling..................................3
ENTR 120   Introduction to Entrepreneurship......................2
ENTR 180   Opportunity Analysis..................................2
FASH 150   Textiles..............................................3
```

```
FASH 242   Consumer Product Evaluation.........................3
FASH 231   Merchandising Planning and Control*.................3
           Prerequisite: MATH 120
MKT  121   Retail Management..................................3
ENTR 142   Fast Trac Business Plan............................3
FASH 283   Fashion Internship I...............................1
           TOTAL PROGRAM CREDIT HOURS........................29
*Prerequisite/Corequisite required
```

Students may be interested in taking additional courses, as
noted below, to complement their certificate study. These
courses are NOT part of the certificate requirements.

```
ENTR 220   Entrepreneurial Marketing*.........................2
           Prerequisite: BUS 230
ENTR 195   Franchising*.......................................3
           Prerequisite: BUS 230
ENTR 131   Financial Management for Small Business*...........2
           Prerequisite: ACCT 111 or ACCT 121
ENTR 160   Legal Issues for Small Business....................2
```

Visual Merchandising Certificate

The visual merchandising certificate provides students with the opportunity to prepare for positions in the retail and wholesale market as display designers or visual merchandise managers.

(Major Code 7200; CIP Code 52.1902)

Fashion Merchandising and Design

Career Certificate

Required Courses

```
FASH 121   Fashion Fundamentals...............................3
FASH 125   Visual Merchandising...............................3
           Fashion Elective...................................3
MKT  121   Retail Management..................................3
ITMD 127   Elements of Floral Design..........................1
ITMD 147   Lighting Basics*...................................1
           Prerequisite: ITMD 121 with a grade of "C" or higher
           or FASH 125
FASH 283   Fashion Internship I...............................1
FASH 225   Store Planning*....................................3
           Prerequisite: FASH 125
           TOTAL PROGRAM CREDIT HOURS........................18
*Prerequisite/Corequisite required
```

Fashion Electives

```
FASH 130   Fashion Illustration I.............................3
FASH 132   Marketing Communications...........................3
FASH 150   Textiles...........................................3
FASH 242   Consumer Product Evaluation........................3
```

Visual Merchandising Entrepreneurship Certificate

This certificate is designed for students interested in opening their own visual merchandising service business providing clients in the retail and wholesale market visual merchandising and design services.

(Major Code 4040; CIP Code 52.1902)

Fashion Merchandising and Design

Career Certificate

Prerequisites for Required Courses

```
BUS  230   Marketing.........................................3
FASH 125   Visual Merchandising..............................3
```

Required Courses

```
FASH 121   Fashion Fundamentals..............................3
ENTR 120   Introduction to Entrepreneurship..................2
ENTR 180   Opportunity Analysis..............................2
ACCT 121   Accounting I......................................3
           or
ACCT 111   Small Business Accounting.........................3
ITMD 127   Elements of Floral Design.........................1
ITMD 147   Lighting Basics*..................................1
           Prerequisite: ITMD 121 with a grade of "C" or higher
           or FASH 125
FASH 225   Store Planning*...................................3
           Prerequisite: FASH 125
FASH 130   Fashion Illustration I............................3
           or
FASH 132   Marketing Communications..........................3
           or
FASH 150   Textiles..........................................3
           or
FASH 242   Consumer Product Evaluation.......................3
MKT  121   Retail Management.................................3
ENTR 131   Financial Management for Small Business*..........2
           Prerequisite: ACCT 111 or ACCT 121
ENTR 142   Fast Trac Business Plan...........................3
ENTR 220   Entrepreneurial Marketing*........................2
           Prerequisite: BUS 230
FASH 283   Fashion Internship I..............................1
           TOTAL PROGRAM CREDIT HOURS........................29
*Prerequisite/Corequisite required
```

Fire Services Administration, A.A.

The goal of the fire science program at Johnson County Community College is to provide comprehensive education and training, specifically designed to:

- Promote the academic and professional development of fire service company-level officers.
- Prepare those seeking employment with fire service agencies of Johnson County.

The program serves to provide higher academic education, technical training and lifelong learning for members of Johnson County fire-related organizations and those seeking employment in those organizations.

The fire science program at JCCC, in close cooperation with the Johnson County Fire Chiefs Association and the University of Kansas Fire and Rescue Training Institute, has developed a degree for advancement in the fire service and for further study toward the baccalaureate degree at a four-year institution, should you elect to pursue your education goals beyond the associate's level.

The program emphasizes general education in addition to technical education and is built around a core of fire science courses carefully selected by the members of the Fire Science Advisory Committee to prepare for your career growth. Technical electives may be pursued through courses available under a continuing cooperative agreement between area fire science programs or through other degree-granting institutions that are accredited by the International Fire Service Accreditation Congress. The transfer of credit from other institutions is governed by JCCC policy. You may fulfill technical education requirements through the advanced standing credit process.

JCCC also offers course work that will prepare you to take the Fire Fighter I and II

certification examinations offered by the University of Kansas Fire and Rescue Training Institute. This course work includes FIRE 110, Essentials of Fire Fighting; EMS 130; HPER 240, Lifetime Fitness I; or equivalent. HPER 240, Lifetime Fitness I, is the prerequisite/corequisite for FIRE 110, Essentials of Fire Fighting.

Note: Mechanisms have been developed to compensate for the effect of students working 24-hour shifts.

(Major Code 2320; CIP Code 43.0203)

Associate of Arts Degree

```
Students graduating with an Associate of Arts degree or an
Associate of Science degree must complete an approved
cultural diversity course.  Some of these courses are able
to meet both a diversity requirement and a general education
requirement.
```

Prerequisite

```
Prior to admission into any FIRE course, the
student must possess an International Fire Service
Accreditation Congress certification as a firefighter
or be an active member in a fire-related occupation.
```

First Semester

```
ENGL 121  Composition I*.......................................3
          Prerequisite: ENGL 106
          or appropriate placement test score or EAP 113 and
          EAP 117
BUS  140  Principles of Supervision...........................3
MATH 171  College Algebra equivalent or higher*...............3
          Prerequisite: MATH 116 with a grade of "C" or higher
          or MATH 134 with a grade of "C" or higher
          or appropriate score on the math assessment test
          Note: Not available to students with credit in MATH 173
FIRE 162  Fire Tactics and Strategy*..........................3
          Prerequisite:  FIRE 110
          Social Science Elective.............................3
          Health and/or Physical Education Elective...........1
          Total Semester Credit Hours........................16
```

Second Semester

```
ENGL 122  Composition II*......................................3
          Prerequisite: ENGL 121
BUS  141  Principles of Management............................3
FIRE 224  Incident Command Systems*...........................3
          Prerequisite:  FIRE 110
          Humanities Elective.................................3
          Physical Science, with lab..........................4
          Total Semester Credit Hours........................16
```

Third Semester

```
FIRE 135  Building and Fire Codes*.............................3
          Prerequisite:  FIRE 110
FIRE 130  Fire Investigation*.................................1
          Prerequisite: FIRE 110
FIRE 222  Fire Science Law*...................................3
          Prerequisite:  FIRE 110
          Technical Electives.................................3
          Oral Communication.................................3
          Science and/or Math Elective.......................3
          Total Semester Credit Hours........................16
```

Fourth Semester

```
FIRE 220   Fire Administration*...............................3
           Prerequisite: FIRE 110
FIRE 250   Fire Service Science Instructional Methodology*......3
           Prerequisite:  FIRE 110
           Technical Electives................................4
           Humanities Electives...............................3
           Social Science Elective............................3
           Total Semester Credit Hours........................16
           TOTAL PROGRAM CREDIT HOURS.........................64
```

Technical Electives

```
FIRE 110   Essentials of Fire Fighting*.........................9
           Prerequisite or corequisite: HPER 240
EMS  128   EMS First Responder.................................5
EMS  130   Emergency Medical Technician*........................9
           Prerequisite: EMS 128 or equivalent, or be an active
           member in a health-related occupation (firefighter,
           rescue, ambulance, law enforcement, industrial first-aid
           personnel or other health-related field), or attained the
           minimum of an associate's degree
EMS  220   MICT I*............................................10
           Prerequisite: Admission to the MICT program
EMS  225   MICT II*...........................................10
           Prerequisite: EMS 220 with a grade of "C" or higher
CS   200   Concepts of Programming Algorithms Using C++*........4
           Prerequisite: CIS 134 or ENGR 171
           or equivalent experience
CS   205   Concepts of Programming Algorithms using JAVA*.......4
           Prerequisite: CIS 134 or ENGR 171
           or equivalent experience
CS   210   Discrete Structures I*..............................3
           Prerequisites: MATH 171 or both MATH 116 and CIS 134
           or appropriate math assessment scores
CIS  162   Database Programming*...............................4
           Prerequisite: CIS 134 or the equivalent
CIS  242   Introduction to System Design and Analysis*.........3
           Prerequisite: CIS 138 or CS 200 or CS 201 or
           CS205
CIS  243   Object-Oriented Analysis and Design*................4
           Prerequisite: One programming course using an
           object-oriented programming language
           or equivalent experience
CIS  258   Operating Systems*..................................3
           Prerequisite: CIS 138 or CIS 162 or
           CS 200 or CS 201 or CS 205
CIS  204   UNIX Operating System*..............................3
           Prerequisites: CS 200 or CS 205 or
           CS 201 and CPCA 139
BUS  120   Management Attitudes and Motivation.................3
BUS  121   Introduction to Business............................3
BUS  145   Small Business Management...........................3
BUS  150   Business Communications*............................3
           Prerequisite: ENGL 121
BUS  225   Human Relations.....................................3
BUS  230   Marketing...........................................3
BUS  243   Human Resource Management...........................3
BUS  261   Business Law I......................................3
POLS 245   Introduction to Public Administration...............3
*Prerequisite/Corequisite required
```

Game Animation & Music Advanced Certificate

The advanced certificate in game animation and music provides tangible evidence that a student has completed all the requirements to be an entry level game programmer but with more depth in the art and music aspects of the industry.

(Major Code 4330; CIP Code 11.0899)
Computing Sciences and Information Technology Department

Career Certificate

Prerequisites for Required Courses

Note: Prior to beginning the program, the student must take
the following prerequisites, or have taken an equivalent
transfer course, or have passed the waiver test, or have
obtained a waiver from the program administrator

```
CPCA 105   Introduction to Personal Computers: Windows..........1
CS   200   Concepts of Programming Algorithms Using C++*........4
           Prerequisite: CIS 134 or ENGR 171
           or equivalent experience
CIS  134   Programming Fundamentals.............................4
MATH 171   College Algebra*.....................................3
           Prerequisite: MATH 116 with a grade of "C" or higher
           or MATH 134 with a grade of "C" or higher
           or appropriate score on the math assessment test
           Note: Not available to students with credit in MATH 173
           or
MATH 173   Precalculus*.........................................5
           Prerequisite: MATH 116 with a grade of "C" or higher
           or appropriate score on the math assessment test
           Note:Not available for credit for students with credit in
           MATH 171 and/or MATH 172
```

Required Courses

```
CDTP 135   Desktop Photo Manipulation I: Photoshop..............1
ANI  120   Conceptual Art for Animation.........................1
           Prerequisite: CDTP 135
ANI  145   Introduction to 3D Animation*........................3
           Prerequisites: CDTP 135 and ANI 120
ANI  245   Character Animation*.................................3
           Prerequisite: ANI 145
GAME 101   Computer Game Creation...............................4
GAME 140   Game Programming I - 2D*.............................4
           Prerequisite: CS 200
GAME 200   Game Design.........................................3
GAME 230   Game Programming II -3D*.............................4
           Prerequisite: GAME 140
MATH 191   Math & Physics for Games I*..........................4
           Prerequisites: MATH 171 or MATH 173 with a grade of "C"
           or higher or appropriate score on math assessment test
           and CS 200
           or
PHYS 191   Math & Physics for Games I*..........................4
           Prerequisite: MATH 171 or MATH 173 with grade of "C" or
           higher or appropriate score on math assessment test
           and CS 200
MUS  156   MIDI Music Composition..............................3
           TOTAL PROGRAM CREDIT HOURS.........................30
*Prerequisite/Corequisite required
```

Game Business Advanced Certificate

This certificate provides tangible evidence that a student has completed all the requirements to be an entry level game programmer or game business person.

(Major Code 4340; CIP Code 11.0899)

Computing Sciences and Information Technology Department

Career Certificate

Prerequisites for Required Courses

Note: Prior to beginning the program, the student must take the following prerequisites, or have taken an equivalent transfer course, or have passed the waiver test (where applicable) or have obtained a waiver from the program administrator.

```
CIS  134   Programming Fundamentals.............................4
MATH 171   College Algebra*.....................................3
           Prerequisite: MATH 116 with a grade of "C" or higher
           or MATH 134 with a grade of "C" or higher
           or appropriate score on the math assessment test
           Note: Not available to students with credit in MATH 173
           or
MATH 173   Precalculus*.........................................5
           Prerequisite: MATH 116 with a grade of "C" or higher
           or appropriate score on the math assessment test
           Note:Not available for credit for students with credit in
           MATH 171 and/or MATH 172
```

Required Courses

```
CS   200   Concepts of Programming Algorithms Using C++*........4
           Prerequisite: CIS 134 or ENGR 171
           or equivalent experience
CIS  242   Introduction to System Design and Analysis*..........3
           Prerequisite: CIS 138 or CS 200 or CS 201 or
           CS205
CIS  262   Project Management*..................................3
           Prerequisite: CIS 242
GAME 101   Computer Game Creation...............................4
GAME 102   The Business of Games................................3
GAME 140   Game Programming I - 2D*.............................4
           Prerequisite: CS 200
GAME 200   Game Design.........................................3
GAME 230   Game Programming II -3D*.............................4
           Prerequisite: GAME 140
MATH 191   Math & Physics for Games I*..........................4
           Prerequisites: MATH 171 or MATH 173 with a grade of "C"
           or higher or appropriate score on math assessment test
           and CS 200
           or
PHYS 191   Math & Physics for Games I*..........................4
           Prerequisite: MATH 171 or MATH 173 with grade of "C" or
           higher or appropriate score on math assessment test
           and CS 200
           TOTAL PROGRAM CREDIT HOURS.........................32
*Prerequisite/Corequisite required
```

Game Development, A.A.S.

The game development associate of applied science degree provides students with the focused knowledge and understanding of game design and development useful in qualifying for entry level industry positions as game programmers, tool builders, collision detection developers, engine builders and interface programmers as well as video and online training developers, Q/A (Question/Answer) Testers, customer supporters and simulations developers. Completion of this degree program will greatly enhance students' ability to create code for 2D/3D graphics and real time virtual environments. Additional skills will include an understanding of game ethics, of the proper presentation of "game bibles" and of math and physics required to model a realistic game world.

Note: Metropolitan Community College students should seek specific counsel from the JCCC program personnel for the appropriate course plan and numbers.

Metropolitan Community College students should refer to Cooperative Program

Information.
(Major Code 2650; CIP Code 11.0899)
Computing Sciences and Information Technology Department

Associate of Applied Science

Note: Prior to beginning the game development program, the student must take the following prerequisites, or have taken an equivalent transfer course, or have passed the waiver test (where applicable), or have obtained a waiver from the program administrator.

Prerequisites for Required Courses

```
CIS  134  Programming Fundamentals.............................4
CDTP 135  Desktop Photo Manipulation I: Photoshop..............1
```

First Semester

```
CS   200  Concepts of Programming Algorithms Using C++*........4
          Prerequisite: CIS 134 or ENGR 171
          or equivalent experience
GAME 101  Computer Game Creation...............................4
GAME 102  The Business of Games................................3
ENGL 121  Composition I*......................................3
          Prerequisite: ENGL 106
          or appropriate placement test score or EAP 113 and
          EAP 117
MATH 171  College Algebra*....................................3
          Prerequisite: MATH 116 with a grade of "C" or higher
          or MATH 134 with a grade of "C" or higher
          or appropriate score on the math assessment test
          Note: Not available to students with credit in MATH 173
          or
          Any Precalculus/Calculus Course*....................3
          Total Semester Credit Hours........................17
```

Second Semester

```
GAME 140  Game Programming I - 2D*............................4
          Prerequisite: CS 200
CIS  235  Object-Oriented Programming Using C++*..............4
          Prerequisite: CS 200 using C++
          or
CS   250  Basic Data Structures using C++*....................4
          Prerequisite:CS 200
          Prerequisite or corequisite: CS 210
          for students transferring to most four-year
          computer science programs
ANI  120  Conceptual Art for Animation........................1
          Prerequisite: CDTP 135
GAME 200  Game Design.........................................3
MATH 191  Math & Physics for Games I*.........................4
          Prerequisites: MATH 171 or MATH 173 with a grade of "C"
          or higher or appropriate score on math assessment test
          and CS 200
          or
PHYS 191  Math & Physics for Games I*.........................4
          Prerequisite: MATH 171 or MATH 173 with grade of "C" or
          higher or appropriate score on math assessment test
          and CS 200
          Total Semester Credit Hours........................16
```

Third Semester

```
ENGL 150  Digital Narratives*.................................3
          Prerequisite: ENGL 121
```

```
             Game Elective.......................................3-4
GAME  230    Game Programming II -3D*............................4
             Prerequisite: GAME 140
ANI   145    Introduction to 3D Animation*......................3
             Prerequisites: CDTP 135 and ANI 120
GAME  180    Artificial Intelligence for Games*.................3
             Prerequisite: CS 200
             Health and/or Physical Education Elective...........1
             Total Semester Credit Hours......................17-18
```

Fourth Semester

```
GAME  250    Game Programming III-Capstone*.....................4
             Prerequisites: GAME 200 and GAME 230 and
             CIM 145 and ENGL 150 and
             Prerequisite or corequisite: GAME 180
GAME  110    Flash Gaming.......................................4
             or
GAME  255    Mobile Game Programming*...........................4
             Prerequisites: GAME 140 and GAME 200
HUM   155    Classical Mythology................................3
             Social Science and/or Economics Elective............3
ENGL  140    Writing for Interactive Media*.....................3
             Prerequisite: ENGL 121
             Total Semester Credit Hours.........................17
             TOTAL PROGRAM CREDIT HOURS.......................67-68
```

Game Electives

```
CIM   140    Interactive Media Assets*..........................4
             Prerequisites: CDTP 135 and CDTP 145 and CWEB 105
             and CWEB 130
             Prerequisite or corequisite: CIM 130
ANI   245    Character Animation*...............................3
             Prerequisite: ANI 145
CIS   243    Object-Oriented Analysis and Design*...............4
             Prerequisite: One programming course using an
             object-oriented programming language
             or equivalent experience
CIS   262    Project Management*................................3
             Prerequisite: CIS 242
MUS   156    MIDI Music Composition.............................3
GAME  110    Flash Gaming.......................................4
GAME  255    Mobile Game Programming*...........................4
             Prerequisites: GAME 140 and GAME 200
*Prerequisite/Corequisite required
```

Game Entrepreneurship Advanced Certificate

The advanced certificate in game entrepreneurship provides tangible evidence that a student has completed all the requirements to be an entry level game programmer with additional skills necessary to start a game company.

(Major Code 4140; CIP Code 11.0899)

Computing Sciences and Information Technology Department

Career Certificate

Prerequisites for Required Courses

```
Note: Prior to beginning the program, the student must take
the following prerequisites, or have taken an equivalent
transfer course, or have passed the waiver test (where
applicable), or have obtained a waiver from the program
administrator:
```

```
CIS  134   Programming Fundamentals.............................4
CS   200   Concepts of Programming Algorithms Using C++*........4
           Prerequisite: CIS 134 or ENGR 171
           or equivalent experience
MATH 171   College Algebra*.....................................3
           Prerequisite: MATH 116 with a grade of "C" or higher
           or MATH 134 with a grade of "C" or higher
           or appropriate score on the math assessment test
           Note: Not available to students with credit in MATH 173
           or
MATH 173   Precalculus*.........................................5
           Prerequisite: MATH 116 with a grade of "C" or higher
           or appropriate score on the math assessment test
           Note:Not available for credit for students with credit in
           MATH 171 and/or MATH 172
```

Required Courses

```
BUS  230   Marketing............................................3
ENTR 120   Introduction to Entrepreneurship.....................2
ENTR 180   Opportunity Analysis.................................2
ENTR 142   Fast Trac Business Plan..............................3
ENTR 220   Entrepreneurial Marketing*...........................2
           Prerequisite: BUS 230
GAME 101   Computer Game Creation...............................4
GAME 140   Game Programming I - 2D*.............................4
           Prerequisite: CS 200
GAME 200   Game Design..........................................3
GAME 230   Game Programming II -3D*.............................4
           Prerequisite: GAME 140
MATH 191   Math & Physics for Games I*..........................4
           Prerequisites: MATH 171 or MATH 173 with a grade of "C"
           or higher or appropriate score on math assessment test
           and CS 200
           or
PHYS 191   Math & Physics for Games I*..........................4
           Prerequisite: MATH 171 or MATH 173 with grade of "C" or
           higher or appropriate score on math assessment test
           and CS 200
           TOTAL PROGRAM CREDIT HOURS..........................31
*Prerequisite/Corequisite required
```

Game Narrative Advanced Certificate

The advanced certificate in game narrative will provide students with more depth in game narrative as well as tangible evidence that a student is skilled in basic programming for games.

(Major Code 4130; CIP Code 11.0899)

Computing Sciences and Information Technology Department

Career Certificate

Prerequisites for Required Courses

```
Note: Prior to beginning the program, the student must take
the following prerequisites, or have taken an equivalent
course, or have passed the waiver test (where applicable),
or have obtained a waiver from the program administrator:

ENGL 121   Composition I*.......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
CIS  134   Programming Fundamentals.............................4
MATH 171   College Algebra*.....................................3
           Prerequisite: MATH 116 with a grade of "C" or higher
```

```
            or MATH 134 with a grade of "C" or higher
            or appropriate score on the math assessment test
            Note: Not available to students with credit in MATH 173
            or
MATH 173   Precalculus*.......................................5
            Prerequisite: MATH 116 with a grade of "C" or higher
            or appropriate score on the math assessment test
            Note:Not available for credit for students with credit in
            MATH 171 and/or MATH 172
```

Required Courses

```
CS   200   Concepts of Programming Algorithms Using C++*........4
            Prerequisite: CIS 134 or ENGR 171
            or equivalent experience
ENGL 150   Digital Narratives*.................................3
            Prerequisite: ENGL 121
ENGL 140   Writing for Interactive Media*......................3
            Prerequisite: ENGL 121
GAME 101   Computer Game Creation..............................4
GAME 140   Game Programming I - 2D*............................4
            Prerequisite: CS 200
GAME 200   Game Design.........................................3
GAME 230   Game Programming II -3D*............................4
            Prerequisite: GAME 140
HUM  155   Classical Mythology.................................3
MATH 191   Math & Physics for Games I*.........................4
            Prerequisites: MATH 171 or MATH 173 with a grade of "C"
            or higher or appropriate score on math assessment test
            and CS 200
            or
PHYS 191   Math & Physics for Games I*.........................4
            Prerequisite: MATH 171 or MATH 173 with grade of "C" or
            higher or appropriate score on math assessment test
            and CS 200
            TOTAL PROGRAM CREDIT HOURS.........................32
*Prerequisite/Corequisite required
```

Game Programming Advanced Certificate

The advanced certificate in game programming provides tangible evidence that a student has completed all the requirements to be an entry level game programmer with additional skills in the art of game programming.

Note: Metropolitan Community College students should seek specific counsel from the JCCC program personnel for the appropriate course plan and numbers.

Metropolitan Community College students should refer to Cooperative Program Information.

(Major Code 4120; CIP Code 11.0899)

Computing Sciences and Information Technology Department

Career Certificate

Prerequisites for Required Courses

```
Note: Prior to beginning the program, the student must take
the following prerequisites, or have taken an equivalent
transfer course, or have passed the waiver test (where
applicable), or have obtained a waiver from the
program administrator:

CS   200   Concepts of Programming Algorithms Using C++*........4
            Prerequisite: CIS 134 or ENGR 171
            or equivalent experience
CIS  134   Programming Fundamentals............................4
MATH 171   College Algebra*....................................3
```

```
            Prerequisite: MATH 116 with a grade of "C" or higher
            or MATH 134 with a grade of "C" or higher
            or appropriate score on the math assessment test
            Note: Not available to students with credit in MATH 173
            or
MATH 173    Precalculus*.......................................5
            Prerequisite: MATH 116 with a grade of "C" or higher
            or appropriate score on the math assessment test
            Note:Not available for credit for students with credit in
            MATH 171 and/or MATH 172
```

Required Courses

```
GAME 101    Computer Game Creation.............................4
GAME 110    Flash Gaming.......................................4
GAME 140    Game Programming I - 2D*...........................4
            Prerequisite: CS 200
GAME 255    Mobile Game Programming*...........................4
            Prerequisites: GAME 140 and GAME 200
GAME 180    Artificial Intelligence for Games*.................3
            Prerequisite: CS 200
GAME 200    Game Design........................................3
GAME 230    Game Programming II -3D*...........................4
            Prerequisite: GAME 140
MATH 191    Math & Physics for Games I*........................4
            Prerequisites: MATH 171 or MATH 173 with a grade of "C"
            or higher or appropriate score on math assessment test
            and CS 200
            or
PHYS 191    Math & Physics for Games I*........................4
            Prerequisite: MATH 171 or MATH 173 with grade of "C" or
            higher or appropriate score on math assessment test
            and CS 200
            TOTAL PROGRAM CREDIT HOURS.........................30
*Prerequisite/Corequisite required
```

Geographic Info Systems Cert

The Geographic Information Systems Certificate program is granted by Metropolitan Community College, but coordinated at JCCC.

This is a professional certificate that gives the GIS user the tools needed to attract a good job in the exciting field of GIS or to advance in their chosen field. It also prepares students to complete their AA degree or transfer to a four year institution. GIS professionals are found in the fields of city, county and state business, economics, natural resources, conservation, pollution, industry, science, infrastructure planners, public works, transportation, architects, education, healthcare, travel, space industry.

The JCCC geographic information systems program is offered to Johnson County residents in cooperation with Metropolitan Community Colleges of Kansas City. Related courses are taken at JCCC. You must be accepted as a student to JCCC and accepted into the program by MCC. Students must be residents of Johnson County in order to receive in-state tuition rates. Consult with a JCCC counselor for more information.

Program courses and credit hours are subject to change because of requirement changes at the degree-granting institution. Contact www.mcckc.edu. Required GIS classes are taught at MCC-Longview and MCC-Maple Woods Community Colleges as early evening courses.

Note: Johnson County Community College students should seek specific counsel from the MCC program personnel for the appropriate course plan and numbers.

Johnson County Community College students should refer to Cooperative Program Information.

Career Certificate

```
Certificate granted by Metropolitan Community College
```

Specific Program Requirements-must be taken MCC

```
KEOG 120   Introduction to Geographic Information Systems.......3
KEOG 220   Geographic Information Systems Database & Design*....3
           Prerequisite: KEOG 120
KEOG 224   Applications in Geographic Information Systems*......3
           Prerequistes: KEOG 120 and KEOG 220
KEOG 228   Administrative Issues in Geographic Info Systems*....3
           Prerequisite: KEOG 120
KEOG 230   Geographic Information Systems Internship*.........1-3
           Prerequisites: KEOG 120 and KEOG 220
```

Note: A student currently employed in a GIS Facility may
take the 1-hour option. All others must complete the 3-hour
internship.

Specific Program Requirements-must be taken at JCCC

```
ENGL 121   Composition I*......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
CIS  162   Database Programming*...............................4
           Prerequisite: CIS 134 or the equivalent
           or
CIS  260   Database Management*................................4
           Prerequisite: CS 250 or CS 255 or CIS 235 or
           CIS 238 or CIS 248
GEOS 145   World Regional Geography............................3
GEOS 130   General Geology.....................................5
           or
GEOS 140   Physical Geography..................................3
           and
GEOS 141   Physical Geography Lab*.............................2
           Prerequisite or Corequisite: GEOS 140 or the equivalent
```

Select two courses from the following list:

```
ADMJ 121   Introduction to Administration of Justice...........3
BIOL 122   Principles of Biology...............................3
           and
BIOL 123   Principles of Biology Lab*..........................1
           Prerequisite or corequisite: BIOL 122 or
           consent of the assistant dean
BIOL 125   General Botany......................................5
BIOL 127   General Zoology.....................................5
BIOL 130   Environmental Science...............................3
           and
BIOL 131   Environmental Science Lab*..........................1
           Prerequisite or corequisite: BIOL 130
BUS  230   Marketing...........................................3
DRAF 120   Introduction to Drafting............................2
           and
DRAF 130   Introduction to CAD Concepts - AutoCAD: 2008*.......3
           Prerequisite: DRAF 120
           or approval of the program assistant dean
Note: DRAF 120 and DRAF 130 must both be taken and
count for only ONE course.

ECON 230   Economics I.........................................3
ECON 231   Economics II........................................3
CIS  162   Database Programming*...............................4
           Prerequisite: CIS 134 or the equivalent
           or
CIS  260   Database Management*................................4
           Prerequisite: CS 250 or CS 255 or CIS 235 or
           CIS 238 or CIS 248
GEOS 140   Physical Geography..................................3
           and
```

```
GEOS 141    Physical Geography Lab*...............................2
            Prerequisite or Corequisite: GEOS 140 or the equivalent
GEOS 130    General Geology.......................................5
            TOTAL PROGRAM CREDIT HOURS......................34-40
*Prerequisite/Corequisite required
```

Graphic Design, A.A.S.

The graphic design field is highly competitive for both salaried and freelance positions. There is a demand for artists with above-average talents and graphic art skills. Opportunities in the field range from entry-level layout and production to art director positions.

Demonstrated abilities are most often the key to obtaining a position in the graphic design field. JCCC has structured its graphic design program to help the student develop a comprehensive portfolio. The student's work will be critiqued by a team of professionals every semester. These professionals working in the field, along with the faculty, will help develop the student's skills in creative problem solving and in the use of materials, processes, tools and equipment. Outstanding studio and computer facilities are available for working on class projects. The two-year curriculum consisting of 71 credit hours leads to an associate of applied science degree.

NOTE: In addition to ART 124 Design 2D (3 cr. hrs.) and GDES 120 Introduction to Graphic Design (3 cr. hrs.) students who wish to complete the Qualifier Semester prior to fall 2008 will be required to complete the three CDTP courses: CDTP 145 Desktop Illustration I: Illustrator (1 cr. hr.); CDTP 135 Desktop Photo Manipulation I: Photoshop (1 cr. hr.); CDTP 140 Desktop Publishing I: InDesign (1 cr. hr.)

Some GDES courses are typically offered in the fall semester only, and some courses are typically offered in the spring semester only. This information can be found under the relevant course descriptions.

(Major Code 2290; CIP Code 50.0409)

Graphic Design

Associate of Applied Science Degree

```
NOTE: Students who wish to complete the Qualifier
Semester prior to fall 2008 will be required to complete
the three CDTP courses listed below.
```

IMPORTANT:

```
Please enroll in the CDTP sections identified in the credit
class search as a Graphic Design Qualifier section.  The
content of these CDTP sections places emphasis on the
Graphic Design career specific application of the Adobe
Creative Suite to industry standards for print production
and is reserved for students enrolling in the Qualifier
semester courses.

It is recommended that you enroll in these five-week CDTP
classes in sequence in the Qualifier semester.
```

Qualifier Semester

```
ART  124   Design 2D..........................................3
GDES 120   Introduction to Graphic Design.....................3
CDTP 135   Desktop Photo Manipulation I: Photoshop..............1
CDTP 140   Desktop Publishing I: InDesign......................1
CDTP 145   Desktop Illustration I: Illustrator.................1
           Total Semester Credit Hours........................9
```

Fall Semester

```
ART  129    Design Color...........................................3

GDES 130    Drawing and Media Methods 1*.........................3
            Prerequisites: ART 124 and GDES 120
GDES 132    Typography*...........................................3
            Prerequisites: ART 124 and GDES 120
PHOT 121    Fundamentals of Photography.........................3
ENGL 121    Composition I*........................................3
            Prerequisite: ENGL 106
            or appropriate placement test score or EAP 113 and
            EAP 117
            Total Semester Credit Hours.........................15
```

Spring Semester

```
ART  127    Design 3D*............................................3
            Prerequisite: ART 124
GDES 131    Drawing and Media Methods 2*.........................3
            Prerequisite: GDES 130
GDES 134    Layout Design*........................................3
            Prerequisite: GDES 132
GDES 140    Technical Processes*..................................3
            Prerequisite: PHOT 121
            Humanities Electives..................................3
            Total Semester Credit Hours.........................15
```

Fall Semester

```
GDES 230    Drawing and Media Methods 3*.........................3
            Prerequisites: GDES 131 and
            GDES 132 and GDES 134
GDES 231    Advanced Typography*..................................3
            Prerequisite: GDES 134
GDES 235    Production Methods*...................................3
            Prerequisites: GDES 134 and GDES 140
            Social Science and/or Economics Elective............3
            Humanities Electives..................................3
            Health and/or Physical Education Elective...........1
            Total Semester Credit Hours.........................16
```

Spring Semester

```
GDES 236    Electronic Production*................................3
            Prerequisites: GDES 230 and GDES 231
            and GDES 235
GDES 244    Communication Systems*................................3
            Prerequisites: GDES 230
            GDES 231 and GDES 235
GDES 245    Advanced Design Practice*.............................3
            Prerequisites: GDES 230 and
            GDES 231 and GDES 235
GDES 272    Professional Preparation*.............................3
            Prerequisites: GDES 230 and GDES 231 and GDES 235
            Prerequisite: The student must have completed all
            required studio courses in the graphic design program
            prior to the semester for which he or she is enrolling in
            this course or be co-enrolled in all fourth-semester
            studio courses.
            Science and/or Math Elective*........................3
            Technical/Studio Elective............................1
            Total Semester Credit Hours.........................16
            TOTAL PROGRAM CREDIT HOURS.........................71
```

Technical/Studio Electives

```
CDTP 131    Desktop Publishing I: QuarkXpress*...................1
CDTP 151    Desktop Publishing II: QuarkXpress*..................1
            Prerequisite: CDTP 131
```

```
CDTP 171   Desktop Publishing III: QuarkXpress*.................1
           Prerequisite: CDTP 151
CDTP 160   Desktop Publishing II: InDesign*....................1
           Prerequisite: CDTP 140
CDTP 165   Desktop Illustration II: Illustrator*...............1
           Prerequisite: CDTP 145
CDTP 185   Desktop Illustration III: Illustrator*..............1
           Prerequisite: CDTP 165
CDTP 155   Desktop Photo Manipulation II: Photoshop*...........1
           Prerequisite: CDTP 135
CDTP 175   Desktop Photo Manipulation III: Photoshop*..........1
           Prerequisite: CDTP 155
CWEB 105   Introduction to Web Pages: Dreamweaver*.............1
           Prerequisite: CWEB 101
CWEB 115   Intermediate Web Pages: Dreamweaver*................1
           Prerequisite: CWEB 105
CWEB 130   Introduction to Flash*..............................1
           Prerequisite: CPCA 161 or CWEB 105 or CWEB 106
CIM  135   Digital Imaging and Video*+.........................3
           Prerequisite: CDTP 135
           Recommended: PHOT 121
PHOT 122   Advanced Photography*+..............................3
           Prerequisite: PHOT 121
PHOT 123   Studio Photography*+................................3
           Prerequisite: PHOT 121
ART  135   Painting I..........................................3
ART  136   Painting II*........................................3
           Prerequisite: ART 135
ART  172   Watercolor Painting.................................3
ART  231   Life Drawing I*.....................................3
           Prerequisite: ART 130
ART  232   Life Drawing II*....................................3
           Prerequisite: ART 231
GDES 275   Graphic Design Internship*^.........................1
           Prerequisite: Graphic design faculty review committee
           approval
*Prerequisite/Corequisite required


Note: ^A graphic design major may apply to this
internship course if the student is also enrolled in or has
completed all fourth-semester studio courses.


Note: +Could be taken in the second year--anytime after
completion of PHOT 121.
```

Health Information Tech, A.A.S

The Health Information Technology, AAS degree program is granted by Metropolitan Community College, but coordinated at JCCC.

A health information technician has the technical skills needed to maintain the components of health information systems consistent with the medical, administrative, ethical, legal accreditation and regulatory requirements of the health care delivery system. Area hospitals and a variety of other health facilities in the community offer field experience in all procedures performed by the health information technician. When the 70-72 credit-hour program has been completed and the associate of applied science degree obtained, you will be eligible to take the accreditation examination of the American Association of Health Information Management.

Health information technology is a cooperative program between JCCC and MCC-Penn Valley Community College for Johnson County residents. You must be accepted as a student at JCCC and accepted into the program by MCC-Penn Valley. Consult with a JCCC counselor for more information.

Program courses and credit hours are subject to change because of requirement changes at the degree-granting institution. Contact MCC-Penn Valley Community College at 816-759-4231 for an application packet, which includes deadlines, program prerequisites and admission requirements.

Note: Johnson County Community College students should seek specific counsel from the MCC program personnel for the appropriate course plan and numbers. Johnson County Community College students should refer to Cooperative Program Information.

Associate of Applied Science Degree

Degree granted by Metropolitan Community College

General Education Requirements-must be taken at JCCC

```
BIOL 144   Human Anatomy and Physiology.........................5
BIOL 227   Human Pathophysiology*...............................4
           Prerequisite: BIOL 144 or BIOL 225
ENGL 121   Composition I*.......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
SPD  121   Public Speaking......................................3
           Elective (Intro to Psych strongly recommended).......3
```

American Institutions

```
HIST 140   U.S. History to 1877.................................3
           or
HIST 141   U.S. History Since 1877..............................3
           or
POLS 122   Political Science....................................3
           or
POLS 124   American National Government.........................3
           or
POLS 126   State and Local Government...........................3
```

Specific Program Requirements-must be taken at JCCC

```
CIS  124   Introduction to Computer Concepts and Applications...3
CPCA 110   Spreadsheets I: MS Excel*............................1
           Prerequisite: CPCA 105 or CPCA 106 or CIS 124
           or CPCA 128 or an appropriate score on a waiver test
CPCA 114   Databases I: MS Access*..............................1
           Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124
           or an appropriate score on a waiver test
CPCA 141   Internet I*..........................................1
           Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or
           CIS 124 or an appropriate score on an assessment test
```

Specific Program Requirements-taken at MCC-Penn Valley

```
KSS  153   The Missouri Constitution............................1
KMRT 101   Introduction to the Health Information Technology ...2
KMRT 102   Health Records Systems, Analysis and Control.......3.5
KMRT 103   Medical Terminology for Health Records...............3
KMRT 106   Health Care Statistics*..............................3
           Prerequisite:  KMRT 102
KMRT 108   Legal Aspects of the Health Information Technology*...2
           Prerequisite: KMRT 102
KMRT 109   Directed Practice I*...............................2.5
           Prerequisites:  BIOL 144 and KMRT 102
KMRT 110   Pharmacology*......................................1.5
           Prerequisites:  BIOL 144 and KMRT 103
KMRT 200   Introduction to Classification Systems...............1
KMRT 201   Quality Management*..................................3
           Prerequisite:  KMRT 108
KMRT 202   Class. Systms/Nomenclatures/Indexes & Registers I*...4
           Prerequisite:  KMRT 200
KMRT 203   Directed Practice II*................................2
           Prerequisites:  BIOL 144 and KMRT 202 and KMRT 210
```

```
                or BIOL 144 and concurrent enrollment in KMRT 202 and
                KMRT 210
KMRT 206    Specialized Health Records Systems...................2
KMRT 207    Class. System/Nomenclature/Index & Register II*......3
                Prerequisites:  BIOL 144 and KMRT 202
KMRT 208    Directed Practice III*..............................2
                Prerequisite:  KMRT 203
KMRT 210    Classif Systems & Nomenclatures/Ambulatory Care*.....3
                Prerequisites:  KMRT 200 and BIOL 108/PVCC
                or concurrent enrollment in BIOL 108/PVCC
KMRT 211    Organization & Administration Health Information*....3
                Prerequisites: KMRT 201, KMRT 202, and KMRT 203
KMRT 212    Intro to Medical Insurance & Office Procedures*....1.5
                Prerequisites: KMRT 103, KMRT 202, KMRT 210 AND BIOL 144
                TOTAL PROGRAM CREDIT HOURS.........................70
*Prerequisite/Corequisite required
```

Certified Medication Aide Certificate

This 80-hour course covers information related to many commonly prescribed medications. Students learn the classification, side effects and techniques of administration, including preparations and accurate distribution of medications. Safety of clients in long-term care will be discussed and demonstrated by students. Clinical practice sessions will be conducted in a long-term care facility.

A pre-requisite to admission is successful completion of a reading level exam/assessment. Copies of the following will be required on the first day of class: social security card, current Kansas CNA card, current CPR for Health Care Provider card and documentation of a current negative TB test. The Kansas CMA examination is administered to successful completers of this course.

The employment outlook for the future is excellent. Facilities employing the CMA include long-term care nursing centers as well as other types of group homes and agencies.

For more information, go to http://www.jccc.net/home/depts/5104/site/newstudent/types/adm_avs/CMA_Information-Requirements

(Major Code 3560; CIP Code 51.2603)

Health Occupations

Certificate of Completion

Required Course

```
AVHO 104    Certified Medication Aide (CMA)*.....................4
                Prerequisites: Appropriate Compass reading test score,
                and proof of Kansas CNA certification
                or having completed the state CNA examination and
                awaiting results. If CNA examination results are not
                satisfactory, the student must withdraw from the CMA
                course.
                Documentation of current TB skin test - negative results
                within the last year.
                Current CPR for Health Care Providers and Social Security
                card.
                TOTAL PROGRAM CREDIT HOURS..........................4
*Prerequisite/Corequisite required
```

Certified Medication Aide Update Certificate

Certified medication aides in Kansas are required to obtain continuing education every two years to renew the CMA certificate. This course meets the state requirements for recertification. The update course includes review of commonly used drugs and their interactions with foods and other drugs.

Students will discuss and identify legal implications and regulations related to

administration and record keeping. Biological effects of medications on the elderly and basic safety principles are reviewed and discussed with other CMAU course participants. This course is available in the classroom and online. A roster of CMAs who complete the update course will be submitted to the Department of Health and Environment for certificate renewal.

Copies of the following are required on the first day of class: social security card, CNA card, and CMA card. Students also must provide a check or money order payable to KDHE for $20.00.

For more information, go to http://www.jccc.net/home/depts/5104/site/newstudent/types/adm_avs/CMA_Update_Info-Requirements

(Major Code 3600; CIP Code 51.2603)

Health Occupations

Certificate of Completion

Required Course

```
AVHO 108   Certified Medication Aide Update (CMA)*..............1
           Prerequisites:  Proof of Kansas CMA certification and
           Proof of Kansas CNA Certification
           TOTAL PROGRAM CREDIT HOURS...........................1
*Prerequisite/Corequisite required
```

Certified Nurse Aide Certificate

This 96-hour course provides classroom and clinical instruction for basic care of clients in long-term and acute-care facilities. Students will learn skills for daily hygiene, bedside care, vital-sign measurement, positioning and safe transfer of clients. You will learn about common health problems and chronic illnesses. Clinical practice sessions are conducted in the nursing home setting. This course is offered in a classroom setting as well as non-traditional online.

Enrollees for this course must pass a reading level exam/assessment prior to admission. Copies of the following will be required on the first day of class: social security card, current CPR for Health Care Providers card and documentation of a current negative TB test.

Attendance is critical and should be given top priority. Failure to meet the criteria outlined in the syllabus will necessitate withdrawal from a class. Upon successful completion of the course, students will be scheduled to take the Kansas CNA examination. Sufficient notice of the exam date is given to allow students to make arrangements to be in attendance on the appointed day.

Employment for workers with CNA skills and training is abundant in long-term care facilities. Acute-care hospitals also employ basic patient care aides who are willing to learn advanced skills.

For more information, go to http://www.jccc.net/home/depts/5104/site/newstudent/types/adm_avs/CNA_Information-Requirements

(Major Code 3530; CIP Code 51.1614)

Health Occupations

Certificate of Completion

Required Course

```
AVHO 102   Certified Nurse Aide (CNA)*.........................5
           Prerequisite: ENGL 121 with a grade of "C" or higher or
           Appropriate Compass reading test score.
           Documentation
           of current
           TB test and current CPR for Health Care Providers and a
           Social Security Card.
           TOTAL PROGRAM CREDIT HOURS...........................5
```

Certified Nurse Aide Refresher Certificate

The CNA in Kansas is required to work at least eight hours every two years for the CNA certificate to remain active. If the CNA does not work for two years, a 21-hour refresher course must be completed. This course meets the state requirement to activate the CNA certificate.

This course includes 12 hours of classroom instruction and 9 hours of laboratory experience. Students will discuss the nurse aide's responsibility in the current health care system and the importance of resident's rights. The student will demonstrate safety measures, infection control procedures, personal care skills, measurement of vital signs and transfers, positioning and turning.

Students enrolled in the refresher course must show proof of certification as a Kansas CNA by bringing a copy of their card on the first day of class.

For more information, go to http://www.jccc.net/home/depts/5104/site/newstudent/types/adm_avs/CNA_Refresher_Info-Requirement

(Major Code 3540; CIP Code 51.1614)

Health Occupations

Certificate of Completion

Required Course

```
AVHO 103  Certified Nurse Aide Refresher Course (CNA)*.........1
          Prerequisite: Kansas CNA Certification
          TOTAL PROGRAM CREDIT HOURS...........................1
*Prerequisite/Corequisite required
```

Dental Assisting, A.A.S.

The Dental Assisting, AAS degree program is granted by Metropolitan Community College, but coordinated at JCCC.

This program, which leads to either an associate in applied science degree or a certificate of proficiency, prepares the student to enter the workforce as a trained dental auxiliary. Graduates of this program are eligible to take the national certifying examination given by the Dental Assisting National Board.

Admission to the Dental Assisting Program - Because enrollment in the program is limited, a student must meet the requirements and apply for admission.

JCCC offers the cooperative dental assisting degree for Johnson County residents with MCC-Penn Valley Community College. You must be accepted as a student at JCCC and accepted into the program at MCC-Penn Valley Community College. The student is awarded the degree from MCC-Penn Valley Community College upon successful completion of all requirements. It is the student's responsibility to check with a JCCC counselor before enrollment.

Program courses and credit hours are subject to change because of requirement changes at the degree-granting institution. Contact MCC-Penn Valley Community College at 816-759-4231 for an application packet, which includes deadlines, program prerequisites and admission requirements.

Note: Johnson County Community College students should seek specific counsel from the MCC program personnel for the appropriate course plan and numbers.

Johnson County Community College students should refer to Cooperative Program Information.

Associate of Applied Science

Degree Granted by Metropolitan Community College

General Education Requirements-can be taken at JCCC

```
ENGL 121  Composition I*.......................................3
          Prerequisite: ENGL 106
          or appropriate placement test score or EAP 113 and
          EAP 117
MATH 116  Intermediate Algebra or higher*......................3
          Prerequisite: MATH 115 with a grade of "C" or higher
          or appropriate score on the math assessment test
SPD  121  Public Speaking......................................3
PSYC 130  Introduction to Psychology...........................3
SOC  122  Introduction to Sociology............................3
```

American Institutions

```
HIST 140  U.S. History to 1877.................................3
          or
HIST 141  U.S. History Since 1877..............................3
          or
POLS 122  Political Science....................................3
          or
POLS 124  American National Government.........................3
          or
POLS 126  State and Local Government...........................3
```

Specific Program Requirements

The following courses can be taken at any campus

```
BIOL 144  Human Anatomy and Physiology.........................5
          and
BIOL 145  Human Anatomy and Physiology Dissection*.............1
          Prerequisites: BIOL 144 and
          Assistant Dean's Approval


          or


BIOL 140  Human Anatomy........................................4
          and
BIOL 225  Human Physiology*....................................4
          Prerequisites: CHEM 122 and either BIOL 140 or BIOL 144


BIOL 230  Microbiology*........................................3
          Prerequisite: CHEM 122 or
          one year of high school chemistry
BIOL 231  Microbiology Lab*....................................2
          BIOL 231 students must be currently enrolled in BIOL 230
          or have successfully completed BIOL 230 within the
          last three years.
CHEM 122  Principles of Chemistry..............................5
```

Specific Program Requirements-taken at MCC-Penn Valley

```
KSS  153  The Missouri Constitution............................1
KDA  100  Introduction to Dental Assisting.....................1
KDA  101  Body Structure and Function*.........................2
          Prerequisite: Admission to dental assisting program
KDA  102  Head & Neck Anatomy*.................................2
          Prerequisite: Admission to the dental assisting program
KDA  103  Dental Anatomy.......................................2
KDA  104  Dental Emergencies & Pharmacology....................1
KDA  105  Dental Materials I*..................................2
KDA  108  Oral Microbiology & Infection Control................2
KDA  110  Chairside Assisting I*...............................5
KDA  115  Dental Radiology I*..................................4
          Prerequisite: KDA 102
KDA  125  Clinical Experience I*...............................2
```

```
         Prerequisite: Admission to the Dental Assisting Program
         and completion of CPR for healthcare workers.

KDA  205  Dental Materials II*................................3
          Prerequisite: KDA 105
KDA  210  Chairside Assisting II*............................5
          Prerequisite: KDA 110
KDA  215  Dental Radiology II*..............................2
          Prerequisite: KDA 115
KDA  225  Dental Office Management*.........................2
          Prerequisite: Enrollment in the Dental Assisting Program
KDA  230  Oral Pathology*...................................1
          Prerequisites: KDA 108 and KDA 110
KDA  250  Clinical Experience II*...........................4
          Prerequisite: KDA 125
KDA  260  Dental Assisting Seminar*.........................2
          Prerequisite: KDA 125


Note: For dental assistants who are already working and wish
to obtain additional certification.


KDA  270  Expanded Functions in Restorative Dentistry*.........1
          Prequisite:  Student must meet one of the following:  1)
          Certified dental or orthodontic assistant through the
          Dental Assisting National Board, Inc.  2) Graduate of an
          ADA-accredited dental assisting or dental hygiene program
          3) Completion of KDA 106 Basic Dental Techniques and
          successful completion of Basic Skills Mastery Exam given
          by the Missouri Dental Assistants Association
KDA  271  Expanded Functions in Orthodontics*.................5
          Prerequisite:  Student must meet one of the following:
          1) Certified dental or orthodontic assistant through the
          Dental Assisting National Board, Inc.  2) Graduate of an
          ADA-accredited dental assisting or dental hygiene program
          3) Completion of KDA 106 Basic Dental Techniques and
          successful completion of Basic Skills Mastery Exam given
          by the Missouri Dental Assistants Association
          NOTE: KDA 271 is .50 credit hour
KDA  272  Expanded Functions in Periodontics*.................5
          Prerequisite:  Student must meet one of the following:
          1) Certified dental or orthodontic assistant through the
          Dental Assisting National Board, Inc.  2)  Graduate of an
          ADA-accredited dental assisting or dental hygiene program
          3) Completion of KDA 106 Basic Dental Techniques and
          successful completion of Basic Skills Mastery Exam given
          by the Missorui Dental Assistants Association
          NOTE: KDA 272 is .50 credit hour
KDA  273  Expanded Functions in Prosthetic Dentistry*..........1
          Prequisite:  Student must meet one of the following:
          1) Certified dental or orthodontic assistant through the
          Dental Assisting National Board, Inc.  2) Graduate of an
          ADA-accredited dental assisting or dental hygiene program
          3) Completion of KDA 106 Basic Dental Techniques
          and
          successful completion of Basic Skills Mastery Exam given
          by the Missouri Dental Assistants Association
          TOTAL PROGRAM CREDIT HOURS.......................77-82
  *Prerequisite/Corequisite required
```

Dental Assisting Certificate

The Dental Assisting Certificate program is granted by Metropolitan Community College, but coordinated at JCCC.

One of the most exciting features of a dental assistant career is the variety of work experiences you'll have, including working chair-side with dentists, taking radiographs, mixing dental materials, performing laboratory procedures, taking dental impressions, creating models, and fabricating bleaching trays and mouth

guards. The demand for dental assistants and other professionals that dentists rely on to serve patients has increased dramatically.

The dental assistant program has accreditation from the American Dental Association (ADA), Commission on Dental Accreditation. Graduating from an ADA-accredited dental assisting program allows you to take the Dental Assisting National Board examination without the two years of full-time work experience that would otherwise be required.

JCCC offers the cooperative dental assisting certificate program for Johnson County residents with MCC-Penn Valley Community College. You must be accepted as a student at JCCC and accepted into the program at MCC-Penn Valley Community College. Consult with a JCCC counselor for more information.

Program courses and credit hours are subject to change because of requirement changes at the certificate-granting institution. Contact MCC-Penn Valley Community College at 816-759-4231 for an application packet, which includes deadlines, program prerequisites and admission requirements.

Note: Johnson County Community College students should seek specific counsel from the MCC program personnel for the appropriate course plan and numbers.

Johnson County Community College students should refer to Cooperative Program Information.

Career Certificate

Certificate granted by Metropolitan Community College

Specific Program Requirements-must be taken at JCCC

```
ENGL 121   Composition I*......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
PSYC 130   Introduction to Psychology..........................3
SPD  121   Public Speaking.....................................3
```

Specific Program Requirements taken at MCC-Penn Valley

```
KDA  100   Introduction to Dental Assisting....................1
KDA  101   Body Structure and Function*........................2
           Prerequisite: Admission to dental assisting program
KDA  102   Head & Neck Anatomy*................................2
           Prerequisite: Admission to the dental assisting program
KDA  103   Dental Anatomy......................................2
KDA  104   Dental Emergencies & Pharmacology...................1
KDA  105   Dental Materials I*.................................2
KDA  108   Oral Microbiology & Infection Control...............2
KDA  110   Chairside Assisting I*..............................5
KDA  115   Dental Radiology I*.................................4
           Prerequisite: KDA 102
KDA  125   Clinical Experience I*..............................2
           Prerequisite: Admission to the Dental Assisting Program
           and completion of CPR for healthcare workers.

KDA  205   Dental Materials II*................................3
           Prerequisite: KDA 105
KDA  210   Chairside Assisting II*.............................5
           Prerequisite: KDA 110
KDA  215   Dental Radiology II*................................2
           Prerequisite: KDA 115
KDA  225   Dental Office Management*...........................2
           Prerequisite: Enrollment in the Dental Assisting Program
KDA  230   Oral Pathology*.....................................1
           Prerequisites: KDA 108 and KDA 110
KDA  250   Clinical Experience II*.............................4
           Prerequisite: KDA 125
KDA  260   Dental Assisting Seminar*...........................2
           Prerequisite: KDA 125
```

```
Note: For dental assistants who are already working and wish
to obtain additional certification.

KDA  270  Expanded Functions in Restorative Dentistry*.........1
          Prequisite:  Student must meet one of the following:  1)
          Certified dental or orthodontic assistant through the
          Dental Assisting National Board, Inc.  2) Graduate of an
          ADA-accredited dental assisting or dental hygiene program
          3) Completion of KDA 106 Basic Dental Techniques and
          successful completion of Basic Skills Mastery Exam given
          by the Missouri Dental Assistants Association
KDA  271  Expanded Functions in Orthodontics*.................5
          Prerequisite:  Student must meet one of the following:
          1) Certified dental or orthodontic assistant through the
          Dental Assisting National Board, Inc.  2) Graduate of an
          ADA-accredited dental assisting or dental hygiene program
          3) Completion of KDA 106 Basic Dental Techniques and
          successful completion of Basic Skills Mastery Exam given
          by the Missouri Dental Assistants Association
          NOTE: KDA 271 is .50 credit hour
KDA  272  Expanded Functions in Periodontics*..................5
          Prerequisite:  Student must meet one of the following:
          1) Certified dental or orthodontic assistant through the
          Dental Assisting National Board, Inc.  2)  Graduate of an
          ADA-accredited dental assisting or dental hygiene program
          3) Completion of KDA 106 Basic Dental Techniques and
          successful completion of Basic Skills Mastery Exam given
          by the Missorui Dental Assistants Association
          NOTE: KDA 272 is .50 credit hour
KDA  273  Expanded Functions in Prosthetic Dentistry*..........1
          Prequisite:  Student must meet one of the following:
          1) Certified dental or orthodontic assistant through the
          Dental Assisting National Board, Inc.  2) Graduate of an
          ADA-accredited dental assisting or dental hygiene program
          3) Completion of KDA 106 Basic Dental Techniques
          and
          successful completion of Basic Skills Mastery Exam given
          by the Missouri Dental Assistants Association
          TOTAL PROGRAM CREDIT HOURS.......................51-53
*Prerequisite/Corequisite required
```

Home Health Aide Certificate

Home health care services are in demand, and continued growth in employment opportunities is expected into the next century. Home health aides may be required to provide support services for all age levels in the home setting. This 21-hour course will provide you with information necessary for nutritional meal planning, task modification, emotional support and personal services to clients and families needing health care assistance at home.

Enrollees must complete a reading comprehension exam/assessment prior to admission. Copies of the following will be required on the first day of class: social security card, current Kansas CNA card, current CPR for Health Care Provider card and documentation of a current negative TB test. Those who successfully complete this course will be scheduled to take the Kansas HHA certification examination. Sufficient notice of the exam date is given to allow students to make arrangements to be in attendance on the appointed day.

For more information, go to http://www.jccc.net/home/depts/5104/site/newstudent/types/adm_avs/HHA_Information-Requirements

(Major Code 3580; CIP Code 51.2602)

Health Occupations

Certificate of Completion

Required Course

```
AVHO 106   Home Health Aide*...................................1
           Prerequisites: Proof of Kansas CNA certification
           and appropriate Compass reading test score
           Requirements - copy of current TB test, current CPR for
           Health Care Providers card, social security card
           TOTAL PROGRAM CREDIT HOURS...........................1
*Prerequisite/Corequisite required
```

IV Therapy for LPN's Certificate

This 48-hour course is designed to prepare the student for clients who require intravenous fluid therapy. This course meets the Kansas requirements for nurses seeking certification in IV therapy.

During this course, you will review basic physiology of the circulatory system and learn principles of site selection for veins appropriate to assess for IV therapy. A pharmacology review will include action, interaction, breakdown and allergic responses to medications commonly administered via the intravenous route. Principles of infection control, correct legal documentation and calculation of infusion rates will be taught. Equipment and supplies routinely used to initiate and administer IV therapy will be used in instruction. You will use the laboratory setting to demonstrate the basic skills of initiating intravenous therapy along with clinical sessions in a hospital setting.

At the conclusion of the class, a comprehensive written exam will be administered. Upon successful completion of the exam, the Kansas State Board of Nursing will be notified and the individual's nursing license will be updated to reflect IV certification.

Copies of the following are required at the first class: documentation of current Liability Insurance-standard policy, current CPR for Health Care Provider card and documentation of a current negative TB skin test or negative chest X-ray.

For more information, go to http://www.jccc.net/home/depts/5104/site/newstudent/types/adm_avs/IV_Therapy _Info-Requirements

(Major Code 3640; CIP Code 51.1613)

Health Occupations

Certificate of Completion

Required Course

```
AVHO 115   I V Therapy For LPNs*...............................3
           Prerequisites: Proof of Kansas LPN licensure.
           Present evidence of personal liability insurance at the
           time of application for admission to the program and
           maintain it throughout the clinical practicum.
           Maintenance of current CPR certification for the duration
           of the course.
           Evidence of negative TB test or chest X-ray within the
           past year.
           TOTAL PROGRAM CREDIT HOURS...........................3
*Prerequisite/Corequisite required
```

Occupatnl Therapy Asst, A.A.S.

The Occupational Therapy Assistant, AAS degree program is granted by Metropolitan Community College, but coordinated at JCCC.

The occupational therapy assistant works under the supervision of a registered occupational therapist, helping people with emotional and developmental limitations achieve more functional lives. Graduates are eligible to sit for the national certification examination for the occupational therapy assistant administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of the exam, the individual will be a Certified Occupational Therapy Assistant (COTA). Most states require licensure in order to practice; however, state licenses are usually based on the results of the

NBCOT Certification Examination.

The JCCC occupational therapy assistant program is offered to Johnson County residents in cooperation with MCC-Penn Valley Community College. The support courses are held at JCCC. The clinical courses are held at MCC-Penn Valley or at affiliated clinical agencies. You must be accepted as a student at JCCC and accepted into the program at MCC-Penn Valley. Consult with a JCCC counselor for more information.

Program courses and credit hours are subject to change because of requirement changes at the degree-granting institution. Contact MCC-Penn Valley Community College at 816-759-4231 for an application packet, which includes deadlines, program prerequisites and admission requirements.

Note: Johnson County Community College students should seek specific counsel from the MCC program personnel for the appropriate course plan and numbers.

Johnson County Community College students should refer to Cooperative Program Information.

Health Occupations

Associate of Applied Science Degree

```
Degree granted by Metropolitan Community College
General Education Requirements-must be taken at JCCC
ENGL 121  Composition I*......................................3
          Prerequisite: ENGL 106
          or appropriate placement test score or EAP 113 and
          EAP 117
SPD  121  Public Speaking.....................................3
PSYC 130  Introduction to Psychology..........................3
```

American Institutions

```
HIST 140  U.S. History to 1877................................3
          or
HIST 141  U.S. History Since 1877.............................3
          or
POLS 122  Political Science...................................3
          or
POLS 124  American National Government........................3
          or
POLS 126  State and Local Government..........................3
```

Prerequisite Courses-must be taken at JCCC

```
CHEM 122  Principles of Chemistry.............................5
AAC  130  Medical Terminology.................................3
```

Specific Program Requirements-must be taken at JCCC

Option 1

```
BIOL 144  Human Anatomy and Physiology........................5
          and
BIOL 145  Human Anatomy and Physiology Dissection*............1
          Prerequisites: BIOL 144 and
          Assistant Dean's Approval
Note: BIOL 144 must be taken before BIOL 145


          or
```

Option 2

```
BIOL 140  Human Anatomy.......................................4
          and
BIOL 225  Human Physiology*...................................4
          Prerequisites: CHEM 122 and either BIOL 140 or BIOL 144
Note: BIOL 140 and CHEM 122 must be taken prior to BIOL 225
```

Specific Program Requirements-taken at MCC-Penn Valley

```
KSS  153  The Missouri Constitution..............................1
KOT  112  Basic Emergency Patient Care...........................1
KOT  100  Introduction to Occupational Therapy...................2
KOT  102  Documentation Guidelines*..............................2
          Prerequisite: Formal admission into the occupational
          therapy assistant program
KOT  103  Clinical Conditions*...................................2
          Prerequisite: Formal admission into the occupational
          therapy assistant program
KOT  106  Therapeutic Interventions I*...........................4
          Prerequisite: Formal admission into the occupational
          therapy assistant program
KOT  116  Level I Fieldwork I*...................................1
          Prerequisite: Formal admission into the occupational
          therapy assistant program
KOT  118  Assistive Technology*..................................2
          Prerequisites: BIOL 144 and BIOL 145,  KOT 112, KOT 100
          102, 103, 106 and  116
KOT  120  Pediatrics*............................................3
          Prerequisites: KOT 112, BIOL 144 and BIOL 145 and KOT 100
          KOT 102, KOT 103, KOT 106 and KOT 116
KOT  121  Level I Fieldwork II*.................................5
          Prerequisites:  BIOL 144 and BIOL 145, KOT 112, and KOT
          100, KOT 102, KOT 103, KOT 106 and KOT 116 and
          concurrent enrollment in KOT 120
          NOTE: KOT 121 is .50 credit hour
KOT  130  Analysis of Physical Performance*.....................3
          Prerequisites: KOT 112, BIOL 144 and BIOL 145, KOT 100,
          KOT 102 KOT 103 KOT 106 and KOT 116
KOT  154  Applied Neurology*.....................................2
          Prerequisites: BIOL 144 and BIOL 145, MCC BIOL 210, and
          admission to OTHA or PTHA program.
KOT  201  Mental Health*.......................................2.5
          Prerequisites: KOT 118 and KOT 120 and KOT 121 and
          KOT 130 and
          KOT 154
KOT  202  Physical Dysfunction*.................................3
          Prerequisites: KOT 118 and KOT 120 and KOT 121 and
          KOT 130 and
          KOT 154
KOT  203  Gerontology*..........................................3
          Prerequisites: KOT 118 and KOT 120 and KOT 121 and
          KOT 130 and KOT 154
KOT  208  Therapeutic Interventions II*.........................2
          Prerequisites:
          KOT 118 and KOT 120 and KOT 121
          and KOT 130 and KOT 154
KOT  212  Level I Fieldwork III*................................2
          Prequisites:  KOT 118
          and KOT 120 and KOT 121 and KOT 130 and KOT 154
KOT  217  Fieldwork Seminar*....................................3
          Prerequisites: KOT 118 and KOT 120 and KOT 121 and
          KOT 130 and KOT 154
KOT  222  Level II Fieldwork*..................................12
          Prequisites: KOT 201, KOT 202, KOT 203, KOT 208 and
          KOT 212 and KOT 217
          TOTAL PROGRAM CREDIT HOURS.......................77-79
*Prerequisite/Corequisite required
```

Physical Therapist Asst, A.A.S

The Physical Therapist Assistant, AAS degree program is granted by Metropolitan Community College, but coordinated at JCCC.

The physical therapist assistant, under the supervision of a licensed physical therapist, performs direct patient care. The therapist uses physical agents such as heat, light, sound, water, cold, massage, exercise and rehabilitation techniques as

prescribed by a physician. The Commission on Accreditation in Physical Therapy Education accredits the program.

The JCCC physical therapist assistant program is offered to Johnson County residents in cooperation with MCC-Penn Valley Community College. The support courses are held at JCCC. All the clinical courses are held at MCC-Penn Valley and affiliated clinical agencies. You must be accepted as a student at JCCC and accepted into the program at MCC-Penn Valley. Consult with a JCCC counselor for more information.

Program courses and credit hours are subject to change because of requirement changes at the degree-granting institution. Contact MCC-Penn Valley Community College at 816-759-4231 for an application packet, which includes deadlines, program prerequisites and admission requirements.

Note: Johnson County Community College students should seek specific counsel from the MCC program personnel for the appropriate course plan and numbers.

Johnson County Community College students should refer to Cooperative Program Information.

Associate of Applied Science Degree

Degree granted by Metropolitan Community College

General Education Requirements-must be taken at JCCC

```
ENGL 121  Composition I*.......................................3
          Prerequisite: ENGL 106
          or appropriate placement test score or EAP 113 and
          EAP 117
SPD  121  Public Speaking......................................3
PSYC 130  Introduction to Psychology...........................3
```

American Institutions

```
HIST 140  U.S. History to 1877.................................3
          or
HIST 141  U.S. History Since 1877..............................3
          or
POLS 122  Political Science....................................3
          or
POLS 124  American National Government.........................3
          or
POLS 126  State and Local Government...........................3
```

Prerequisite Courses-must be taken at JCCC

```
CHEM 122  Principles of Chemistry..............................5
AAC  130  Medical Terminology..................................3
```

Specific Program Requirements-must be taken at JCCC

Option 1

```
BIOL 144  Human Anatomy and Physiology.........................5
          and
BIOL 145  Human Anatomy and Physiology Dissection*.............1
          Prerequisites: BIOL 144 and
          Assistant Dean's Approval
Note: BIOL 144 must be taken first


          or
```

Option 2

```
BIOL 140  Human Anatomy.......................................4
          and
BIOL 225  Human Physiology*...................................4
```

```
                    Prerequisites: CHEM 122 and either BIOL 140 or BIOL 144
Note: BIOL 140 and CHEM 122 must be taken before BIOL 225.
```

Specific Program Requirements-taken at MCC-Penn Valley

```
KSS  153  The Missouri Constitution............................1
KPT  151  Introduction to Physical Therapy....................2
Note: KPT 151 is a prerequisite course)


KPT  102  Basic Emergency Patient Care........................1
KPT  152  Physical Therapy Fundamentals I*....................4
          Prerequisite:  Formal acceptance into the program.
KPT  153  Kinesiology*........................................4
          Prerequisites: BIOL 144,  BIOL 145, KPT 152 and KPT 160
KPT  154  Applied Neurology*..................................2
          Prerequisites: BIOL 144 and BIOL 145, MCC BIOL 210 and
          admission to OTHA or PTHA program.
KPT  155  Rehabilitation*.....................................4
          Prerequisite: KPT 162
KPT  158  Therapeutic Exercise*...............................4
          Prerequisite: KPT 162
KPT  159  Orthopedic Pathology*...............................2
          Prerequisites: BIOL 144, BIOL 145,  KPT 152 and KPT 160
KPT  160  Medical Diseases*...................................2
          Prerequisites: Formal acceptance into the program.
KPT  161  Physical Therapy Fundamentals II*...................4
          Prerequisites: BIOL 144, BIOL 145, KPT 152, and KPT 160
KPT  162  Clinical Experience I*..............................2
          Prerequisites: KPT 153, KPT 154, KPT 159, KPT 161,
          and KPT 102
KPT  164  Pediatrics and Gerontology*.........................2
          Prerequisite: KPT 162
KPT  170  Clinical Experience II*.............................2
          Prerequisites: KPT 162 and
          concurrent enrollment in KPT 155, KPT 158, KPT 164
          and KPT 171
KPT  171  Clinical Seminar*...................................2
          Prerequisite: KPT 162
KPT  172  Clinical Experience III*...........................12
          Prerequisites: Completion of all other required courses
          in the KPT program
          TOTAL PROGRAM CREDIT HOURS.......................76-78
*Prerequisite/Corequisite required
```

Radiologic Technology, A.A.S.

The Radiologic Technology, AAS degree program is granted by Metropolitan Community College, but coordinated at JCCC.

The radiologic technology curriculum (X-ray technology) consists of a continuous 24-month period of study. Areas of study are radiographic exposure, positioning and anatomy, and the use of imaging equipment. The program is fully accredited by the Joint Review Committee on Education in Radiologic Technology.

The JCCC radiologic technology program is offered to Johnson County residents in cooperation with MCC-Penn Valley Community College. Related courses are taken at JCCC with lab and clinical courses held at MCC-Penn Valley or at a cooperating health facility. You must be accepted as a student at JCCC and accepted into the program by MCC-Penn Valley. Consult with a JCCC counselor for more information.

Program courses and credit hours are subject to change because of requirement changes at the degree-granting institution. Contact MCC-Penn Valley Community College at 816-759-4231 for an application packet, which includes deadlines, admission requirements and options for meeting academic criteria.

For enrollment information regarding this cooperative program, go to Cooperative Program Information.

Associate of Applied Science Degree

Degree granted by Metropolitan Community College

General Education Requirements-must be taken at JCCC

```
ENGL 121  Composition I*........................................3
          Prerequisite: ENGL 106
          or appropriate placement test score or EAP 113 and
          EAP 117
SPD  121  Public Speaking.......................................3
PSYC 130  Introduction to Psychology............................3
```

American Institutions

```
HIST 140  U.S. History to 1877..................................3
          or
HIST 141  U.S. History Since 1877...............................3
          or
POLS 122  Political Science.....................................3
          or
POLS 124  American National Government..........................3
          or
POLS 126  State and Local Government............................3
```

Specific Program Requirements-must be taken at JCCC

```
BIOL 140  Human Anatomy.........................................4
AAC  130  Medical Terminology...................................3
```

Specific Program Requirements-taken at MCC-Penn Valley

```
KSS  153  The Missouri Constitution.............................1
KRAD 150  Introduction to Radiologic Technology.................2
KRAD 160  Survey of Radiologic Technology.......................6
          Prerequisite: Admission to the radiologic technology
          program
KRAD 162  Image Processing*.....................................2
          Prerequisites: KRAD 160, KRAD 172 and KRAD 173
KRAD 165  Patient Care*.........................................2
          Prerequisite: KRAD 160
KRAD 170  Radiation Biology and Protection*.....................3
          Prerequisite: KRAD 160 with concurrent  enrollment in
          corresponding semester of clinical training
KRAD 171  Radiographic Exposures I*.............................3
          Prerequisite: Admission to the program
KRAD 172  Radiographic Positioning I*...........................3
          Prerequisite: KRAD 160
          and concurrent enrollment in KRAD 165 and KRAD 173
KRAD 173  Clinical Practice I*..................................3
          Prerequisite: KRAD 160
          and concurrent enrollment in KRAD 165 and KRAD 172
KRAD 174  Radiographic Exposures II*............................3
          Prerequisites: KRAD 160, KRAD 171, KRAD 172 and
          KRAD 173
KRAD 175  Clinical Practice II*.................................4
          Prerequisites: KRAD 165, KRAD 172 and KRAD 173
          and concurrent
          enrollment in KRAD 176
KRAD 176  Radiographic Positioning II*..........................3
          Prerequisites: BIOL 140 and KRAD 165, KRAD 172 and
          KRAD 173 and
          concurrent enrollment in KRAD 162 and KRAD 175
KRAD 178  Clinical Practice III*................................4
          Prerequisites: KRAD 175 and KRAD 176
KRAD 278  Imaging Modalities and Pathology*.....................3
          Prerequisites: KRAD 279, KRAD 280, KRAD 281
          and concurrent
```

```
                enrollment in KRAD 282
KRAD 279  Radiographic Positioning III*.......................2
                Prerequisites: KRAD 176 and KRAD 178
                and concurrent enrollment in
                KRAD 280, KRAD 281 and KRAD 285
KRAD 280  Clinical Practice IV*................................4
                Prerequisites: KRAD 162, KRAD 176 and KRAD 178,
                and concurrent
                enrollment in KRAD 279, KRAD 281 and KRAD 285
KRAD 281  Radiation Physics*..................................3
                Prerequisite: PHYS 162 and KRAD 171
KRAD 282  Clinical Practice V*................................4
                Prerequisites: KRAD 279, KRAD 280, KRAD 281 and
                KRAD 285 and
                concurrent enrollment in KRAD 278
KRAD 283  Final Seminar*.....................................2
                Prerequisites: KRAD 174 and KRAD 279 and KRAD 280
KRAD 285  Special Procedures*................................2
                Prerequisites: KRAD 170 and KRAD 171 and KRAD 178,
                and concurrent
                enrollment in KRAD 279 and KRAD 280 and KRAD 281
                TOTAL PROGRAM CREDIT HOURS..........................80
*Prerequisite/Corequisite required
```

Rehabilitative Aide Certificate

The Rehabilitative Aide Certificate program is granted by Metropolitan Community College, but coordinated at JCCC.

The 32-hour rehabilitative aide course includes both classroom and laboratory instruction. The roles of the rehabilitative aide as a member of the health care team and in the aging process are emphasized. Students learn skills required to enhance the ability of elderly residents in long-term care. Skills required for residents with special needs are also learned. Student must have current CNA certification.

For enrollment information regarding this cooperative program, go to Cooperative Program Information.

(Major Code 3620; CIP Code 51.2602)

Health Occupations

Certificate of Completion

Required Course

```
AVHO 112  Rehabilitative Aide*................................2
                Prerequisite: Proof of current Kansas CNA certification
                TOTAL PROGRAM CREDIT HOURS..........................2
*Prerequisite/Corequisite required
```

Surgical Technology Cert

The Surgical Technology Certificate program is granted by Metropolitan Community College, but coordinated at JCCC.

The surgical technology vocational certificate program leads to a certificate of proficiency and prepares students for entry-level jobs as operating room technicians.

JCCC offers the cooperative surgical vocational certificate program for Johnson County residents with MCC-Penn Valley Community College. You must be accepted as a student at JCCC and accepted into the program at MCC-Penn Valley Community College. Consult with a JCCC counselor for more information. Students must be a resident of Johnson County in order to receive in-state tuition rates.

Program courses and credit hours are subject to change at the certificate-granting institution. Contact MCC-Penn Valley Community College at 816-759-4231 for an

application packet, which includes deadlines, program prerequisites, and admission requirements.

Note: Johnson County Community College students should seek specific counsel from the MCC program personnel for the appropriate course plan and numbers.

Johnson County Community College students should refer to Cooperative Program Information.

Career Certificate

Certificate granted by Metropolitan Community College

The following courses should be taken first at JCCC

```
BIOL 144  Human Anatomy and Physiology.........................5
AAC  130  Medical Terminology..................................3
```

Specific Program Requirements-taken at MCC-Penn Valley

```
KST  100  Introduction to Surgical Technology..................2
KST  102  Introduction to Fundamentals I*.....................5
          Prerequisites:  The student must meet the entrance
          requirements and be accepted into the surgical technology
          program.
KST  103  Introduction to Fundamentals II*....................6
KST  105  Pharmacology for the Surgical Technologist*..........2
KST  106  Microbiology for the Surgical Technologist*.........3
KST  109  Surgical Procedures I*..............................8
KST  110  Surgical Procedures II*.............................8
KST  114  Surgical Procedures III*............................8
KST  111  Career Development for the Surgical Technologist*....2
          TOTAL PROGRAM CREDIT HOURS..........................52
*Prerequisite/Corequisite required
```

General Basic HVAC Certificate

This vocational certificate is the recommended first step to employment in the Heating, Ventilation and Air Conditioning field. It is 10 credit hours of basic knowledge in HVAC. This certificate is the first completion point for students in the HVAC field and verifies that the student can demonstrate several basic HVAC skills.

(Major Code 3770; CIP Code 47.0201)

Heating, Ventilation, Air Cond. Technology

Certificate of Completion

Required Courses

```
HVAC 121  Basic Principles of HVAC*...............................4
          Prerequisite or corequisite: HVAC 123
HVAC 123  Electromechanical Systems...............................4
HVAC 150  Refrigerant Management and Certification.............1
HVAC 155  Workplace Skills........................................1
          TOTAL PROGRAM CREDIT HOURS..........................10
*Prerequisite/Corequisite required
```

General Basic HVAC Installation and Duct Fabrication Cert.

This vocational certificate provides the student with the fundamentals necessary to gain employment in the area of installation and duct fabrication in the heating and air conditioning field. It is 20 credit hours of basic knowledge in heating

ventilation air conditioning, industrial safety, and sheet metal. This certificate is the beginning completion point for students in the HVAC field and verifies that the student can demonstrate several basic HVAC skills as they relate to installation and duct fabrication.

(Major Code 3780; CIP Code 47.0201)

Heating, Ventilation, Air Cond. Technology

Career Certificate

Required Courses

```
HVAC 121   Basic Principles of HVAC*.............................4
           Prerequisite or corequisite: HVAC 123
HVAC 123   Electromechanical Systems.............................4
HVAC 150   Refrigerant Management and Certification.............1
HVAC 155   Workplace Skills.....................................1
INDT 125   Industrial Safety....................................3
HVAC 167   Sheet Metal Layout and Fabrication...................3
MATH 133   Technical Mathematics I*.............................4
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
           TOTOAL PROGRAM CREDIT HOURS.........................20
*Prerequisite/Corequisite required
```

General Basic HVAC Maintenance Certificate

This vocational certificate provides the student with the fundamentals necessary to gain employment in the area of maintenance in the heating and air conditioning field. It is 23 credit hours of basic knowledge in heating ventilation air conditioning, industrial safety, electrical wiring and plumbing. This certificate is the beginning completion point for students in the HVAC field and verifies that the student can demonstrate several basic HVAC skills as they relate to building maintenance.

(Major Code 3790; CIP Code 47.0201)

Heating, Ventilation, Air Cond. Technology

Career Certificate

Required Courses

```
HVAC 121   Basic Principles of HVAC*.............................4
           Prerequisite or corequisite: HVAC 123
HVAC 123   Electromechanical Systems.............................4
HVAC 150   Refrigerant Management and Certification.............1
HVAC 155   Workplace Skills.....................................1
INDT 125   Industrial Safety....................................3
HVAC 167   Sheet Metal Layout and Fabrication...................3
HVAC 146   Plumbing Systems Applications........................3
ELTE 125   Residential Wiring Methods*..........................4
           Prerequisite or corequisite: HVAC 123 or ELTE 123
           TOTAL PROGRAM CREDIT HOURS..........................23
*Prerequisite/Corequisite required
```

General Basic HVAC Sales, Design and Estimating Cert.

This vocational certificate is the recommended first step to employment in the area of sales, design and estimating in the heating and air conditioning field. It is 20 credit hours of basic knowledge in HVAC with an emphasis on design and marketing. This certificate is a beginning completion point for students in the HVAC field and verifies that the student can demonstrate several basic HVAC and selling skills.

(Major Code 3800; CIP Code 47.0201)

Heating, Ventilation, Air Cond. Technology

Career Certificate

Required Courses

```
HVAC 121   Basic Principles of HVAC*............................4
           Prerequisite or corequisite: HVAC 123
HVAC 123   Electromechanical Systems...........................4
HVAC 150   Refrigerant Management and Certification.............1
HVAC 155   Workplace Skills....................................1
ENGL 121   Composition I*......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
HVAC 124   Equipment Selection and Duct Design.................4
           Prerequisites: HVAC 121 and HVAC 123
MKT  134   Professional Selling................................3
           TOTAL PROGRAM CREDIT HOURS.........................20
*Prerequisite/Corequisite required
```

HVAC Commercial Service Technician, A.A.S.

Modern residential, commercial, institutional and manufacturing operations depend on carefully monitored temperature conditions and well-trained installation and service technicians. Government researchers say graduates of training programs that emphasize hands-on experience will have a definite advantage when seeking employment in heating, ventilation and air conditioning technology. JCCC provides you the opportunity to work on actual equipment while pursuing a degree or certificate program. The 64-credit-hour associate of applied science degree program focuses on developing an awareness of basic mathematical and scientific principles. The curriculum is concerned with the manner by which these principles affect the control of temperature and the quality of air, design, testing, installation and development of heating and cooling systems.

If you select the commercial maintenance technician degree, you will learn the special emphasis is on energy conservation through computer management. The theory of operation as well as installation, service and repair of rooftop air conditioners, cooling towers, steam boilers and commercial systems air conditioning are part of the curriculum. In addition to the 31 core hours, the following courses are required for the A.A.S. degree, facilities maintenance technician option.

(Major Code 2870; CIP Code 47.0201)

Heating, Ventilation, Air Cond. Technology

Associate of Applied Science Degree

First Semester

```
HVAC 121   Basic Principles of HVAC*............................4
           Prerequisite or corequisite: HVAC 123
HVAC 123   Electromechanical Systems...........................4
HVAC 143   Reading Blueprints and Ladder Diagrams..............2
HVAC 155   Workplace Skills....................................1
INDT 125   Industrial Safety...................................3
ENGL 121   Composition I*......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
EMS  121   CPR I - Basic Life Support for Healthcare Provider...1
           Total Semester Credit Hours........................18
```

Second Semester

```
HVAC 146   Plumbing Systems Applications.......................3
HVAC 150   Refrigerant Management and Certification.............1
```

```
HVAC 167   Sheet Metal Layout and Fabrication...................3
HVAC 221   Commercial Systems: Air Conditioning*...............4
           Prerequisites: HVAC 121 and HVAC 123
HVAC 231   HVAC Rooftop Units*.................................3
           Prerequisites: HVAC 121 and HVAC 123
           Total Semester Credit Hours........................14
```

Third Semester

```
MATH 133   Technical Mathematics I*............................4
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
           Social Science and/or Economic Elective.............3
HVAC 223   Commercial Systems: Heating*........................4
           Prerequisite: HVAC 123
ELTE 122   National Electrical Code I...........................4
CPCA 105   Introduction to Personal Computers: Windows.........1
           Total Semester Credit Hours........................16
```

Fourth Semester

```
HVAC 229   Advanced Control Systems*...........................4
           Prerequisites: HVAC 123 and HVAC 121
ELTE 205   Industrial Electrical Wiring*.......................4
           Prerequisite: ELTE 122 or ELTE 125 or ELTE 200
           Technical Elective.................................2
           Humanities Elective................................3
           General Education Elective.........................3
           Total Semester Credit Hours........................16
           TOTAL PROGRAM CREDIT HOURS.........................64
```

Technical Electives

```
HVAC 125   Energy Alternatives.................................2
HVAC 271   HVAC Internship*....................................3
           Prerequisite: Program facilitator approval
           Required
HVAC 291   Independent Study................................1-7
ELTE 125   Residential Wiring Methods*.........................4
           Prerequisite or corequisite: HVAC 123 or ELTE 123
```

General Education Electives

```
ENGL 123   Technical Writing I*................................3
           Prerequisite: ENGL 121
SPD  120   Interpersonal Communication.........................3
*Prerequisite/Corequisite required
```

HVAC Commercial Service Technician Certificate

The postsecondary certificate program is designed to prepare you for the basic job skills needed to service and maintain heating and air conditioning equipment. Students who elect the facilities maintenance technician certificate option learn the theory of operation and how to service, repair and design rooftop air conditioners, cooling towers, steam boilers and commercial systems air conditioners. This knowledge is reinforced by working on actual equipment in the laboratory. Completion of this program will allow the student to seek employment as a commercial maintenance and service technician in the heating/air conditioning trade.

(Major Code 6250; CIP Code 47.0201)

Heating, Ventilation, Air Cond. Technology

Career Certificate

Required Courses

```
ENGL 121  Composition I*......................................3
          Prerequisite: ENGL 106
          or appropriate placement test score or EAP 113 and
          EAP 117
HVAC 121  Basic Principles of HVAC*...........................4
          Prerequisite or corequisite: HVAC 123
HVAC 123  Electromechanical Systems...........................4
HVAC 143  Reading Blueprints and Ladder Diagrams..............2
HVAC 150  Refrigerant Management and Certification............1
HVAC 167  Sheet Metal Layout and Fabrication..................3
HVAC 221  Commercial Systems: Air Conditioning*...............4
          Prerequisites: HVAC 121 and HVAC 123
HVAC 223  Commercial Systems: Heating*........................4
          Prerequisite: HVAC 123
HVAC 229  Advanced Control Systems*...........................4
          Prerequisites: HVAC 123 and HVAC 121
HVAC 231  HVAC Rooftop Units*.................................3
          Prerequisites: HVAC 121 and HVAC 123
INDT 125  Industrial Safety..................................3
HVAC 155  Workplace Skills...................................1
MATH 115  Elementary Algebra*................................3
          Prerequisite: MATH 111 with a grade of "C" or higher
          or appropriate score on the math assessment test
          TOTAL PROGRAM CREDIT HOURS........................39
*Prerequisite/Corequisite required
```

HVAC Installation Technician Certificate

The heating, ventilation and air conditioning vocational certificate program is a one-year program you can complete in two semesters. The program is designed as a fast track to employment for both new students into the job market and those who have been displaced from their jobs due to changes in the employment market. Upon successful completion of the program, you will be equipped with the entry-level technical skills necessary to enter the job market as an installation technician in the heating/air conditioning trade.

(Major Code 6270; CIP Code 47.0201)

Heating, Ventilation, Air Cond. Technology

Career Certificate

Required Courses

```
HVAC 121  Basic Principles of HVAC*...........................4
          Prerequisite or corequisite: HVAC 123
HVAC 123  Electromechanical Systems...........................4
HVAC 167  Sheet Metal Layout and Fabrication..................3
HVAC 155  Workplace Skills...................................1
INDT 125  Industrial Safety..................................3
HVAC 148  HVAC Installation and Start-up Procedures*.........3
          Prerequisites: HVAC 121 and HVAC 123
HVAC 146  Plumbing Systems Applications......................3
HVAC 143  Reading Blueprints and Ladder Diagrams..............2
HVAC 124  Equipment Selection and Duct Design*...............4
          Prerequisites: HVAC 121 and HVAC 123
HVAC 150  Refrigerant Management and Certification............1
          TOTAL PROGRAM CREDIT HOURS........................28
*Prerequisite/Corequisite required
```

HVAC Residential Service Technician, A.A.S.

Modern residential, commercial, institutional and manufacturing operations depend on carefully monitored temperature conditions and well-trained installation and service technicians. Government researchers say graduates of training

programs that emphasize hands-on experience will have a definite advantage when seeking employment in heating, ventilation and air conditioning technology. JCCC provides you the opportunity to work on actual equipment while pursuing a degree or certificate program. The 64-credit-hour associate of applied science degree program focuses on developing an awareness of basic mathematical and scientific principles. The curriculum is concerned with the manner by which these principles affect the control of temperature and the quality of air, design, testing, installation and development of heating and cooling systems.

If you select the residential degree, you will learn the theory of operation as well as installation, duct design, service and repair of gas and electric furnaces, heat pumps and central air conditioners. In addition to the 31 core hours, the following courses are required for the A.A.S. degree, residential option.

(Major Code 2880; CIP Code 47.0201)

Heating, Ventilation, Air Cond. Technology

Associate of Applied Science Degree

First Semester

```
HVAC 121  Basic Principles of HVAC*............................4
          Prerequisite or corequisite: HVAC 123
HVAC 123  Electromechanical Systems...........................4
HVAC 143  Reading Blueprints and Ladder Diagrams..............2
HVAC 155  Workplace Skills....................................1
INDT 125  Industrial Safety...................................3
ENGL 121  Composition I*......................................3
          Prerequisite: ENGL 106
          or appropriate placement test score or EAP 113 and
          EAP 117
EMS  121  CPR I - Basic Life Support for Healthcare Provider...1
          Total Semester Credit Hours........................18
```

Second Semester

```
HVAC 146  Plumbing Systems Applications.......................3
HVAC 150  Refrigerant Management and Certification............1
HVAC 137  Residential Systems: Air Conditioning*..............4
          Prerequisites: HVAC 121 and HVAC 123
HVAC 124  Equipment Selection and Duct Design*................4
          Prerequisites: HVAC 121 and HVAC 123
HVAC 167  Sheet Metal Layout and Fabrication..................3
          Total Semester Credit Hours........................15
```

Third Semester

```
MATH 133  Technical Mathematics I*............................4
          Prerequisite: MATH 111 with a grade of "C" or higher
          or appropriate score on the math assessment test
          Social Science and/or Economics Elective............3
HVAC 127  Residential Systems: Heating*.......................4
          Prerequisites: HVAC 121 and HVAC 123
HVAC 148  HVAC Installation and Start-up Procedures*..........3
          Prerequisites: HVAC 121 and HVAC 123
          Technical Elective..................................3
          Total Semester Credit Hours........................17
```

Fourth Semester

```
HVAC 235  Residential Heat Pump Systems*......................4
          Prerequisites: HVAC 121 and HVAC 123
          Humanities Elective.................................3
          Technical Electives................................4
          General Education Elective..........................3
          Total Semester Credit Hours........................14
          TOTAL PROGRAM CREDIT HOURS.........................64
```

Technical Electives

```
AUTO 230   Automotive Heating and Air Conditioning*.............3
           Prerequisite or corequisite: AUTO 125 or
           approval of program administrator
ELTE 122   National Electrical Code I...........................4
ELTE 125   Residential Wiring Methods*..........................4
           Prerequisite or corequisite: HVAC 123 or ELTE 123
HVAC 125   Energy Alternatives.................................2
HVAC 221   Commercial Systems: Air Conditioning*...............4
           Prerequisites: HVAC 121 and HVAC 123
HVAC 231   HVAC Rooftop Units*.................................3
           Prerequisites: HVAC 121 and HVAC 123
HVAC 271   HVAC Internship*...................................3
           Prerequisite: Program facilitator approval
           Required
HVAC 291   Independent Study................................1-7
```

General Education Electives

```
ENGL 123   Technical Writing I*................................3
           Prerequisite: ENGL 121
SPD  120   Interpersonal Communication........................3
*Prerequisite/Corequisite required
```

HVAC Residential Service Technician Certificate

The postsecondary certificate program is designed to prepare you for the basic job skills needed to service residential heating and air conditioning equipment. Students who elect the residential service certificate option learn the theory of operation and how to service, repair and design gas furnaces, central air conditioners, heat pumps and rooftop air conditioning systems. This knowledge is reinforced by working on actual equipment in the laboratory. Completion of this program will allow the student to seek employment as a residential maintenance and service technician in the heating/air conditioning trade.

(Major Code 6260; CIP Code 47.0201)

Heating, Ventilation, Air Cond. Technology

Career Certificate

Required Courses

```
ENGL 121   Composition I*.....................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
HVAC 121   Basic Principles of HVAC*..........................4
           Prerequisite or corequisite: HVAC 123
HVAC 123   Electromechanical Systems..........................4
HVAC 124   Equipment Selection and Duct Design*...............4
           Prerequisites: HVAC 121 and HVAC 123
HVAC 150   Refrigerant Management and Certification............1
HVAC 137   Residential Systems: Air Conditioning*.............4
           Prerequisites: HVAC 121 and HVAC 123
HVAC 127   Residential Systems: Heating*......................4
           Prerequisites: HVAC 121 and HVAC 123
HVAC 235   Residential Heat Pump Systems*.....................4
           Prerequisites: HVAC 121 and HVAC 123
HVAC 167   Sheet Metal Layout and Fabrication.................3
HVAC 155   Workplace Skills...................................1
MATH 115   Elementary Algebra*................................3
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
           Technical Electives..............................3-4
           TOTAL  PROGRAM CREDIT HOURS....................38-39
```

Technical Electives

```
HVAC 125   Energy Alternatives...................................2
HVAC 143   Reading Blueprints and Ladder Diagrams...............2
HVAC 221   Commercial Systems: Air Conditioning*................4
           Prerequisites: HVAC 121 and HVAC 123
HVAC 231   HVAC Rooftop Units*..................................3
           Prerequisites: HVAC 121 and HVAC 123
HVAC 271   HVAC Internship*.....................................3
           Prerequisite: Program facilitator approval
           Required
HVAC 291   Independent Study....................................1
CPCA 105   Introduction to Personal Computers: Windows..........1
INDT 125   Industrial Safety...................................3
*Prerequisite/Corequisite required
```

Floral Design Entrepreneurship Certificate

This certificate is designed to prepare students to realize their entrepreneurial dream of opening their own business in the floral design industry. This certificate is designed to provide the student with basic skills in floral design and maintenance and small business development and management.

(Major Code 4240; CIP Code 01.0601)

Science Department

Career Certificate

Prerequisite for Required Courses

```
ACCT 111   Small Business Accounting............................3
           or
ACCT 121   Accounting I........................................3
```

Required Courses

```
HORT 160   Garden Center Operations.............................3
HORT 210   Concepts of Floral Design............................3
HORT 220   Herbaceous Plants....................................3
ENTR 120   Introduction to Entrepreneurship.....................2
ENTR 180   Opportunity Analysis.................................2
BUS  230   Marketing...........................................3
ITMD 127   Elements of Floral Design............................1
ITMD 121   Interior Design/Tech Prep............................3
ITMD 282   Interiors Internship I*..............................1
           Prerequisite: ITMD 121 with a grade of C or higher
ENTR 131   Financial Management for Small Business*.............2
           Prerequisite: ACCT 111 or ACCT 121
ENTR 220   Entrepreneurial Marketing*..........................2
           Prerequisite: BUS 230
ENTR 142   Fast Trac Business Plan..............................3
           TOTAL PROGRAM CREDIT HOURS..........................28
*Prerequisite/Corequisite required
```

```
Students may be interested in taking additional courses, as
noted below, to complement their certificate study.  These
courses are NOT part of the certificate requirements.
```

```
HORT 115   Home Horticulture...................................2
HORT 201   Introduction to Horticultural Science...............4
HORT 205   Plant Propagation*..................................3
           Prerequisite: HORT 201 or permission of assistant dean
ENTR 160   Legal Issues for Small Business......................2
ENTR 195   Franchising*........................................3
           Prerequisite: BUS 230
ENTR 225   Family Business.....................................3
ENTR 240   Funding Acquisition for Entrepreneurs*..............2
```

Prerequisite: ENTR 142

Horticulture, A.A.S.

The horticulture degree program is designed to prepare students with the knowledge and job skills for employment in the greening industry. Upon completion of the associate of applied science degree, students will possess the competencies to be successful at entry-level or higher positions in landscape design and maintenance, greenhouse operations, chemical applicator lawn care, park attendants, plant science technicians, groundskeepers, landscape technicians, irrigation technicians and other related occupations.

Major Code 2150; CIP Code 01.0601

Science Department

Associate of Applied Science

First Semester

```
HORT 201   Introduction to Horticultural Science...............4
MATH 116   Intermediate Algebra or higher*.....................3
           Prerequisite: MATH 115 with a grade of "C" or higher
           or appropriate score on the math assessment test
ENGL 121   Composition I*......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
HORT 214   Woody Plants I, Deciduous...........................3
BIOL 125   General Botany......................................5
           Total Semester Credit Hours........................18
```

Second Semester

```
HORT 140   Turfgrass I.........................................3
HORT 205   Plant Propagation*..................................3
           Prerequisite: HORT 201 or permission of assistant dean
HORT 215   Woody Plants II, Evergreens.........................3
           Social Science/Economics Elective...................3
           Humanities/Art Elective.............................3
           Health and/or Physical Education Elective...........1
           Total Semester Credit Hours........................16
```

Third Semester

```
HORT 220   Herbaceous Plants...................................3
HORT 235   Landscape Maintenance and Techniques................3
HORT 260   Horticulture Soils..................................3
           Electives.........................................6-8
           Total Semester Credit Hours.....................15-17
```

Fourth Semester

```
HORT 160   Garden Center Operations............................3
HORT 225   Plant Problems*.....................................3
           Prerequisites: HORT 214 and HORT 220 or permission of
           assistant dean
           Horticulture Electives..............................6
HORT 270   Horticulture Internship*............................3
           Prerequisite: Approval of assistant dean
           Total Semester Credit Hours........................15
           TOTAL PROGRAM CREDIT HOURS......................64-66
```

Horticulture Electives

```
HORT 135   Landscape Design....................................3
```

```
HORT 210   Concepts of Floral Design...........................3
HORT 240   Turfgrass II........................................3
           Prerequisite: HORT 140
HORT 265   Landscape Construction..............................3
HORT 165   Arboriculture.......................................3
```

List of Electives

```
BUS  140   Principles of Supervision...........................3
BUS  150   Business Communications*............................3
           Prerequisite: ENGL 121
FL   130   Elementary Spanish I................................5
*Prerequisite/Corequisite required
```

Horticulture Certificate

Programs in some career areas are made available by means of cooperative agreements with other educational institutions. These cooperative agreements have resulted in the sharing of programming, curriculum and staffing in the greater Kansas City area and have promoted increased economies of operations for cooperating institutions. The horticultural certificate program is a cooperative program with the Metropolitan Community Colleges.

The 29-credit-hour certificate granted by Johnson County Community College is a certificate program designed to prepare students for a career in the "greening industry." Upon completion of this certificate, students will possess the competencies to be successful at entry-level or higher positions in landscape design and maintenance, lawn care, garden centers and nurseries, wholesale greenhouse growers, and greenhouse operations and other related occupations.

Note: Metropolitan Community College students should seek specific counsel from the JCCC program personnel for the appropriate course plan and numbers.

Metropolitan Community College students should refer to Cooperative Program Information.

(Major Code 6180; CIP Code 01.0601)

Science Department

Career Certificate

First Semester

```
HORT 140   Turfgrass I.........................................3
HORT 214   Woody Plants I, Deciduous...........................3
HORT 220   Herbaceous Plants...................................3
           Elective (choose from list below)...................3
           Total Semester Credit Hours........................12
```

Second Semester

```
HORT 215   Woody Plants II, Evergreens.........................3
HORT 225   Plant Problems*.....................................3
           Prerequisites: HORT 214 and HORT 220 or permission of
           assistant dean
HORT 135   Landscape Design....................................3
           Total Semester Credit Hours.........................9
```

Third Semester

```
HORT 235   Landscape Maintenance and Techniques................3
HORT 150   Fruits, Vegetables and Herb Crops...................2
           Elective (choose from list below)...................3
           Total Semester Credit Hours.........................8
           TOTAL PROGRAM CREDIT HOURS.........................29
*Prerequisite/Corequisite required
```

Electives

```
BUS  121   Introduction to Business.............................3
BUS  145   Small Business Management............................3
HORT 160   Garden Center Operations.............................3
SPD  128   Business and Professional Speech.....................3
```

Horticulture Entrepreneurship Certificate

This certificate is designed to prepare students to open their own business in the "greening industry" businesses such as landscape design and maintenance, lawn care, garden centers and nurseries, and wholesale greenhouse growers. This certificate is design to provide the student with basic skills in horticulture and small business development and management.

(Major Code 4270; CIP Code 01.0601)

Science Department

Career Certificate

Required Courses

```
HORT 140   Turfgrass I..........................................3
HORT 214   Woody Plants I, Deciduous............................3
HORT 220   Herbaceous Plants...................................3
HORT 135   Landscape Design....................................3
ENTR 120   Introduction to Entrepreneurship....................2
ENTR 180   Opportunity Analysis................................2
HORT 215   Woody Plants II, Evergreens.........................3
HORT 225   Plant Problems*.....................................3
           Prerequisites: HORT 214 and HORT 220 or permission of
           assistant dean
HORT 235   Landscape Maintenance and Techniques................3
HORT 150   Fruits, Vegetables and Herb Crops...................2
ENTR 142   Fast Trac Business Plan.............................3
           TOTAL PROGRAM CREDIT HOURS.........................30
*Prerequisite/Corequisite required


Students may be interested in taking additional courses, as
noted below, to complement their certificate study.  These
courses are NOT part of the certificate requirements.

HORT 115   Home Horticulture...................................2
HORT 160   Garden Center Operations............................3
HORT 201   Introduction to Horticultural Science...............4
HORT 205   Plant Propagation*..................................3
           Prerequisite: HORT 201 or permission of assistant dean
HORT 210   Concepts of Floral Design*..........................3
HORT 255   Landscape Pest Control..............................3
HORT 260   Horticulture Soils..................................3
ENTR 160   Legal Issues for Small Business.....................2
ENTR 220   Entrepreneurial Marketing*..........................2
           Prerequisite: BUS 230
ENTR 131   Financial Management for Small Business*............2
           Prerequisite: ACCT 111 or ACCT 121
ENTR 195   Franchising*........................................3
           Prerequisite: BUS 230
ENTR 225   Family Business.....................................3
ENTR 240   Funding Acquisition for Entrepreneurs*..............2
           Prerequisite: ENTR 142
FL   130   Elementary Spanish I................................5
```

Landscape Technician Certificate

The 31-credit-hour certificate program is designed to prepare students for a

career in landscape design and maintenance. Upon completion of this certificate, students will possess the competencies to be successful at entry-level or higher positions in landscape design and maintenance and other related occupations.

A full-time student can complete this certificate in a fall-spring sequence year.

(Major Code 6190; CIP Code 01.0605)

Science Department

Career Certificate

First Semester

```
HORT 201   Introduction to Horticultural Science...............4
HORT 214   Woody Plants I, Deciduous...........................3
HORT 140   Turfgrass I........................................3
           Total Semester Credit Hours.......................10
```

Second Semester

```
HORT 220   Herbaceous Plants..................................3
HORT 205   Plant Propagation*.................................3
           Prerequisite: HORT 201 or permission of assistant dean
HORT 260   Horticulture Soils.................................3
           Total Semester Credit Hours........................9
```

Third Semester

```
HORT 135   Landscape Design...................................3
HORT 225   Plant Problems*....................................3
           Prerequisites: HORT 214 and HORT 220 or permission of
           assistant dean
           Total Semester Credit Hours........................6
```

Fourth Semester

```
HORT 235   Landscape Maintenance and Techniques...............3
HORT 265   Landscape Construction.............................3
           Total Semester Credit hours........................6
           TOTAL PROGRAM CREDIT HOURS........................31
*Prerequisite/Corequisite required
```

Landscape Technician Entrepreneurship Certificate

This certificate is designed to prepare students to open their own business in the landscape design and maintenance industry. It will provide students with the basic skills in landscape design and maintenance and small business development and management. Upon completion, the student should be prepared to develop, grow and sustain their own landscape and maintenance business venture.

(Major Code 4280; CIP Code 01.0601)

Science Department

Career Certificate

Prerequisite for Required Courses

```
HORT 214   Woody Plants I, Deciduous..........................3
```

Required Courses

```
HORT 201   Introduction to Horticultural Science...............4
HORT 220   Herbaceous Plants..................................3
HORT 135   Landscape Design...................................3
ENTR 120   Introduction to Entrepreneurship...................2
```

```
ENTR 180   Opportunity Analysis.................................2
HORT 260   Horticulture Soils...................................3
HORT 225   Plant Problems*......................................3
           Prerequisites: HORT 214 and HORT 220 or permission of
           assistant dean
HORT 235   Landscape Maintenance and Techniques.................3
HORT 265   Landscape Construction...............................3
ENTR 142   Fast Trac Business Plan..............................3
           TOTAL PROGRAM CREDIT HOURS..........................29
*Prerequisite/Corequisite required
```

Students may be interested in taking additional courses, as
noted below, to complement their certificate study. These
courses are NOT part of the certificate requirements.

```
HORT 115   Home Horticulture....................................2
HORT 160   Garden Center Operations.............................3
HORT 205   Plant Propagation....................................3
           Prerequisite: HORT 201 or permission of assistant dean
HORT 210   Concepts of Floral Design............................3
HORT 255   Landscape Pest Control...............................3
HORT 260   Horticulture Soils...................................3
ENTR 160   Legal Issues for Small Business......................2
ENTR 220   Entrepreneurial Marketing*...........................2
           Prerequisite: BUS 230
ENTR 131   Financial Management for Small Business*.............2
           Prerequisite: ACCT 111 or ACCT 121
ENTR 195   Franchising*.........................................3
           Prerequisite: BUS 230
ENTR 225   Family Business......................................3
ENTR 240   Funding Acquisition for Entrepreneurs*...............2
           Prerequisite: ENTR 142
FL   130   Elementary Spanish I.................................5
```

Bed & Breakfast Entrepreneurship Certificate

This certificate program is designed to provide the student with the knowledge
and skills they will need to open their own bed and breakfast. Students will learn
the basic skills in hotel and lodging management, culinary arts and the business
acumen necessary to operate their own entrepreneurial business venture.
(Major Code 4220; CIP Code 52.0904)

Hospitality Management

Career Certificate

Prerequisites for Required Courses

```
HMGT 120   Food Service Sanitation..............................1
HMGT 121   Perspectives of Hospitality Management...............3
HMGT 123   Professional Cooking I*..............................3
           Prerequisite or corequisite: HMGT 120
MATH 120   Business Mathematics*................................3
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
```

Required Courses

```
HMGT 132   Seminar in Housekeeping Operations...................3
HMGT 203   Hotel Sales and Marketing*...........................3
           Prerequisites: HMGT 121 and
           admission to the hospitality management program
ENTR 180   Opportunity Analysis.................................2
HMGT 271   Seminar in Hospitality Management: Purchasing........3
HMGT 235   Seminar: Risk Management and Loss Prevention.........3
HMGT 265   Front Office Management..............................3
HMGT 273   Hospitality Cost Accounting*.........................3
```

```
            Prerequisites: MATH 120 or higher
            and HMGT 121
HMGT 221    Design and Facilities Management*...................3
            Prerequisites: HMGT 123 and HMGT 271
ENTR 225    Family Business.....................................3
ENTR 142    Fast Trac Business Plan.............................3
            TOTAL PROGRAM CREDIT HOURS.........................29
*Prerequisite/Corequisite required


Students may be interested in taking additional courses, as
noted below, to complement their certificate study.  These
courses are NOT part of the certificate requirements.

HMEC 151    Nutrition and Meal Planning.........................3
HMGT 279    Beverage Control....................................3
FL   133    Basic Spanish for Hospitality Management............2
ENTR 160    Legal Issues for Small Business.....................2
ENTR 220    Entrepreneurial Marketing*..........................2
            Prerequisite: BUS 230
ENTR 240    Funding Acquisition for Entrepreneurs*..............2
            Prerequisite: ENTR 142
```

Catering Entrepreneurship Certificate

This certificate is designed to prepare students with the knowledge and skills necessary to open their own catering business. Students will learn the basic skills in culinary arts and business acumen necessary to operate their own entrepreneurial business venture.

(Major Code 4230; CIP Code 52.0904)

Hospitality Management

Career Certificate

Prerequisites for Required Courses

```
HMGT 120    Food Service Sanitation.............................1
HMGT 121    Perspectives of Hospitality Management..............3
MATH 120    Business Mathematics*...............................3
            Prerequisite: MATH 111 with a grade of "C" or higher
            or appropriate score on the math assessment test
```

Required Courses

```
HMGT 123    Professional Cooking I..............................3
            Prerequisite or corequisite: HMGT 120
HMGT 150    Seminar: Food Service Sales and Marketing...........3
HMGT 250    Introduction to Catering............................3
ENTR 120    Introduction to Entrepreneurship....................2
ENTR 180    Opportunity Analysis................................2
ENTR 160    Legal Issues for Small Business.....................2
HMGT 230    Professional Cooking II*............................3
            Prerequisites: HMGT 120 and HMGT 123
HMGT 277    Seminar in Hospitality Management: Menu Planning*....3
            Prerequisite: HMGT 123
HMGT 220    American Regional Cuisine*..........................3
            Prerequisite: HMGT 230
HMGT 273    Hospitality Cost Accounting*........................3
            Prerequisites: MATH 120 or higher
            and HMGT 121
ENTR 142    Fast Trac Business Plan.............................3
            TOTAL PROGRAM CREDIT HOURS.........................30
*Prerequisite/Corequisite required


Students may be interested in taking additional courses, as
noted below, to complement their certificate study.  These
```

```
courses are NOT part of the certificate requirements.
```

```
HMEC 151   Nutrition and Meal Planning.........................3
HMGT 279   Beverage Control....................................3
HMGT 271   Seminar in Hospitality Management: Purchasing........3
FL   133   Basic Spanish for Hospitality Management............2
ENTR 195   Franchising*........................................3
           Prerequisite: BUS 230
```

Chef Apprenticeship, A.A.S.

The hospitality management program at JCCC is a comprehensive study of the food service and public lodging industries. The program is accredited by the American Culinary Federation Educational Institute Accrediting Commission.

The chef apprenticeship program at the college is sponsored by the American Culinary Federation and the U.S. Department of Labor. The three-year program has special admission requirements. You must be 18 years old and have a high school diploma or the equivalent.

The career program features formal course work along with the opportunity to actually practice such skills as baking, menu planning, food purchasing, beverage control and food preparation. After job placement, you join the American Culinary Federation Educational Institute for registered apprentice membership. Likewise, you register with the Department of Labor and will be officially indentured to supervising chefs and the sponsoring American Culinary Federation affiliate chapter for 6,000 hours. The program consists of 75 credit hours and leads to an associate of applied science degree.

Note: Metropolitan Community College students should seek specific counsel from the JCCC program personnel for the appropriate course plan and numbers.

Metropolitan Community College students should refer to Cooperative Program Information.

(Major Code 2440; CIP Code 12.0503)

Hospitality Management

Associate of Applied Science Degree

First Semester

```
HMGT 121   Perspectives of Hospitality Management...............3
HMGT 123   Professional Cooking I*..............................3
           Prerequisite or corequisite: HMGT 120
MATH 120   Business Math or higher*.............................3
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
HMGT 120   Food Service Sanitation.............................1
HMGT 281   Culinary Arts Practicum I*..........................2
           Prerequisite: Acceptance into the American Culinary
           Federation Chef Apprenticeship training program and
           hospitality management assistant dean's approval
           Total Semester Credit Hours........................12
```

Second Semester

```
HMGT 273   Hospitality Cost Accounting*........................3
           Prerequisites: MATH 120 or higher
           and HMGT 121
HMGT 230   Professional Cooking II*............................3
           Prerequisites: HMGT 120 and HMGT 123
HMEC 151   Nutrition and Meal Planning.........................3
CPCA       Computer Elective...................................1
HMGT 282   Culinary Arts Practicum II*.........................2
           Prerequisite: HMGT 281
           Total Semester Credit Hours........................12
```

Summer

```
ENGL 121   Composition I*......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
SPD  120   Interpersonal Communication.........................3
           or
SPD  121   Public Speaking.....................................3
           or
SPD  125   Personal Communication..............................3
           Total Semester Credit Hours.........................6
```

Third Semester

```
HMGT       Hospitality Program Elective........................3
HMGT 271   Seminar in Hospitality Management: Purchasing........3
HMGT 220   American Regional Cuisine*..........................3
           Prerequisite: HMGT 230
HMGT 285   Culinary Arts Practicum III*........................2
           Prerequisite: HMGT 282
           Total Semester Credit Hours........................11
```

Fourth Semester

```
HMGT 226   Garde Manger*.......................................3
           Prerequisite: HMGT 230
HMGT 223   Fundamentals of Baking..............................3
HMGT 277   Seminar in Hospitality Management: Menu Planning*....3
           Prerequisite: HMGT 123
HMGT 286   Culinary Arts Practicum IV*.........................2
           Prerequisite: HMGT 285
           Total Semester Credit Hours........................11
```

Fifth Semester

```
HMGT 231   Advanced Food Preparation*..........................4
           Prerequisites: HMGT 230 and assistant dean's approval
HMGT 279   Beverage Control....................................3
PSYC 121   Applied Psychology..................................3
           or
PSYC 130   Introduction to Psychology..........................3
HMGT 287   Culinary Arts Practicum V*..........................2
           Prerequisite: HMGT 286
           Total Semester Credit Hours........................12
```

Sixth Semester

```
HMGT 128   Supervisory Management..............................3
HMGT 228   Advanced Hospitality Management*....................3
           Prerequisite: assistant dean's approval
HMGT 288   Culinary Arts Practicum VI*.........................2
           Prerequisites: HMGT 287 and assistant dean's approval
           and approval of hospitality management assistant dean
           Humanities Elective.................................3
           Total Semester Credit Hours........................11
           TOTAL PROGRAM CREDIT HOURS.........................75


Hospitality Program Electives
HMGT 126   Food Management*....................................4
           Prerequisites: HMGT 123 and  HGMT 230
           and HMGT 277 and
           admission to the hospitality management program
HMGT 130   Hospitality Law.....................................3
HMGT 132   Seminar in Housekeeping Operations..................3
HMGT 150   Seminar: Food Service Sales and Marketing...........3
HMGT 203   Hotel Sales and Marketing*..........................3
           Prerequisites: HMGT 121 and
           admission to the hospitality management program
HMGT 207   Hospitality Human Resource Management*..............3
```

```
            Prerequisite: HMGT 128
HMGT 221    Design and Facilities Management*....................3
            Prerequisites: HMGT 123 and HMGT 271
HMGT 240    Advanced Baking*.....................................4
            Prerequisites: HMGT 123 and HMGT 223
HMGT 248    Confectionery Arts...................................3
HMGT 250    Introduction to Catering.............................3
HMGT 256    Casino Management....................................3
HMGT 265    Front Office Management..............................3
HMGT 268    Hospitality Managerial Accounting*...................3
            Prerequisites: MATH 120 and HMGT 121 and HMGT 273
*Prerequisite/Corequisite required
```

Food and Beverage Management, A.A.S.

The hospitality management program at JCCC is a comprehensive study of the food service and public lodging industries. The program is accredited by the American Culinary Federation Educational Institute Accrediting Commission.

The JCCC food and beverage management program prepares graduates to enter restaurant, club or food service management as a trainee or assistant manager. Courses in the 66-credit-hour program include supervisory management, hospitality accounting, hospitality law, food management, design techniques and advanced hospitality management. In addition, students learn food preparation skills through courses in basic and intermediate food preparation, menu planning, purchasing, nutrition and beverage control. Individuals considering this field should enjoy a very active environment and a lot of contact with people.

Note: Metropolitan Community College students should seek specific counsel from the JCCC program personnel for the appropriate course plan and numbers.

Metropolitan Community College students should refer to Cooperative Program Information.

(Major Code 2550; CIP Code 12.0504)

Hospitality Management

Associate of Applied Science Degree

First Semester

```
HMGT 121    Perspectives of Hospitality Management...............3
SPD  120    Interpersonal Communication..........................3
            or
SPD  121    Public Speaking......................................3
            or
SPD  125    Personal Communication...............................3
MATH 120    Business Math or higher*.............................3
            Prerequisite: MATH 111 with a grade of "C" or higher
            or appropriate score on the math assessment test
CPCA        Computer Elective....................................1
ENGL 121    Composition I*.......................................3
            Prerequisite: ENGL 106
            or appropriate placement test score or EAP 113 and
            EAP 117
HMGT 120    Food Service Sanitation..............................1
            Total Semester Credit Hours.........................14
```

Second Semester

```
HMGT 128    Supervisory Management...............................3
HMGT 123    Professional Cooking I*..............................3
            Prerequisite or corequisite: HMGT 120
HMGT 277    Seminar in Hospitality Management: Menu Planning*....3
            Prerequisite: HMGT 123
HMGT 271    Seminar in Hospitality Management: Purchasing........3
HMEC 151    Nutrition and Meal Planning..........................3
            Total Semester Credit Hours.........................15
```

Summer

```
PSYC 121   Applied Psychology..................................3
           or
PSYC 130   Introduction to Psychology..........................3
           Humanities Requirement..............................3
           Total Semester Credit Hours.........................6
```

Third Semester

```
HMGT 230   Professional Cooking II*............................3
           Prerequisites: HMGT 120 and HMGT 123
HMGT 207   Hospitality Human Resource Management*..............3
           Prerequisite: HMGT 128
HMGT 279   Beverage Control...................................3
HMGT 221   Design and Facilities Management*...................3
           Prerequisites: HMGT 123 and HMGT 271
HMGT 273   Hospitality Cost Accounting*........................3
           Prerequisites: MATH 120 or higher
           and HMGT 121
           Total Semester Credit Hours........................15
```

Fourth Semester

```
HMGT 126   Food Management*....................................4
           Prerequisites: HMGT 123 and  HGMT 230
           and HMGT 277 and
           admission to the hospitality management program
HMGT 228   Advanced Hospitality Management*....................3
           Prerequisite: assistant dean's approval
HMGT       Hospitality Program Elective........................3
HMGT 268   Hospitality Managerial Accounting*..................3
           Prerequisites: MATH 120 and HMGT 121 and HMGT 273
HMGT 150   Seminar: Food Service Sales and Marketing...........3
           Total Semester Credit Hours........................16
           TOTAL PROGRAM CREDIT HOURS.........................66


Hospitality Program Electives
HMGT 130   Hospitality Law....................................3
HMGT 203   Hotel Sales and Marketing*.........................3
           Prerequisites: HMGT 121 and
           admission to the hospitality management program
HMGT 223   Fundamentals of Baking.............................3
HMGT 250   Introduction to Catering...........................3
HMGT 256   Casino Management..................................3
HMGT 275   Seminar in Hospitality Management: Internship*.......3
           Prerequisite: Admission to the hospitality management
           program
*Prerequisite/Corequisite required
```

Food and Beverage Management Certificate

The food and beverage management certificate program is a one-year program that students can complete in two semesters. Designed to give students basic skills hospitality industry employers are seeking for entry-level positions, the program includes an internship, which allows the student to gain actual experience with local employers.

(Major Code 4840; CIP Code 12.0504)

Hospitality Management

Career Certificate

First Semester

```
ENGL 121   Composition I*.....................................3
```

```
                    Prerequisite: ENGL 106
                    or appropriate placement test score or EAP 113 and
                    EAP 117
HMGT 121    Perspectives of Hospitality Management...............3
HMGT 123    Professional Cooking I*..............................3
                    Prerequisite or corequisite: HMGT 120
HMGT 126    Food Management*.....................................4
                    Prerequisites: HMGT 123 and  HGMT 230
                    and HMGT 277 and
                    admission to the hospitality management program
HMGT 128    Supervisory Management...............................3
HMGT 230    Professional Cooking II*.............................3
                    Prerequisites: HMGT 120 and HMGT 123
HMGT 271    Seminar in Hospitality Management: Purchasing........3
HMGT 273    Hospitality Cost Accounting*.........................3
                    Prerequisites: MATH 120 or higher
                    and HMGT 121
HMGT 275    Seminar in Hospitality Management: Internship*.......3
                    Prerequisite: Admission to the hospitality management
                    program
MATH 120    Business Mathematics*................................3
                    Prerequisite: MATH 111 with a grade of "C" or higher
                    or appropriate score on the math assessment test
                    TOTAL PROGRM CREDIT HOURS..........................31
*Prerequisite/Corequisite required
```

Hospitality Entrepreneurship Certificate

The hospitality entrepreneurship certificate prepares students to open their own hospitality business. This certificate is designed to provide the student with basic skills in restaurant operation small business development and management.

(Major Code 4190; CIP Code 52.0901)

Hospitality Management

Career Certificate

Prerequisites for Required Courses

```
HMGT 123    Professional Cooking I*..............................3
                    Prerequisite or corequisite: HMGT 120
MATH 120    Business Math or higher*.............................3
                    Prerequisite: MATH 111 with a grade of "C" or higher
                    or appropriate score on the math assessment test
BUS  230    Marketing...........................................3
```

Required Courses

```
HMGT 121    Perspectives of Hospitality Management...............3
HMGT 120    Food Service Sanitation.............................1
HMGT 128    Supervisory Management...............................3
HMGT 277    Seminar in Hospitality Management: Menu Planning*....3
                    Prerequisite: HMGT 123
ENTR 120    Introduction to Entrepreneurship....................2
ENTR 180    Opportunity Analysis................................2
ENTR 195    Franchising*........................................3
                    Prerequisite: BUS 230
HMGT 230    Professional Cooking II*.............................3
                    Prerequisites: HMGT 120 and HMGT 123
HMGT 273    Hospitality Cost Accounting*.........................3
                    Prerequisites: MATH 120 or higher
                    and HMGT 121
ENTR 160    Legal Issues for Small Business.....................2
ENTR 220    Entrepreneurial Marketing*..........................2
                    Prerequisite: BUS 230
ENTR 142    Fast Trac Business Plan.............................3
                    TOTAL PROGRAM CREDIT HOURS..........................30
```

```
*Prerequisite/Corequisite required
```

Students may be interested in taking additional courses, as
noted below, to complement their certificate study. These
courses are NOT part of the certificate requirements.

```
HMEC 151   Nutrition and Meal Planning.........................3
HMGT 279   Beverage Control....................................3
HMGT 271   Seminar in Hospitality Management: Purchasing........3
HMGT 130   Hospitality Law.....................................3
HMGT 250   Introduction to Catering............................3
HMGT 203   Hotel Sales and Marketing*..........................3
           Prerequisites: HMGT 121 and
           admission to the hospitality management program
FL   133   Basic Spanish for Hospitality Management.............2
```

Hotel & Lodging Management, A.A.S.

The hospitality management program at JCCC is a comprehensive study of the food service and public lodging industries. The program is accredited by the American Culinary Federation Educational Institute Accrediting Commission.

The JCCC hotel and lodging management program prepares the graduate to enter hotel and lodging management, usually as a trainee or department supervisor. Courses in supervisory management, hotel accounting, hotel sales and marketing, and advanced hospitality management provide a comprehensive management background. In addition the students learn basic skills through courses in housekeeping, front office management, basic and intermediate food preparation, and beverage control.

Individuals considering this field should enjoy a very active environment and a lot of contact with people.

Note: Metropolitan Community College students should seek specific counsel from the JCCC program personnel for the appropriate course plan and numbers.

Metropolitan Community College students should refer to Cooperative Program Information.

(Major Code 2510; CIP Code 52.0904)

Hospitality Management

Associate of Applied Science

First Semester

```
HMGT 121   Perspectives of Hospitality Management...............3
ENGL 121   Composition I*......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
PSYC 121   Applied Psychology..................................3
           or
PSYC 130   Introduction to Psychology..........................3
HMGT 120   Food Service Sanitation.............................1
HPER 200   First Aid and CPR...................................2
HMGT 132   Seminar in Housekeeping Operations..................3
           Total Semester Credit Hours........................15
```

Second Semester

```
MATH 120   Business Math or higher*............................3
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
HMGT 265   Front Office Management.............................3
HMGT 128   Supervisory Management..............................3
HMGT 235   Seminar: Risk Management and Loss Prevention........3
HMGT 123   Professional Cooking I*.............................3
           Prerequisite or corequisite: HMGT 120
```

```
                  Total Semester Credit Hours........................15
```

Summer

```
HMGT 275   Seminar in Hospitality Management: Internship*.......3
           Prerequisite: Admission to the hospitality management
           program
CPCA       Computer Elective...................................1
           Total Semester Credit Hours.........................4
```

Third Semester

```
SPD  120   Interpersonal Communication.........................3
           or
SPD  121   Public Speaking.....................................3
           or
SPD  125   Personal Communication..............................3
HMGT 230   Professional Cooking II*............................3
           Prerequisites: HMGT 120 and HMGT 123
HMGT 279   Beverage Control....................................3
HMGT 203   Hotel Sales and Marketing*..........................3
           Prerequisites: HMGT 121 and
           admission to the hospitality management program
HMGT 273   Hospitality Cost Accounting*........................3
           Prerequisites: MATH 120 or higher
           and HMGT 121
           Total Semester Credit Hours........................15
```

Fourth Semester

```
           Humanities Requirement..............................3
HMGT 228   Advanced Hospitality Management*....................3
           Prerequisite: assistant dean's approval
HMGT       Hospitality Program Elective........................3
HMGT 268   Hospitality Managerial Accounting*.................3
           Prerequisites: MATH 120 and HMGT 121 and HMGT 273
HMGT 207   Hospitality Human Resource Management*..............3
           Prerequisite: HMGT 128
           Total Semester Credit Hours........................15
           TOTAL PROGRAM CREDIT HOURS.........................64


Hospitality Program Electives
HMEC 151   Nutrition and Meal Planning.........................3
HMGT 126   Food Management*....................................4
           Prerequisites: HMGT 123 and  HGMT 230
           and HMGT 277 and
           admission to the hospitality management program
HMGT 130   Hospitality Law.....................................3
HMGT 221   Design and Facilities Management*...................3
           Prerequisites: HMGT 123 and HMGT 271
HMGT 223   Fundamentals of Baking..............................3
HMGT 250   Introduction to Catering............................3
HMGT 256   Casino Management...................................3
HMGT 271   Seminar in Hospitality Management: Purchasing........3
HMGT 277   Seminar in Hospitality Management: Menu Planning*....3
           Prerequisite: HMGT 123
*Prerequisite/Corequisite required
```

Pastry/Baking Certificate

The one-year pastry/baking certificate program is for students who are seeking employment as pastry cooks in pastry/bake shops, hotels, restaurants or other areas that produce pastry and baked products. Students may have an entrepreneurial interest for opening their own operation.

The program involves a total of 30 credits over two semesters with a maximum enrollment of 15 students. This is an open enrollment program beginning only

during the fall semester. Current industry professionals may desire this program to upgrade their skills and increase their knowledge in this area of study.

Students must complete HMGT 120, Food Service Sanitation, and HMGT 123, Professional Cooking I, before enrolling in the program.

(Major Code 4350; CIP Code 12.0501)

Hospitality Management

Career Certificate

Prerequisites for Required Courses

```
HMGT 120   Food Service Sanitation..............................1
HMGT 123   Professional Cooking I*..............................3
           Prerequisite or corequisite: HMGT 120
```

Fall Semester

```
HMPB 155   Pastry Shop Production I*............................4
           Prerequisites: HMGT 120 and HMGT 123
           Corequisites: HMPB 160 and HMPB 233 and HMPB 252
HMPB 160   Pastry Shop Principles I*...........................4
           Prerequisites: HMGT 120 and HMGT 123
           Corequisites: HMPB 155 and HMPB 233 and HMPB 252
HMPB 233   Patisserie*........................................4
           Prerequisites: HMGT 120 and HMGT 123
           Corequisites: HMPB 155 and HMPB 160 and HMPB 252
HMPB 252   Pastry Shop Business Basics I*......................3
           Prerequisites: HMGT 120 and HMGT 123
           Corequisites: HMPB 155 and HMPB 160 and HMPB 233
           Total Semester Credit Hours.........................15
```

Spring Semester

```
HMPB 255   Pastry Shop Production II*...........................4
           Prerequisites: HMPB 155 and HMPB 160 and HMPB 233 and
           HMPB 252
           Corequisites: HMPB 260 and HMPB 257 and HMPB 252
HMPB 260   Pastry Shop Principles II*..........................4
           Prerequisites: HMPB 155 and HMPB 160 and HMPB 233 and
           HMPB 252
           Corequisites: HMPB 255 and HMPB 257 and HMPB 262
HMPB 257   Sugar Basics*......................................4
           Prerequisites: HMPB 155 and HMPB 160 and HMPB 233 and
           HMPB 252
           Corequisites: HMPB 255 and HMPB 260 and HMPB 262
HMPB 262   Pastry Shop Business Basics II*.....................3
           Prerequisites: HMPB 155 and HMPB 160 and HMPB 233 and
           HMPB 252
           Corequisites: HMPB 255 and HMPB 260 and HMPB 257
           Total Semester Credit Hours.........................15
           TOTAL PROGRAM CREDIT HOURS..........................30
*Prerequisite/Corequisite required
```

Pastry/Baking Entrepreneurship Certificate

This certificate is designed to prepare students to open their own business, and to provide the student with basic skills in pastry/baking preparation and small business development and management.

The program involves two semesters of pastry/baking courses with a maximum enrollment of 15 students. This is an open enrollment program beginning only during the fall semester. Students must complete HMGT 120, Food Service Sanitation, and HMGT 123, Professional Cooking I, with a passing grade before enrolling in pastry/baking courses (HMPB). Current industry professionals may desire this program to upgrade their skills and increase their knowledge in this area of study.

(Major Code 4080; CIP Code 12.0501)
Hospitality Management

Career Certificate

Prerequisites for Required Courses

```
HMGT 120   Food Service Sanitation................................1
HMGT 123   Professional Cooking I*...............................3
           Prerequisite or corequisite: HMGT 120
```

Fall Semester

```
HMPB 155   Pastry Shop Production I*.............................4
           Prerequisites: HMGT 120 and HMGT 123
           Corequisites: HMPB 160 and HMPB 233 and HMPB 252
HMPB 160   Pastry Shop Principles I*............................4
           Prerequisites: HMGT 120 and HMGT 123
           Corequisites: HMPB 155 and HMPB 233 and HMPB 252
HMPB 233   Patisserie*..........................................4
           Prerequisites: HMGT 120 and HMGT 123
           Corequisites: HMPB 155 and HMPB 160 and HMPB 252
HMPB 252   Pastry Shop Business Basics I*.......................3
           Prerequisites: HMGT 120 and HMGT 123
           Corequisites: HMPB 155 and HMPB 160 and HMPB 233
           Total Semester Credit Hours........................15
```

Spring Semester

```
HMPB 255   Pastry Shop Production II*............................4
           Prerequisites: HMPB 155 and HMPB 160 and HMPB 233 and
           HMPB 252
           Corequisites: HMPB 260 and HMPB 257 and HMPB 252
HMPB 260   Pastry Shop Principles II*...........................4
           Prerequisites: HMPB 155 and HMPB 160 and HMPB 233 and
           HMPB 252
           Corequisites: HMPB 255 and HMPB 257 and HMPB 262
HMPB 257   Sugar Basics*........................................4
           Prerequisites: HMPB 155 and HMPB 160 and HMPB 233 and
           HMPB 252
           Corequisites: HMPB 255 and HMPB 260 and HMPB 262
HMPB 262   Pastry Shop Business Basics II*......................3
           Prerequisites: HMPB 155 and HMPB 160 and HMPB 233 and
           HMPB 252
           Corequisites: HMPB 255 and HMPB 260 and HMPB 257
           Total Semester Credit Hours........................15
```

Required ENTR Courses

Note: ENTR courses may be taken any time during the program.

```
ENTR 120   Introduction to Entrepreneurship.....................2
ENTR 180   Opportunity Analysis.................................2
ENTR 142   Fast Trac Business Plan..............................3
           Total ENTR Credit Hours..............................7
           TOTAL PROGRAM CREDIT HOURS..........................37
*Prerequisite/Corequisite required
```

Students may be interested in taking additional courses, as
noted below, to complement their certificate study. These
courses are NOT part of the certificate requirements.

```
ENTR 160   Legal Issues for Small Business......................2
ENTR 195   Franchising..........................................3
           Prerequisite: BUS 230
ENTR 220   Entrepreneurial Marketing............................2
           Prerequisite: BUS 230
```

```
ENTR 131   Financial Management for Small Business*.............2
           Prerequisite: ACCT 111 or ACCT 121
```

Industrial Maintenance, A.A.S.

Industrial maintenance requires people employed in the field to be trained in a variety of areas, including welding, electricity, HVAC, gasoline or diesel engines, and generators. Often, the needs will change due to growth in a company or the expansion of services provided. This degree option will allow a student to choose from numerous courses to custom build a program that will fit the needs of an employer. It will also allow students employed in an industrial maintenance position to broaden their skill areas and achieve an associate of applied science degree.

(Major Code 2270; CIP Code 47.0303)

Electrical Technology Program

Associate of Applied Science Degree

```
Note: MFAB 120-MFAB Tools and Equipment is a prerequisite/
corequisite to MFAB 121 and MFAB 127.  Students who may
have the skills needed for MFAB 120 may contact the career
program facilitator for a waiver or may contact the Testing
for prior learning credit.
```

First Semester

```
DRAF 129   Interpreting Architectural Drawings..................2
           or
MFAB 180   Blueprint and Symbols Reading for Welders............2
           or
HVAC 143   Reading Blueprints and Ladder Diagrams...............2
ENGL 121   Composition I*.......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
INDT 125   Industrial Safety....................................3
HVAC 123   Electromechanical Systems............................4
MATH 133   Technical Mathematics I*.............................4
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
           Total Semester Credit Hours........................16
```

Second Semester

```
CPCA 128   PC Applications: MS Office...........................3
ELTE 122   National Electrical Code I...........................4
ENGL 123   Technical Writing I*.................................3
           Prerequisite: ENGL 121
INDT 155   Workplace Skills....................................1
           Technical Electives.................................5
           Total Semester Credit Hours........................16
```

Third Semester

```
ECON 132   Survey of Economics..................................3
MFAB 121   Introduction to Welding*.............................4
           Prerequisite or Corequisite: MFAB 120 or
           program facilitator approval or contact testing office
           for Prior Learning Assessment
           or
MFAB 127   Welding Processes*...................................2
           Prerequisite or Corequisite: MFAB 120 or program
           facilitator approval or contact testing office for Prior
           Learning Assessment
SPD  120   Interpersonal Communication.........................3
```

```
                Related Electives...................................3
                Technical Electives..............................3-5
                Total Semester Credit Hours.......................16
```

Fourth Semester

```
EMS  121  CPR I - Basic Life Support for Healthcare Provider...1
                Humanities Elective...............................3
                Related Electives.................................3
                Technical Electives...............................9
                Total Semester Credit Hours.......................16
                TOTAL PROGRAM CREDIT HOURS........................64
```

Technical Electives

```
AUTO 165  Automotive Engine Repair*............................4
                Prerequisite or corequisite: AUTO 125 or
                approval of the program administrator
AUTO 210  Advanced Engine Repair*..............................3
                Prerequisite: AUTO 165
CET  105  Construction Methods.................................3
ELEC 120  Introduction to Electronics..........................3
ELEC 133  Programmable Controllers.............................3
ELEC 165  Advanced Programmable Controllers*...................3
                Prerequisite: ELEC 133
ELTE 200  Commercial Wiring Methods*...........................4
                Prerequisite or corequisite: HVAC 123 or ELTE 123
ELTE 205  Industrial Electrical Wiring*........................4
                Prerequisite: ELTE 122 or ELTE 125 or ELTE 200
ELTE 271  Electrical Internship I*.............................3
                Prerequisite: program facilitator approval
HVAC 150  Refrigerant Management and Certification.............1
HVAC 121  Basic Principles of HVAC*............................4
                Prerequisite or corequisite: HVAC 123
HVAC 146  Plumbing Systems Applications........................3
HVAC 221  Commercial Systems: Air Conditioning*...............4
                Prerequisites: HVAC 121 and HVAC 123
HVAC 223  Commercial Systems: Heating*.........................4
                Prerequisite: HVAC 123
HVAC 271  HVAC Internship*.....................................3
                Prerequisite: Program facilitator approval
                Required
MFAB 125  Advanced Gas and Arc Welding*........................4
                Prerequisite:  MFAB 121
MFAB 170  Basic Machine Tool Processes.........................4
MFAB 240  Metallurgy...........................................2
MFAB 140  Maintenance Repair Welding*..........................3
                Prerequisite: MFAB 121 or MFAB 130
MFAB 271  Metal Fabrication Internship*........................3
                Prerequisite: Program facilitator approval
```

Related Electives

```
BUS  140  Principles of Supervision............................3
BUS  141  Principles of Management.............................3
CET  129  Construction Management..............................3
CET  140  Civil Engineering Materials*.........................3
                Corequisite: MATH 133
Note:  Must take concurrent with Math 133


CPCA 105  Introduction to Personal Computers: Windows..........1
CPCA 121  Introduction to Project Management*..................1
                Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124
                or an appropriate score on a waiver test
CPCA 141  Internet I*..........................................1
                Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or
                CIS 124 or an appropriate score on an assessment test
IT   200  Networking Technologies..............................3
*Prerequisite/Corequisite required
```

Industrial Maintenance Certificate

Industrial maintenance mechanics are employed in the die-casting, plastics, food processing, printing, precision metal and woodworking industries. The vocational certificate course work includes a broad curriculum of industrial electricity, welding, HVAC and blueprint reading. Emphasis will be hands-on training in the repairing and testing of equipment. This also allows students employed in an industrial maintenance position to broaden their skill areas and achieve a vocational certificate.

(Major Code 5210; CIP Code 47.0303)

Electrical Technology Program

Career Certificate

Note: MFAB 120-MFAB Tools and Equipment is a prerequisite/ corequisite to MFAB 121 and MFAB 127. Students who may have the skills needed for MFAB 120 may contact the career program facilitator for a waiver or may contact the Testing for prior learning credit.

Required Courses

```
DRAF 129   Interpreting Architectural Drawings..................2
           or
MFAB 180   Blueprint and Symbols Reading for Welders............2
           or
HVAC 143   Reading Blueprints and Ladder Diagrams..............2
ELTE 123   Electromechanical Systems...........................4
INDT 125   Industrial Safety...................................3
MFAB 121   Introduction to Welding*............................4
           Prerequisite or Corequisite: MFAB 120 or
           program facilitator approval or contact testing office
           for Prior Learning Assessment
           or
MFAB 127   Welding Processes*..................................2
           Prerequisite or Corequisite: MFAB 120 or program
           facilitator approval or contact testing office for Prior
           Learning Assessment
           Technical Electives............................11-13
           TOTAL PROGRAM CREDIT HOURS........................24
```

Technical Electives

```
ELEC 120   Introduction to Electronics.........................3
ELEC 133   Programmable Controllers............................3
ELEC 165   Advanced Programmable Controllers*..................3
           Prerequisite: ELEC 133
ELTE 122   National Electrical Code I..........................4
ELTE 200   Commercial Wiring Methods*..........................4
           Prerequisite or corequisite: HVAC 123 or ELTE 123
ELTE 205   Industrial Electrical Wiring*.......................4
           Prerequisite: ELTE 122 or ELTE 125 or ELTE 200
HVAC 121   Basic Principles of HVAC*...........................4
           Prerequisite or corequisite: HVAC 123
CET  105   Construction Methods................................3
MFAB 125   Advanced Gas and Arc Welding*.......................4
           Prerequisite:  MFAB 121
MFAB 140   Maintenance Repair Welding*.........................3
           Prerequisite: MFAB 121 or MFAB 130
MFAB 170   Basic Machine Tool Processes........................4
MFAB 240   Metallurgy..........................................2
INDT 155   Workplace Skills....................................1
*Prerequisite/Corequisite required
```

Information Technology, A.A.S.

Information technology connects people, departments and companies for communication purposes. The technology of local area networks gives employees the ability to share and retrieve information at the group level. Combining local area networks with the Internet and telecommunications resources gives employees unlimited intranet access to information throughout the company and beyond. The associate of applied science degree in information technology provides students with a foundation in designing, installing and implementing computer networking resources. Course requirements include network operations and product-specific requirements for Windows, Unix and Cisco.

(Major Code 2330; CIP Code 11.0901)

Information Technology

Associate of Applied Science Degree

First Semester

```
IT   205   Implementing Windows Client*.........................3
           Prerequisite: IT 200
ELEC 126   Microcomputer A+ Preparation.........................4
ENGL 121   Composition I*.......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
           Technical Electives..................................3
           Social Science and/or Economics Elective............3
           Health and/or Physical Education Elective............1
           Total Semester Credit Hours.........................17
```

Second Semester

```
IT   221   Windows Server*......................................3
           Prerequisites: IT 200 and ELEC 126 and IT 205
IT   230   UNIX Fundamentals....................................3
IT   246   Introduction to Routers*.............................3
           Prerequisite: IT 200
MATH 171   College Algebra or higher*...........................3
           Prerequisite: MATH 116 with a grade of "C" or higher
           or MATH 134 with a grade of "C" or higher
           or appropriate score on the math assessment test
           Note: Not available to students with credit in MATH 173
ENGL 122   Composition II*......................................3
           Prerequisite: ENGL 121
           or
ENGL 123   Technical Writing I*.................................3
           Prerequisite: ENGL 121
           Total Semester Credit Hours.........................15
```

Third Semester

```
IT   225   Windows Active Directory Services*...................3
           Prerequisite: IT 221
IT   231   UNIX Administration*.................................3
           Prerequisite: IT 230
IT   247   Introduction to Wide-Area Networks*.................3
           Prerequisite: IT 246
           Humanities Elective..................................3
           Technical Electives.................................3
           Total Semester Credit Hours.........................15
```

Fourth Semester

```
IT   245   Network Infrastructure*.............................3
           Prerequisite: IT 221
IT   251   Network Security Fundamentals*......................4
           Prerequisite: IT 247
SPD  121   Public Speaking.....................................3
           or
```

```
SPD   125   Personal Communication...............................3
            Technical Elective...................................7
            Total Semester Credit Hours.........................17
            TOTAL PROGRAM CREDIT HOURS..........................64
```

Technical Electives

```
CPCA 121   Introduction to Project Management*..................1
            Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124
            or an appropriate score on a waiver test
CIS  134   Programming Fundamentals.............................4
ELEC 150   Introduction to Telecommunications...................3
ELEC 185   LAN Cabling and Installation.........................3
ELEC 250   Microcomputer Maintenance*...........................3
            Prerequisite: ELEC 126
IT   200   Networking Technologies..............................3
IT   203   Voice over IP Fundamentals*..........................4
            Prerequisite: IT 200
IT   227   SQL Server Administration*...........................3
            Prerequisite: IT 221
IT   228   Exchange Server*.....................................3
            Prerequisite: IT 225
IT   232   UNIX Networking and Security*........................4
            Prerequisite: IT 231
IT   249   Advanced Routing*....................................3
            Prerequisite: IT 247
IT   250   Networking Seminar*..................................3
            Prerequisite: IT 225 and IT 247
IT   252   Firewall Security*...................................4
            Prerequisite: IT 247
IT   253   Advanced Switching*..................................3
            Prerequisite: IT 247
IT   254   Remote Access Networks*..............................3
            Prerequisite: IT 247
IT   255   Wireless Security*...................................4
            Prerequisite: IT 247
IT   271   Information Technology Internship I*.................3
            Prerequisites: IT 210 or IT 221 or IT 230
            and approval of the assistant dean
IT   272   Information Technology Internship II*................3
            Prerequisites: IT 271
            and approval of the assistant dean
*Prerequisite/Corequisite required
```

Networking Administration: UNIX Certificate

This certificate is a 19-credit-hour program that students can complete in 2-3 semesters. The certificate will provide students with competencies necessary to install, troubleshoot and administer Unix systems in a networked environment. (Major Code 7000; CIP Code 11.0901)

Career Certificate

First Semester

```
IT   200   Networking Technologies..............................3
IT   230   UNIX Fundamentals....................................3
            Total Semester Credit Hours..........................6
```

Second Semester

```
IT   231   UNIX Administration*.................................3
            Prerequisite: IT 230
            Total Semester Credit Hours..........................3
```

Third Semester

```
IT   232   UNIX Networking and Security*.......................4
           Prerequisite: IT 231
           Technical Electives.................................6
           Total Semester Credit Hours........................10
           TOTAL PROGRAM CREDIT HOURS.........................19
```

Technical Electives

```
IT   205   Implementing Windows Client*........................3
           Prerequisite: IT 200
IT   221   Windows Server*.....................................3
           Prerequisites: IT 200 and ELEC 126 and IT 205
IT   225   Windows Active Directory Services*..................3
           Prerequisite: IT 221
IT   227   SQL Server Administration*..........................3
           Prerequisite: IT 221
IT   245   Network Infrastructure*.............................3
           Prerequisite: IT 221
IT   247   Introduction to Wide-Area Networks*.................3
           Prerequisite: IT 246
IT   250   Networking Seminar*.................................3
           Prerequisite: IT 225 and IT 247
IT   251   Network Security Fundamentals*......................4
           Prerequisite: IT 247
IT   252   Firewall Security*..................................4
           Prerequisite: IT 247
IT   255   Wireless Security*..................................4
           Prerequisite: IT 247
IT   271   Information Technology Internship I*................3
           Prerequisites: IT 210 or IT 221 or IT 230
           and approval of the assistant dean
IT   272   Information Technology Internship II*...............3
           Prerequisites: IT 271
           and approval of the assistant dean
ELEC 185   LAN Cabling and Installation........................3
*Prerequisite/Corequisite required
```

Networking Administration: Windows Certificate

The networking administration: windows vocational certificate is a 28-credit-hour program that students can complete in four semesters. The program is designed to give students the hands-on skills needed to install, troubleshoot and administer a local area network with Windows operating system. Course work parallels the requirements for the Microsoft Certified Systems Associate (MCSA) certification exams.

(Major Code 5230; CIP Code 11.0901)

Information Technology

Career Certificate

Required Courses

```
IT   200   Networking Technologies.............................3
ELEC 126   Microcomputer A+ Preparation........................4
IT   205   Implementing Windows Client*........................3
           Prerequisite: IT 200
IT   221   Windows Server*.....................................3
           Prerequisites: IT 200 and ELEC 126 and IT 205
IT   225   Windows Active Directory Services*..................3
           Prerequisite: IT 221
IT   245   Network Infrastructure*.............................3
           Prerequisite: IT 221
           Technical Electives.................................9
           TOTAL PROGRAM CREDIT HOURS.........................28
```

Technical Electives

```
IT   227   SQL Server Administration*...........................3
           Prerequisite: IT 221
IT   228   Exchange Server*.....................................3
           Prerequisite: IT 225
IT   230   UNIX Fundamentals...................................3
IT   231   UNIX Administration*................................3
           Prerequisite: IT 230
IT   232   UNIX Networking and Security*.......................4
           Prerequisite: IT 231
IT   246   Introduction to Routers*............................3
           Prerequisite: IT 200
IT   247   Introduction to Wide-Area Networks*.................3
           Prerequisite: IT 246
IT   249   Advanced Routing*...................................3
           Prerequisite: IT 247
IT   250   Networking Seminar*.................................3
           Prerequisite: IT 225 and IT 247
IT   251   Network Security Fundamentals*......................4
           Prerequisite: IT 247
IT   252   Firewall Security*..................................4
           Prerequisite: IT 247
IT   255   Wireless Security*..................................4
           Prerequisite: IT 247
IT   271   Information Technology Internship I*................3
           Prerequisites: IT 210 or IT 221 or IT 230
           and approval of the assistant dean
IT   272   Information Technology Internship II*...............3
           Prerequisites: IT 271
           and approval of the assistant dean
*Prerequisite/Corequisite required
```

Network Connectivity Certificate

The network connectivity vocational certificate is a 13-credit-hour program that students can complete in three semesters. The certificate addresses the crucial area of Internet connection devices and provides necessary skills for students to be successful in the field. This certificate is supported and promoted by Cisco through its Networking Academy initiative.

(Major Code 7010; CIP Code 11.0901)

Information Technology

Certificate of Completion

Required Courses

```
IT   200   Networking Technologies.............................3
ELEC 126   Microcomputer A+ Preparation........................4
IT   246   Introduction to Routers*............................3
           Prerequisite: IT 200
IT   247   Introduction to Wide-Area Networks*.................3
           Prerequisite: IT 246
           TOTAL PROGRAM CREDIT HOURS.........................13
*Prerequisite/Corequisite required
```

Interactive Media, A.A.S.

The interactive media program provides instruction in the design and development process for different types of interactive media, acquiring and managing assets, the history and theory of communication forms, authoring for interactive media, screen design, interface design, and project management. This program is designed to build a common foundation of experience while allowing the student to select courses from the interactive media electives list as well as general electives that best serve his or her individual needs. Depending on individual

choices and talents, students who complete the interactive media program should be prepared for employment in a variety of positions in the interactive media field. For more information and to see samples of student work, go to web.jccc.net/academic/cim

(Major Code 2410; CIP Code 11.0801)

Interactive Media

Associate of Applied Science Degree

Prerequisites for Required Courses

Note: Prior to beginning the program, the student must take the following prerequisites, or have taken the equivalent transfer courses, or have passed the waiver test (where applicable), or have obtained a waiver from the program administrator.

```
CDTP 135   Desktop Photo Manipulation I: Photoshop..............1
CDTP 145   Desktop Illustration I: Illustrator..................1
CWEB 105   Introduction to Web Pages: Dreamweaver*..............1
           Prerequisite: CWEB 101
CWEB 130   Introduction to Flash*..............................1
           Prerequisite: CPCA 161 or CWEB 105 or CWEB 106
```

First Semester

```
ENGL 121   Composition I*.......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
CIM  130   Interactive Media Concepts...........................2
CIM  140   Interactive Media Assets*............................4
           Prerequisites: CDTP 135 and CDTP 145 and CWEB 105
           and CWEB 130
           Prerequisite or corequisite: CIM 130
CIM  133   Screen Design*.......................................4
           Prerequisite: CDTP 135
           Electives............................................3
           Total Semester Credit Hours.........................16
```

Second Semester

```
ENGL 140   Writing for Interactive Media*.......................3
           Prerequisite: ENGL 121
CIM  154   Interactive Authoring I: Director*...................4
           Prerequisite: CIM 130 and
           Prerequisite or corequisite: CIM 140
           or
CIM  156   Interactive Authoring I: Web*........................4
           Prerequisite: CIM 130
           Prerequisite or corequisite: CIM 140
CIM  200   Interactive Communication Form*......................3
           Prerequisite or corequisite: CIM 130
           Humanities Elective..................................3
           Interactive Media Elective...........................3
           Total Semester Credit Hours.........................16
```

Third Semester

```
CIM  230   Interactive Media Development*.......................4
           Prerequisite: CIM 154 or CIM 156 and
           Corequisite: CIM 250
CIM  250   Interface Design*....................................4
           Prerequisite: CIM 154 or CIM 156
           Corequisite: CIM 230
           Social Science and/or Economic Elective.............3
           Interactive Media Elective...........................3
```

```
                    Electives...........................................3
                    Total Semester Credit Hours.........................17
```

Fourth Semester

```
CIM  270   Interactive Media Project*.............................4
           Prerequisites or corequisites: CIM 200 and CIM 230 and
           CIM 250
CIM  273   Career Preparation*....................................4
           Prerequisites: CIM 230 and CIM 250 and
           Prerequisite or corequisite: CIM 270
           Science and/or Mathematics.............................3
           Health and/or Physical Education......................1
           Electives.............................................3
           Total Semester Credit Hours..........................15
           TOTAL PROGRAM CREDIT HOURS...........................64
```

Interactive Media Elective List

```
ANI  120   Conceptual Art for Animation..........................1
           Prerequisite: CDTP 135
ANI  145   Introduction to 3D Animation..........................3
           Prerequisites: CDTP 135 and ANI 120
BUS  141   Principles of Management..............................3
CIM  135   Digital Imaging and Video*............................3
           Prerequisite: CDTP 135
           Recommended: PHOT 121


CIM  154   Interactive Authoring I: Director*....................4
           Prerequisite: CIM 130 and
           Prerequisite or corequisite: CIM 140
           or
CIM  156   Interactive Authoring I: Web*.........................4
           Prerequisite: CIM 130
           Prerequisite or corequisite: CIM 140
Note: Whichever course not already taken as a
requirement
CIM    235*
CIM    254*
CIS    134
CIS    162*
ENGL 150*
MUS  156
SPD   120
SPD   121
SPD   125
*Prerequisite/Corequisite required
```

Multimedia Design Certificate

The multimedia design certificate provides instruction in the design and development process needed to deliver information and media, primarily via CD-ROM and DVD. This includes acquiring and managing assets (text, graphics, sound and video), the history and theory of communication forms, screen design, multimedia authoring, interface design and project management.

Students who complete the multimedia design certificate should be prepared for employment in a variety of positions within the interactive media field. Potential positions in multimedia design include writer/editor/researcher, graphics professional, photography/imaging/video professional, music/audio professional, programmer, information designer, interface designer and/or project manager. For more information and to see samples of student work, go to web.jccc.net/academic/cim

(Major Code 4480; CIP Code 11.0801)

Interactive Media

Career Certificate

Prerequisites for Required Courses

Note: Prior to beginning the program, the student
must take the following prerequisites, or have taken the
equivalent transfer courses, or have passed the waiver
test (where applicable), or have obtained a waiver from the
program administrator.

```
CDTP 135   Desktop Photo Manipulation I: Photoshop..............1
CDTP 145   Desktop Illustration I: Illustrator.................1
CWEB 105   Introduction to Web Pages: Dreamweaver*.............1
           Prerequisite: CWEB 101
CWEB 130   Introduction to Flash*.............................1
           Prerequisite: CPCA 161 or CWEB 105 or CWEB 106
```

Required Courses

```
CIM  130   Interactive Media Concepts..........................2
CIM  140   Interactive Media Assets*...........................4
           Prerequisites: CDTP 135 and CDTP 145 and CWEB 105
           and CWEB 130
           Prerequisite or corequisite: CIM 130
CIM  133   Screen Design*......................................4
           Prerequisite: CDTP 135
CIM  154   Interactive Authoring I: Director*..................4
           Prerequisite: CIM 130 and
           Prerequisite or corequisite: CIM 140
CIM  200   Interactive Communication Form*.....................3
           Prerequisite or corequisite: CIM 130
CIM  230   Interactive Media Development*......................4
           Prerequisite: CIM 154 or CIM 156 and
           Corequisite: CIM 250
CIM  250   Interface Design*...................................4
           Prerequisite: CIM 154 or CIM 156
           Corequisite: CIM 230
CIM  270   Interactive Media Project*..........................4
           Prerequisites or corequisites: CIM 200 and CIM 230 and
           CIM 250
           TOTAL PROGRAM CREDIT HOURS.........................29
*Prerequisite/Corequisite required
```

Multimedia Design Entrepreneurship Certificate

This certificate is designed to prepare students to open their own business providing multimedia design services. This certificate is designed to provide the student with instruction in the design and development process needed to deliver information and media primarily via CD-ROM and DVD. This includes acquiring and managing assets (i.e., text, graphics, sound and video), the history and theory of communication forms, screen design, multimedia authoring, interface design, and project management. Additionally, the certificate provides the student instruction in small business development and management.

(Major Code 4070; CIP Code 11.0801)

Interactive Media

Career Certificate

Prerequisites for Required Courses

Note: Prior to beginning the program, the student
must take the following prerequisites, or have taken the
equivalent transfer courses, or have passed the waiver test
(where applicable), or have obtained a waiver from the
program administrator.

```
CDTP 135   Desktop Photo Manipulation I: Photoshop..............1
CDTP 145   Desktop Illustration I: Illustrator..................1
CWEB 105   Introduction to Web Pages: Dreamweaver*.............1
           Prerequisite: CWEB 101
CWEB 130   Introduction to Flash*...............................1
           Prerequisite: CPCA 161 or CWEB 105 or CWEB 106
CIM  130   Interactive Media Concepts..........................2
CIM  140   Interactive Media Assets*...........................4
           Prerequisites: CDTP 135 and CDTP 145 and CWEB 105
           and CWEB 130
           Prerequisite or corequisite: CIM 130
```

Required Courses

```
CIM  133   Screen Design*......................................4
           Prerequisite: CDTP 135
CIM  154   Interactive Authoring I: Director*..................4
           Prerequisite: CIM 130 and
           Prerequisite or corequisite: CIM 140
ENTR 120   Introduction to Entrepreneurship....................2
ENTR 180   Opportunity Analysis................................2
CIM  200   Interactive Communication Form*.....................3
           Prerequisite or corequisite: CIM 130
CIM  230   Interactive Media Development*......................4
           Prerequisite: CIM 154 or CIM 156 and
           Corequisite: CIM 250
CIM  250   Interface Design*...................................4
           Prerequisite: CIM 154 or CIM 156
           Corequisite: CIM 230
CIM  270   Interactive Media Project*..........................4
           Prerequisites or corequisites: CIM 200 and CIM 230 and
           CIM 250
ENTR 142   Fast Trac Business Plan.............................3
           TOTAL PROGRAM CREDIT HOURS.........................30
*Prerequisite/Corequisite required
```

Students may be interested in taking additional courses, as
noted below, to complement their certificate study. These
courses are NOT part of the certificate requirements.

```
ENTR 220   Entrepreneurial Marketing*..........................2
           Prerequisite: BUS 230
ENTR 131   Financial Management for Small Business*.............2
           Prerequisite: ACCT 111 or ACCT 121
ENTR 160   Legal Issues for Small Business.....................2
ENTR 195   Franchising.........................................3
           Prerequisite: BUS 230
CIM  135   Digital Imaging and Video*..........................3
           Prerequisite: CDTP 135
           Recommended: PHOT 121
CIM  156   Interactive Authoring I: Web*.......................4
           Prerequisite: CIM 130
           Prerequisite or corequisite: CIM 140
CIM  235   Advanced Digital Video*.............................3
           Prerequisite: CIM 135
CIM  254   Interactive Authoring II: Director*.................4
           Prerequisite: CIM 154
CIS  162   Database Programming*...............................4
           Prerequisite: CIS 134 or the equivalent
MUS  156   MIDI Music Composition..............................3
```

Web Design Certificate

The Web design certificate provides instruction in the design and development
process needed to deliver information and media primarily via the World Wide
Web. This instruction includes acquiring and managing assets (text, graphics,
sound and video), the history and theory of communication forms, screen design,
multimedia authoring, interface design and project management.

Students who complete the Web design certificate should be prepared for employment in a variety of positions within the interactive media field. Potential positions in Web design include writer/editor/researcher, graphics professional, photography/imaging/video professional, music/audio professional, programmer, information designer, interface designer and/or project manager. For more information and to see samples of student work, go to web.jccc.net/academic/cim

(Major Code 4490; CIP Code 11.0801)

Interactive Media

Career Certificate

Prerequisites for Required Courses

```
Note: Prior to beginning the program, the student must
take the following prerequisites, or have taken the
equivalent transfer courses, or have passed the waiver test
(where applicable), or have obtained a waiver from the
program administrator.


CDTP 135   Desktop Photo Manipulation I: Photoshop..............1
CDTP 145   Desktop Illustration I: Illustrator..................1
CWEB 105   Introduction to Web Pages: Dreamweaver*..............1
           Prerequisite: CWEB 101
CWEB 130   Introduction to Flash*..............................1
           Prerequisite: CPCA 161 or CWEB 105 or CWEB 106
```

Required Courses

```
CIM  130   Interactive Media Concepts..........................2
CIM  140   Interactive Media Assets*...........................4
           Prerequisites: CDTP 135 and CDTP 145 and CWEB 105
           and CWEB 130
           Prerequisite or corequisite: CIM 130
CIM  133   Screen Design*......................................4
           Prerequisite: CDTP 135
CIM  156   Interactive Authoring I: Web*.......................4
           Prerequisite: CIM 130
           Prerequisite or corequisite: CIM 140
CIM  200   Interactive Communication Form*.....................3
           Prerequisite or corequisite: CIM 130
CIM  230   Interactive Media Development*......................4
           Prerequisite: CIM 154 or CIM 156 and
           Corequisite: CIM 250
CIM  250   Interface Design*...................................4
           Prerequisite: CIM 154 or CIM 156
           Corequisite: CIM 230
CIM  270   Interactive Media Project*..........................4
           Prerequisites or corequisites: CIM 200 and CIM 230 and
           CIM 250
           TOTAL PROGRAM CREDIT HOURS..........................29
*Prerequisite/Corequisite required
```

Web Design Entrepreneurship Certificate

This certificate is designed to prepare students to open their own business providing Web design services. It provides the student with instruction in the design and development process needed to deliver information and media, primarily via the World Wide Web. This includes acquiring and managing assets (i.e., text, graphics, sound and video), the history and theory of communication forms, screen design, multimedia authoring, interface design, and project management. Additionally, the certificate provides the student instruction in small business development and management.

(Major Code 4200; CIP Code 11.0801)

Interactive Media

Career Certificate

Prerequisites for Required Courses

Note: Prior to beginning the program, the student must take the following prerequisites, or have taken the equivalent transfer courses, or have passed the waiver test (where applicable), or have obtained a waiver from the program administrator.

```
CDTP 135  Desktop Photo Manipulation I: Photoshop..............1
CDTP 145  Desktop Illustration I: Illustrator..................1
CWEB 105  Introduction to Web Pages: Dreamweaver*..............1
          Prerequisite: CWEB 101
CWEB 130  Introduction to Flash*..............................1
          Prerequisite: CPCA 161 or CWEB 105 or CWEB 106
CIM  130  Interactive Media Concepts..........................2
CIM  140  Interactive Media Assets*...........................4
          Prerequisites: CDTP 135 and CDTP 145 and CWEB 105
          and CWEB 130
          Prerequisite or corequisite: CIM 130
```

Required Courses

```
CIM  133  Screen Design*......................................4
          Prerequisite: CDTP 135
CIM  156  Interactive Authoring I: Web*.......................4
          Prerequisite: CIM 130
          Prerequisite or corequisite: CIM 140
ENTR 120  Introduction to Entrepreneurship....................2
ENTR 180  Opportunity Analysis................................2
CIM  200  Interactive Communication Form*.....................3
          Prerequisite or corequisite: CIM 130
CIM  230  Interactive Media Development*......................4
          Prerequisite: CIM 154 or CIM 156 and
          Corequisite: CIM 250
CIM  250  Interface Design*...................................4
          Prerequisite: CIM 154 or CIM 156
          Corequisite: CIM 230
CIM  270  Interactive Media Project*..........................4
          Prerequisites or corequisites: CIM 200 and CIM 230 and
          CIM 250
ENTR 142  Fast Trac Business Plan.............................3
          TOTAL PROGRAM CREDIT HOURS.........................30
*Prerequisite/Corequisite required
```

Students may be interested in taking additional courses, as noted below, to complement their certificate study. These courses are NOT part of the certificate requirements.

```
ENTR 220  Entrepreneurial Marketing*..........................2
          Prerequisite: BUS 230
ENTR 131  Financial Management for Small Business*.............2
          Prerequisite: ACCT 111 or ACCT 121
ENTR 160  Legal Issues for Small Business.....................2
ENTR 195  Franchising.........................................3
          Prerequisite: BUS 230
CIM  135  Digital Imaging and Video*..........................3
          Prerequisite: CDTP 135
          Recommended: PHOT 121
CIM  154  Interactive Authoring I: Director*..................4
          Prerequisite: CIM 130 and
          Prerequisite or corequisite: CIM 140
CIM  235  Advanced Digital Video*.............................3
          Prerequisite: CIM 135
CIM  254  Interactive Authoring II: Director*.................4
          Prerequisite: CIM 154
CIS  162  Database Programming*...............................4
          Prerequisite: CIS 134 or the equivalent
```

```
      MUS   156   MIDI Music Composition..............................3
```

Interior Design, A.A.S.

Seven options in JCCC's interior design program offer students opportunities to choose a career path from a wide variety of exciting fields. Three associate of applied science degree options -- interior design, interior merchandising and interior entrepreneurship -- offer design, retail and business proprietorship skills. Three certificate programs, the interior products sales certificate, interior design and merchandising entrepreneurship certificate and the interior design sales and marketing representative certificate, are available for students who need skills for immediate employment or who want a broader knowledge base for their current employment. The interior design advanced certificate offers classes needed to sit for the NCIDQ exam.

JCCC's program offers courses in interior materials and resources, professional selling, business management, manual and CAD drafting, and product presentation, combined with a basic curriculum of business math, English and art history. Two required internships help develop technical, creative and business skills.

Faculty have worked in the field, which equips them to offer valuable firsthand knowledge of what it takes to succeed.

JCCC's interior design program is recognized by the National Kitchen and Bath Association as an NKBA Accredited program.

Note: Metropolitan Community College students should seek specific counsel from the JCCC program personnel for the appropriate course plan and numbers.

Metropolitan Community College students should refer to Cooperative Program Information.

(Major Code 2750; CIP Code 50.0408)

Interior Design

Associate of Applied Science Degree

First Semester

```
ITMD  121   Interior Design/Tech Prep.............................3
DRAF  164   Architectural Drafting/Residential Interior Design...3
ITMD  133   Furniture & Ornamentation/Antiquity to Renaissance...3
MATH  120   Business Math or higher*.............................3
            Prerequisite: MATH 111 with a grade of "C" or higher
            or appropriate score on the math assessment test
ITMD  125   Interior Textiles...................................3
ENGL  121   Composition I*......................................3
            Prerequisite: ENGL 106
            or appropriate placement test score or EAP 113 and
            EAP 117
            Total Semester Credit Hours........................18
```

Second Semester

```
ITMD  123   Space Planning*.....................................3
            Prerequisites: ITMD 121 with "C" or higher and DRAF 164
            with a grade of "C" or higher or DRAF 261
            with "C" or higher
ITMD  129   Design Presentation*................................3
            Prerequisites: ITMD 121 with a grade of "C" or higher and
            DRAF 164 with a grade of "C" or higher or DRAF
            261 with a grade of "C" or higher
ITMD  132   Materials and Resources.............................3
MKT   134   Professional Selling................................3
ITMD  231   Furniture & Ornamentation Renaissance to 20th Cent...3
BUS   150   Business Communications*............................3
            Prerequisite: ENGL 121
            Total Semester Credit Hours........................18
```

Third Semester

```
DRAF 264   CAD:Interior Design*................................3
           Prerequisites: ITMD 122 or
           ITMD 123 and ITMD 129 both with a grade of
           C or higher, or approval of the program assistant dean
ITMD 271   Budgeting and Estimating*...........................3
           Prerequisites: ITMD 121 with a grade of "C" or higher and
           ITMD 125 with a grade of "C" or higher and MATH 120
           or higher
           with a grade of "C" or higher
ITMD 282   Interiors Internship I*.............................1
           Prerequisite: ITMD 121 with a grade of C or higher
ARTH 180   Art History: Ancient to Renaissance.................3
ECON 132   Survey of Economics.................................3
           or
ECON 230   Economics I.........................................3
ITMD 213   Lighting Design and Planning*.......................3
           Prerequisite: ITMD 121 with grade of "C" or higher
           or FASH 125
           Total Semester Credit Hours........................16
```

Fourth Semester

```
ITMD 221   Residential Design*.................................3
           Prerequisites: DRAF 264 with a grade of "C" or higher and
           ITMD 123 with a grade of "C" or higher and ITMD 129
           with a grade of "C" or higher or ITMD 122 with a grade
           or "C" or higher
ITMD 273   Interiors Seminar: Practices and Procedures*........2
           Prerequisite: ITMD 122 with a grade of "C" or higher or
           ITMD 123 with a grade of "C" or higher
ITMD 284   Interiors Internship II*............................1
           Prerequisites: ITMD 121 with a grade of C or higher
           and ITMD 282 with a grade of C or higher
ITMD 140   Window Treatments*..................................1
           Prerequisites: ITMD 121 and ITMD 125 both with a grade
           of "C" or higher and
           Prerequisite or Corequisite: ITMD 271 or ITMD 275
           both with a grade of "C" or higher
ITMD 145   Upholstered Furniture*..............................1
           Prerequisites:  ITMD 121 and ITMD 125 both with a grade
           of "C" or higher and
           Prerequisite or corequisite:  ITMD 271 or
           ITMD 275 both with a grade of "C" or higher
ITMD 149   Casegoods*..........................................1
           Prerequisite: ITMD 121 with a grade of "C" or higher
ITMD 148   History of Asian Furniture and Design...............2
           Prequisite: Program Facilitator Approval
ITMD 150   Asian Rugs and Carpets..............................1
ITMD 180   Leadership in Design*...............................1
           Prerequisite: ITMD 123 with a grade of "C" or higher
ITMD 239   Capstone: Interior Design*..........................2
           Prerequisite: Program Facilitator Approval
           Health and/or Physical Education Elective............1
           Total Semester Credit Hours........................16
           TOTAL PROGRAM CREDIT HOURS.........................68
*Prerequisite/Corequisite required
```

Students may be interested in taking additional courses, as
noted below, to complement their AAS degree study. These
courses are NOT part of the degree requirements.

```
ITMD 127   Elements of Floral Design...........................1
ITMD 143   Accessory Fundamentals*.............................1
           Prerequisite: ITMD 121 with a grade of "C" or higher
ITMD 175   Advanced Floral Design*.............................1
           Prerequisite: ITMD 127
ITMD 189   Sustaining Design...................................1
ITMD 250   20th Century Designers..............................1
```

```
ITMD 295    Field Study: Design and Merchandising*...............3
            Prerequisites: ITMD 121
            and approval of the program facilitator
ITMD 296    Interior Design: the Orient........................3
*Prerequisite/Corequisite required
```

Interior Design Advanced Certificate

This certificate is designed for students who wish to be certified or registered interior designers. Students must have completed the Interior Design AAS degree.

Faculty have worked in the field, which equips them to offer valuable firsthand knowledge of what it takes to succeed.

JCCC's interior design program is recognized by the National Kitchen and Bath Association as an NKBA Accredited program.

Note: Metropolitan Community College students should seek specific counsel from the JCCC program personnel for the appropriate course plan and numbers.

Metropolitan Community College students should refer to Cooperative Program Information.

(Major Code 4100; CIP Code 50.0408)

Interior Design

Career Certificate

Required Courses

```
ITMD 225    Interior Textiles II*..............................3
            Prerequisite: ITMD 125 with a grade of "C" or higher
DRAF 230    Intermediate CAD: AutoCAD*.........................3
            Prerequisite: DRAF 130
            or approval of the program assistant dean
            or
ART  129    Design Color.......................................3

ITMD 223    Commercial Design*.................................3
            Prerequisite: DRAF 264 with a grade of "C"
            or higher
            Art Electives......................................3
ITMD 219    Issues in Interior Design*.........................3
            Prerequisite: ITMD 221 with a grade of "C" or higher
            Interior Design Electives..........................3
ITMD 234    Kitchen and Bath: Planning and Design*.............3
            Prerequisites: DRAF 264 with a grade of "C" or higher
            and either
            ITMD 122 with a grade of "C" or higher or
            ITMD 123 with a grade of "C" or higher
            TOTAL PROGRAM CREDIT HOURS.........................21
```

Art/Art History electives

```
ARTH 182    Art History: Renaissance to Modern.................3
ART  124    Design 2D..........................................3
ART  127    Design 3D*.........................................3
            Prerequisite: ART 124
```

Interior Design electives

```
ITMD 127    Elements of Floral Design..........................1
ITMD 143    Accessory Fundamentals*............................1
            Prerequisite: ITMD 121 with a grade of "C" or higher
ITMD 175    Advanced Floral Design*............................1
            Prerequisite: ITMD 127
ITMD 250    20th Century Designers.............................1
ITMD 295    Field Study: Design and Merchandising*.............3
            Prerequisites: ITMD 121
```

```
                    and approval of the program facilitator
ITMD 296   Interior Design: the Orient.........................3
*Prerequisite/Corequisite required
```

Interior Design Retail Sales/Manufacturing Rep Certificate

The interior design retail sales/manufacturers representative certificate is a program designed for students employed in or seeking positions in the retail or wholesale interior design market.

Faculty have worked in the field, which equips them to offer valuable firsthand knowledge of what it takes to succeed.

Note: Metropolitan Community College students should seek specific counsel from the JCCC program personnel for the appropriate course plan and numbers.

Metropolitan Community College students should refer to Cooperative Program Information.

(Major Code 6510; CIP Code 50.0408)

Interior Design

Career Certificate

First Semester

```
ITMD 121   Interior Design/Tech Prep...........................3
ITMD 125   Interior Textiles...................................3
ITMD 132   Materials and Resources.............................3
MATH 120   Business Math or higher*............................3
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
MKT  134   Professional Selling................................3
FASH 135   Image Management....................................1
ITMD 282   Interiors Internship I*.............................1
           Prerequisite: ITMD 121 with a grade of C or higher
           Total Semester Credit Hours........................17
```

Second Semester

```
MKT  121   Retail Management...................................3
FASH 125   Visual Merchandising................................3
ITMD 271   Budgeting and Estimating*...........................3
           Prerequisites: ITMD 121 with a grade of "C" or higher and
           ITMD 125 with a grade of "C" or higher and MATH 120
           or higher
           with a grade of "C" or higher
ITMD 284   Interiors Internship II*............................1
           Prerequisites: ITMD 121 with a grade of C or higher
           and ITMD 282 with a grade of C or higher
ITMD       Elective............................................3
           Total Semester Credit Hours........................13
           TOTAL PROGRAM CREDIT HOURS.........................30
```

List of ITMD Electives

```
ITMD 127   Elements of Floral Design...........................1
ITMD 140   Window Treatments*..................................1
           Prerequisites: ITMD 121 and ITMD 125 both with a grade
           of "C" or higher and
           Prerequisite or Corequisite: ITMD 271 or ITMD 275
           both with a grade of "C" or higher
ITMD 143   Accessory Fundamentals*.............................1
           Prerequisite: ITMD 121 with a grade of "C" or higher
ITMD 145   Upholstered Furniture*..............................1
           Prerequisites:  ITMD 121 and ITMD 125 both with a grade
           of "C" or higher and
```

```
                  Prerequisite or corequisite:  ITMD 271 or
                  ITMD 275 both with a grade of "C" or higher
ITMD 147    Lighting Basics*....................................1
                  Prerequisite: ITMD 121 with a grade of "C" or higher
                  or FASH 125
ITMD 149    Casegoods*..........................................1
                  Prerequisite: ITMD 121 with a grade of "C" or higher
ITMD 213    Lighting Design and Planning*.......................3
                  Prerequisite: ITMD 121 with grade of "C" or higher
                  or FASH 125
ITMD 225    Interior Textiles II................................3
                  Prerequisite: ITMD 125 with a grade of "C" or higher
ITMD 231    Furniture & Ornamentation Renaissance to 20th Cent...3
ITMD 273    Interiors Seminar: Practices and Procedures*.........2
                  Prerequisite: ITMD 122 with a grade of "C" or higher or
                  ITMD 123 with a grade of "C" or higher
*Prerequisite/Corequisite required
```

Interior Design & Merchandising Entrep Certificate

The interior design and merchandising entrepreneurship certificate prepares students to open their own interior design or merchandising service or retail business. This certificate is designed to provide the student with basic skills in interior merchandising and design and the basic skills in small business development and management.

Faculty have worked in the field, which equips them to offer valuable firsthand knowledge of what it takes to succeed.

Note: Metropolitan Community College students should seek specific counsel from the JCCC program personnel for the appropriate course plan and numbers.

Metropolitan Community College students should refer to Cooperative Program Information.

(Major Code 4210; CIP Code 50.0408)

Interior Design

Career Certificate

Prerequisites for Required Courses

```
MATH 120    Business Mathematics*...............................3
                  Prerequisite: MATH 111 with a grade of "C" or higher
                  or appropriate score on the math assessment test
DRAF 164    Architectural Drafting/Residential Interior Design...3
```

Required Courses

```
ITMD 121    Interior Design/Tech Prep...........................3
ITMD 125    Interior Textiles...................................3
ITMD 132    Materials and Resources.............................3
ENTR 120    Introduction to Entrepreneurship....................2
ENTR 180    Opportunity Analysis................................2
ITMD 123    Space Planning*.....................................3
                  Prerequisites: ITMD 121 with "C" or higher and DRAF 164
                  with a grade of "C" or higher or DRAF 261
                  with "C" or higher
ITMD 271    Budgeting and Estimating*...........................3
                  Prerequisites: ITMD 121 with a grade of "C" or higher and
                  ITMD 125 with a grade of "C" or higher and MATH 120
                  or higher
                  with a grade of "C" or higher
ITMD 273    Interiors Seminar: Practices and Procedures*.........2
                  Prerequisite: ITMD 122 with a grade of "C" or higher or
                  ITMD 123 with a grade of "C" or higher
ENTR 160    Legal Issues for Small Business.....................2
ENTR 142    Fast Trac Business Plan.............................3
ITMD 282    Interiors Internship I*.............................1
```

```
                 Prerequisite: ITMD 121 with a grade of C or higher
```

Choose 3 of the 5 one-credit hour courses

```
ITMD 127   Elements of Floral Design............................1
ITMD 175   Advanced Floral Design*.............................1
           Prerequisite: ITMD 127
ITMD 140   Window Treatments*..................................1
           Prerequisites: ITMD 121 and ITMD 125 both with a grade
           of "C" or higher and
           Prerequisite or Corequisite: ITMD 271 or ITMD 275
           both with a grade of "C" or higher
ITMD 145   Upholstered Furniture*.............................1
           Prerequisites:  ITMD 121 and ITMD 125 both with a grade
           of "C" or higher and
           Prerequisite or corequisite:  ITMD 271 or
           ITMD 275 both with a grade of "C" or higher
ITMD 147   Lighting Basics*...................................1
           Prerequisite: ITMD 121 with a grade of "C" or higher
           or FASH 125
           TOTAL PROGRAM CREDIT HOURS.........................30
*Prerequisite/Corequisite required


Students may be interested in taking additional courses, as
noted below, to complement their certificate study.  These
courses are NOT part of the certificate requirements.

ENTR 195   Franchising*.......................................3
           Prerequisite: BUS 230
ENTR 220   Entrepreneurial Marketing*.........................2
           Prerequisite: BUS 230
ENTR 131   Financial Management for Small Business*............2
           Prerequisite: ACCT 111 or ACCT 121
```

Interior Entrepreneurship, A.A.S.

Seven options in JCCC's interior design program offer students opportunities to choose a career path from a wide variety of exciting fields. Three associate of applied science degree options -- interior design, interior merchandising and interior entrepreneurship--offer design, retail and business proprietorship skills. Three certificate programs, the interior products sales certificate, interior design and merchandising entrepreneurship certificate and the interior design sales and marketing representative certificate, are available for students who need skills for immediate employment or who want a broader knowledge base for their current employment. The interior design advanced certificate offers classes needed to sit for the NCIDQ exam.

JCCC's program offers courses in interior materials and resources, professional selling, business management, manual and CAD drafting, and product presentation, combined with a basic curriculum of business math, English and art history. Two required work-study internships help develop technical, creative and business skills.

Faculty have worked in the field, which equips them to offer valuable firsthand knowledge of what it takes to succeed.

Note: Metropolitan Community College students should seek specific counsel from the JCCC program personnel for the appropriate course plan and numbers.

Metropolitan Community College students should refer to Cooperative Program Information.

(Major Code 2770; CIP Code 50.0408)

Interior Design

Associate of Applied Science Degree

First Semester

```
ITMD 121   Interior Design/Tech Prep.............................3
ITMD 133   Furniture & Ornamentation/Antiquity to Renaissance...3
DRAF 164   Architectural Drafting/Residential Interior Design...3
MATH 120   Business Math or higher*.............................3
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
ITMD 125   Interior Textiles...................................3
ENGL 121   Composition I*......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
           Total Semester Credit Hours........................18
```

Second Semester

```
ITMD 123   Space Planning*.....................................3
           Prerequisites: ITMD 121 with "C" or higher and DRAF 164
           with a grade of "C" or higher or DRAF 261
           with "C" or higher
           Interiors Elective..................................3
ITMD 132   Materials and Resources.............................3
MKT  134   Professional Selling................................3
ITMD 231   Furniture & Ornamentation Renaissance to 20th Cent...3
BUS  150   Business Communications*............................3
           Prerequisite: ENGL 121
           Total Semester Credit Hours........................18
```

Third Semester

```
           Interiors Elective..................................3
ITMD 271   Budgeting and Estimating*...........................3
           Prerequisites: ITMD 121 with a grade of "C" or higher and
           ITMD 125 with a grade of "C" or higher and MATH 120
           or higher
           with a grade of "C" or higher
ITMD 282   Interiors Internship I*.............................1
           Prerequisite: ITMD 121 with a grade of C or higher
ARTH 180   Art History: Ancient to Renaissance.................3
ECON 132   Survey of Economics.................................3
           or
ECON 230   Economics I.........................................3
           Business/Marketing/Entrepreneurship
           Electives...........................................3
           Total Semester Credit Hours........................16
```

Fourth Semester

```
ITMD 273   Interiors Seminar: Practices and Procedures*........2
           Prerequisite: ITMD 122 with a grade of "C" or higher or
           ITMD 123 with a grade of "C" or higher
ITMD 284   Interiors Internship II*............................1
           Prerequisites: ITMD 121 with a grade of C or higher
           and ITMD 282 with a grade of C or higher
           Business/Marketing/Entrepreneurship
           Electives...........................................6
ITMD 237   Capstone: Merchandising and Entrepreneurship*.......2
           Prerequisite: Approval of program facilitator
ITMD 180   Leadership in Design*...............................1
           Prerequisite: ITMD 123 with a grade of "C" or higher
           Physical Education Elective.........................1
           Interiors Elective..................................3
           Total Semester Credit Hours........................16
           TOTAL PROGRAM CREDIT HOURS.........................68
```

Interiors Electives

```
ITMD 127   Elements of Floral Design...........................1
ITMD 140   Window Treatments*..................................1
```

```
            Prerequisites: ITMD 121 and ITMD 125 both with a grade
            of "C" or higher and
            Prerequisite or Corequisite: ITMD 271 or ITMD 275
            both with a grade of "C" or higher
ITMD 143    Accessory Fundamentals*...............................1
            Prerequisite: ITMD 121 with a grade of "C" or higher
ITMD 145    Upholstered Furniture*................................1
            Prerequisites:  ITMD 121 and ITMD 125 both with a grade
            of "C" or higher and
            Prerequisite or corequisite:  ITMD 271 or
            ITMD 275 both with a grade of "C" or higher
ITMD 147    Lighting Basics*......................................1
            Prerequisite: ITMD 121 with a grade of "C" or higher
            or FASH 125
ITMD 148    History of Asian Furniture and Design................2
            Prequisite: Program Facilitator Approval
ITMD 149    Casegoods*............................................1
            Prerequisite: ITMD 121 with a grade of "C" or higher
ITMD 150    Asian Rugs and Carpets...............................1
ITMD 175    Advanced Floral Design*..............................1
            Prerequisite: ITMD 127
ITMD 213    Lighting Design and Planning*........................3
            Prerequisite: ITMD 121 with grade of "C" or higher
            or FASH 125
ITMD 225    Interior Textiles II*................................3
            Prerequisite: ITMD 125 with a grade of "C" or higher
ITMD 250    20th Century Designers...............................1
ITMD 295    Field Study: Design and Merchandising*...............3
            Prerequisites: ITMD 121
            and approval of the program facilitator
ITMD 296    Interior Design: the Orient..........................3
```

Business/Marketing/Entrepreneurship Electives

```
ACCT 111    Small Business Accounting............................3
               or
ACCT 121    Accounting I.........................................3
BUS  230    Marketing............................................3
MKT  121    Retail Management....................................3
ENTR 120    Introduction to Entrepreneurship.....................2
ENTR 131    Financial Management for Small Business*.............2
            Prerequisite: ACCT 111 or ACCT 121
ENTR 142    Fast Trac Business Plan..............................3
ENTR 160    Legal Issues for Small Business......................2
ENTR 180    Opportunity Analysis.................................2
*Prerequisite/Corequisite required
```

Interior Merchandising, A.A.S.

Seven options in JCCC's interior design program offer students opportunities to choose a career path from a wide variety of exciting fields. Three associate of applied science degree options -- interior design, interior merchandising and interior entrepreneurship -- offer design, retail and business proprietorship skills. Three certificate programs, the interior products sales certificate, interior design and merchandising entrepreneurship certificate and the interior design sales and marketing representative certificate, are available for students who need skills for immediate employment or who want a broader knowledge base for their current employment. The interior design advanced certificate offers classes needed to sit for the NCIDQ exam.

JCCC's program offers courses in materials and resources, professional selling, business management, manual and CAD drafting, and product presentation, combined with a basic curriculum of business math, English and art history. Two required work-study internships help develop technical, creative and business skills.

Faculty have worked in the field, which equips them to offer valuable firsthand knowledge of what it takes to succeed.

Note: Metropolitan Community College students should seek specific counsel

from the JCCC program personnel for the appropriate course plan and numbers. Metropolitan Community College students should refer to Cooperative Program Information.

(Major Code 2760; CIP Code 50.0408)

Interior Design

Associate of Applied Science Degree

First Semester

```
ITMD 121   Interior Design/Tech Prep............................3
ITMD 133   Furniture & Ornamentation/Antiquity to Renaissance...3
DRAF 164   Architectural Drafting/Residential Interior Design...3
MATH 120   Business Math or higher*............................3
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
ITMD 125   Interior Textiles..................................3
ENGL 121   Composition I*.....................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
           Total Semester Credit Hours........................18
```

Second Semester

```
ITMD 123   Space Planning*....................................3
           Prerequisites: ITMD 121 with "C" or higher and DRAF 164
           with a grade of "C" or higher or DRAF 261
           with "C" or higher
           Interiors Elective.................................3
ITMD 132   Materials and Resources............................3
MKT  134   Professional Selling...............................3
ITMD 231   Furniture & Ornamentation Renaissance to 20th Cent...3
BUS  150   Business Communications*...........................3
           Prerequisite: ENGL 121
           Total Semester Credit Hours........................18
```

Third Semester

```
           Interiors Elective.................................3
ITMD 271   Budgeting and Estimating*..........................3
           Prerequisites: ITMD 121 with a grade of "C" or higher and
           ITMD 125 with a grade of "C" or higher and MATH 120
           or higher
           with a grade of "C" or higher
ITMD 282   Interiors Internship I*............................1
           Prerequisite: ITMD 121 with a grade of C or higher
ARTH 180   Art History: Ancient to Renaissance................3
ECON 132   Survey of Economics................................3
           or
ECON 230   Economics I........................................3
           Business/Marketing Elective........................3
           Total Semester Credit Hours........................16
```

Fourth Semester

```
           Interiors Elective.................................3
ITMD 273   Interiors Seminar: Practices and Procedures*.........2
           Prerequisite: ITMD 122 with a grade of "C" or higher or
           ITMD 123 with a grade of "C" or higher
ITMD 284   Interiors Internship II*...........................1
           Prerequisites: ITMD 121 with a grade of C or higher
           and ITMD 282 with a grade of C or higher
           Business/Marketing Elective........................3
FASH 125   Visual Merchandising...............................3
FASH 135   Image Management...................................1
           or
```

```
ITMD 180   Leadership in Design................................1
           Prerequisite: ITMD 123 with a grade of "C" or higher
ITMD 237   Capstone: Merchandising and Entrepreneurship*........2
           Prerequisite: Approval of program facilitator
           Physical Education Elective.........................1
           Total Semester Credit Hours.......................16
           TOTAL PROGRAM CREDIT HOURS........................68
```

Interior Electives

```
ITMD 127   Elements of Floral Design..........................1
ITMD 140   Window Treatments*.................................1
           Prerequisites: ITMD 121 and ITMD 125 both with a grade
           of "C" or higher and
           Prerequisite or Corequisite: ITMD 271 or ITMD 275
           both with a grade of "C" or higher
ITMD 143   Accessory Fundamentals*............................1
           Prerequisite: ITMD 121 with a grade of "C" or higher
ITMD 145   Upholstered Furniture*.............................1
           Prerequisites:  ITMD 121 and ITMD 125 both with a grade
           of "C" or higher and
           Prerequisite or corequisite:  ITMD 271 or
           ITMD 275 both with a grade of "C" or higher
ITMD 147   Lighting Basics*...................................1
           Prerequisite: ITMD 121 with a grade of "C" or higher
           or FASH 125
ITMD 148   History of Asian Furniture and Design...............2
           Prequisite: Program Facilitator Approval
ITMD 149   Casegoods*.........................................1
           Prerequisite: ITMD 121 with a grade of "C" or higher
ITMD 150   Asian Rugs and Carpets.............................1
ITMD 175   Advanced Floral Design*............................1
           Prerequisite: ITMD 127
ITMD 213   Lighting Design and Planning*......................3
           Prerequisite: ITMD 121 with grade of "C" or higher
           or FASH 125
ITMD 225   Interior Textiles II*..............................3
           Prerequisite: ITMD 125 with a grade of "C" or higher
ITMD 250   20th Century Designers.............................1
ITMD 295   Field Study: Design and Merchandising*.............3
           Prerequisites: ITMD 121
           and approval of the program facilitator
ITMD 296   Interior Design: the Orient........................3
```

Business/Marketing Electives

```
BUS  145   Small Business Management..........................3
BUS  230   Marketing.........................................3
MKT  121   Retail Management.................................3
MKT  221   Sales Management*.................................3
           Prerequisite: MKT 134 or MKT 133
*Prerequisite/Corequisite required
```

Interior Products Sales Representative Certificate

The interior products sales representative certificate is a 17-credit-hour program designed for students employed in or seeking positions in the interior design retail market. The required courses are already included in the approved curriculum of the interior design program.

Faculty have worked in the field, which equips them to offer valuable first hand knowledge of what it takes to succeed.

Note: Metropolitan Community College students should seek specific counsel from the JCCC program personnel for the appropriate course plan and numbers.

Metropolitan Community College students should refer to Cooperative Program Information.

(Major Code 6500; CIP Code 50.0408)

Interior Design

Career Certificate

Required Courses

```
ITMD 121   Interior Design/Tech Prep...........................3
ITMD 125   Interior Textiles..................................3
ITMD 132   Materials and Resources............................3
MATH 120   Business Math or higher*...........................3
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
MKT  134   Professional Selling...............................3
FASH 135   Image Management...................................1
ITMD 282   Interiors Internship I*............................1
           Prerequisite: ITMD 121 with a grade of C or higher
           TOTAL PROGRAM CREDIT HOURS.........................17
*Prerequisite/Corequisite required
```

Interpreter Training, A.A.S.

The employment outlook for sign language interpreters is promising. As the population grows, so does the need for interpreters. Another factor in the predicted increase in employment opportunities is the effort many social service agencies, school systems, medical services and industries are making to provide interpreter services.

JCCC's program concentrates on preparing students to provide entry-level interpretation and transliteration for the deaf, hard of hearing and non-deaf communities. During the last semester of the program, students participate in a practicum class in which they interpret under supervision in a variety of situations. Upon successful completion of this program, and a required capstone evaluation, students will earn an associate of applied science degree.

This is a selective admission program with limited enrollment. The deadline for fall semester applications is February 15th. If you are interested, contact the Admissions office for an application packet, which includes prerequisites, deadlines, admission requirements and academic criteria.

Students must earn a grade of "C" or higher in all coursework.

(Major Code 259A; CIP Code 16.1603)

Interpreter Training

Associate of Applied Science Degree

Prerequisites

```
ASL  120   Elementary American Sign Language I.................3
ASL  121   Elementary American Sign Language II*...............3
           Prerequisite: INTR 120 or ASL 120 or FL 180 with a grade
           of "C" or higher
ENGL 121   Composition I......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
           Total Prerequisite Credit Hours....................9
Note: ENGL 121 must be passed with a 'B' or higher.
Note: ASL 120 and 121 must be passed with a 'C' or higher.
```

General Education Requirements

```
ANTH 125   Cultural Anthropology..............................3
Note: ANTH 125 is required to meet the Social Science
and/or Economics Elective and must be taken before second
semester of the ITP.
```

```
SPD  120   Interpersonal Communication.........................3
Note: SPD 120 is required to meet the Communications
Elective and must be taken before the second semester of
the ITP.


           Health and/or Physical Educ Elect...................1
SPD  121   Public Speaking.....................................3
ENGL 122   Composition II*.....................................3
           Prerequisite: ENGL 121
           Science and/or Math Elective........................3
           Humanities Elective.................................3
           Total General Education Credit Hours...............19
```

```
Note:  It is highly recommended that all general
education requirements be taken prior to enrollment
in the program or during the summer.  However, AAC 150
should be taken in student's last semester due to
course/career relevancy.
```

First Semester

```
INTR 122   Intermediate American Sign Language I*..............3
           Prerequisite: INTR 121 or ASL 121 or FL 181
           with a grade of "C" or
           higher and
           Corequisite: Students accepted in the interpreter
           training program must take corequisites of
           INTR 130 and INTR 126 and (INTR 147 or ASL 145) and
           (INTR 145 or ASL 145)
           all with a grade of "C" or higher
INTR 126   Classifiers in American Sign Language*..............2
           Prerequisites: INTR 121 or ASL 121 with
           grade of "C" or higher and acceptance in the interpreter
           training program
           Corequisites: (INTR 122 or ASL 122) and INTR 130 and
           (INTR 147 or ASL 147)
           and (INTR 145 or ASL 145)
INTR 130   Survey of the Interpreting Profession*..............3
           Prerequisites: INTR 121  or FL 181 or ASL 121
           with a grade of "C" or higher and
           acceptance in the interpreter training
           program
           Corequisites: (INTR 122 or ASL 122) and INTR 126 and
           (INTR 147 or ASL 147) and (INTR 145 or ASL 145)
           all with a grade of "C" or higher
INTR 147   Fingerspelling I*...................................2
           Prerequisite: INTR 121 or FL 181 or ASL 121
           with a grade of "C" or higher and
           Corequisites: For students accepted in the interpreter
           training program, enroll in:
           (INTR 122 or ASL 122) and INTR 126 and
           INTR 130 and (INTR 145 or ASL 145) all with a
           grade of "C" or higher
INTR 145   Introduction to the Deaf Community*.................3
           Prerequisite: Acceptance to interpreter training program
           and
           Prerequisite or corequisite: ANTH 125 and SPD 120 for
           Interpreter Training Program
           Corequisites for Interpreter Training Prog: INTR 122 and
           INTR 126 and INTR 130 and INTR 147
           all with a grade of "C" or higher
           Note: Prerequisite or corequisite of INTR 120 or ASL 120
           or FL 180
           required for students in the American Sign Language
           Studies Certificate
           Total Semester Credit Hours.........................13
```

Second Semester

```
INTR 123    Intermediate American Sign Language II*..............3
            Prerequisite: INTR 122 or ASL 122 or FL 270
            with a grade of "C" or higher and
            Corequisite: For students accepted in the interpreter
            training program: INTR 131 and INTR 135 and INTR 242
            and INTR 248 all with a grade of "C" or higher
INTR 131    Interpreting Preparation Skills*.....................2
            Prerequisites: INTR 130 with a grade of "C" or higher
            and acceptance into the
            interpreter training program
            Corequisites: INTR 123 and INTR 135
            and INTR 242 and INTR 248 all with a grade of "C" or
            higher
INTR 135    Intro to American Sign Language Linguistics*.........3
            Prerequisite: INTR 122 or ASL 122 or FL 270
            with a grade of "C" or higher
            Corequisites: for students accepted in the interpreter
            training program enroll in:
            INTR 123 and INTR 242 and INTR 131
            and INTR 248 all with a grade of "C" or higher
INTR 242    Fingerspelling II*...................................2
            Prerequisite: INTR 142 with a grade of "C" or higher
            Corerequisites: INTR 123 and INTR 131 and INTR
            135 and INTR 248 all with a grade of "C" or higher
INTR 248    Deaf Community Ethnography*..........................3
            Prerequisite: INTR 145 or ASL 145
            with a grade of "C" or higher
            Corequisites: (INTR 123 or ASL 123) and INTR 131 and
            (INTR 135 or ASL 135) and INTR 242 all
            with a grade of "C" or higher
            Total Semester Credit Hours.........................13
```

Third Semester

```
INTR 181    Interpreting Practicum I*............................1
            Prerequisite: INTR 130 with a grade of "C" or higher
            Corequisites: (INTR 145 or ASL 145) and INTR 223 and
            INTR 226 and
            INTR 250 all with a grade of "C" or higher
INTR 223    Advanced American Sign Language*.....................3
            Prerequisite: INTR 123 or ASL 123 or
            FL 271 with a grade of "C" or higher
            Corequisites:
            INTR 250 and
            INTR 226 and
            INTR 181 all with a grade of "C" or higher
INTR 226    Specialized and Technical Vocabulary*................2
            Prerequisite: INTR 123 or ASL 123 with a grade
            of "C" or higher
            Corequisites: INTR 181 and
            INTR 250 and
            INTR 223 all with a grade of "C" or higher
INTR 250    Interpreting I*......................................6
            Prerequisite: INTR 131 with a grade of "C" or higher
            Corequisites: INTR 181 and INTR 223 and INTR 226
            all with a grade of "C" or higher
            Total Semester Credit Hours.........................12
```

Fourth Semester

```
INTR 251    Interpreting II*.....................................2
            Prerequisite: INTR 250 with a grade of "C" or higher
            Corequisites: INTR 262 and INTR 282 and AAC 150 all
            with a grade of "C" or higher
INTR 262    Seminar on Interpreting*.............................3
            Prerequisite: INTR 250 with a grade of "C" or higher
            Corequisites: INTR 251 and INTR 282 and AAC 150 all
            with a grade of "C" or higher
INTR 282    Interpreting Practicum II*...........................6
            Prerequisite: INTR 181 with a grade of "C" or higher
```

```
            Corequisites: INTR 251 and INTR 262 and AAC 150 all with
            a grade of "C" or higher
AAC  150    Job Search Skills....................................1
            Total Semester Credit Hours.........................12
            TOTAL PROGRAM CREDIT HOURS..........................69
*Prerequisite/Corequisite required
```

American Sign Language Studies Certificate

The American Sign Language (ASL) studies postsecondary certificate has been developed based on the need for professionals and community members to be skilled in ASL. This program is intended as supplementary and does not prepare the learner to work as an interpreter. MATH 115 or higher is required for the certificate program; students planning to apply for admission to the interpreter training program after receiving their certificates are advised that MATH 116 or higher and/or a science elective are required for the A.A.S. degree. Students should contact a counselor or the career program facilitator for advice concerning graduation requirements.

Students must earn a grade of "C" or higher in all ASL courses.

Please note: ASL 145, ASL 122 and ASL 147 are only offered in the fall semester; ASL 123, ASL 135 and ASL 150 are only offered in the spring semester.

(Major Code 6800; CIP Code 16.1603)

Interpreter Training

Career Certificate

First Semester

```
ASL  120    Elementary American Sign Language I..................3
ASL  145    Introduction to the Deaf Community*..................3
            Prerequisites or Corequisite: INTR 120 or ASL 120 or
            FL 180 with
            a grade of "C" or higher
            Health/Physical Education Elective...................1
ENGL 121    Composition I*.......................................3
            Prerequisite: ENGL 106
            or appropriate placement test score or EAP 113 and
            EAP 117
            Total Semester Credit Hours.........................10
```

Second Semester

```
ASL  121    Elementary American Sign Language II*................3
            Prerequisite: INTR 120 or ASL 120 or FL 180 with a grade
            of "C" or higher
            Social Science or Economics Elective.................3
ENGL 122    Composition II*......................................3
            Prerequisite: ENGL 121
            Total Semester Credit Hours..........................9
```

Third Semester

```
ASL  122    Intermediate American Sign Language I*...............3
            Prerequisites: INTR 121 or ASL 121 or FL 181
            with a grade of "C" or higher
ASL  147    Fingerspelling I*....................................2
            Prerequisites: INTR 121 or ASL 121 or FL 181.
            with a grade of "C" or higher
            Math Elective*.......................................3
            Total Semester Credit Hours..........................8
```

Fourth Semester

```
ASL  123    Intermediate American Sign Language II*..............3
```

```
                Prerequisites: INTR 122 or ASL 122 or FL 270
                with a grade of "C" or higher
ASL  135   Intro to American Sign Language Linguistics*.........3
                Prerequisites: INTR 122 or ASL 122 or FL 270
                with a grade of "C" or higher
ASL  150   American Sign Language Literature*....................3
                Prerequisite: INTR 122 or ASL 122 with a grade of "C" or
                higher
                Total Semester Credit Hours..........................9
                TOTAL PROGRAM CREDIT HOURS..........................36
```

Math Elective

```
MATH 115   Elementary Algebra*..................................3
                Prerequisite: MATH 111 with a grade of "C" or higher
                or appropriate score on the math assessment test
MATH 116   Intermediate Algebra*................................3
                Prerequisite: MATH 115 with a grade of "C" or higher
                or appropriate score on the math assessment test
MATH 118   Geometry*............................................3
                Prerequisite:  MATH 115 with a grade of "C" or higher
                or appropriate score on the math assessment test
MATH 120   Business Mathematics*................................3
                Prerequisite: MATH 111 with a grade of "C" or higher
                or appropriate score on the math assessment test
MATH 122   Mathematics in Our Culture*..........................3
                Prerequisite: MATH 111 with a grade of "C" or higher
                or appropriate score on the math assessment test
MATH 133   Technical Mathematics I*.............................4
                Prerequisite: MATH 111 with a grade of "C" or higher
                or appropriate score on the math assessment test
MATH 134   Technical Mathematics II*............................5
                Prerequisite: MATH 133 or an equivalent course with a
                grade of "C" or higher
MATH 165   Finite Mathematics*..................................3
                Prerequisite: MATH 116 with a grade of "C" or higher
                or appropriate score on the math assessment test
MATH 172   Trigonometry*........................................3
                Prerequisite: MATH 171 with a grade of "C" or higher
                or appropriate score on the math assessment test
                Note: Not available to students with credit in MATH 173
MATH 173   Precalculus*.........................................5
                Prerequisite: MATH 116 with a grade of "C" or higher
                or appropriate score on the math assessment test
                Note:Not available for credit for students with credit in
                MATH 171 and/or MATH 172
MATH 175   Discrete Mathematics and its Applications*...........3
                Prerequisite: MATH 171 or MATH 173
                with a grade of "C" or higher
                or appropriate score on the math assessment test
MATH 181   Statistics*..........................................3
                Prerequisite: MATH 171 or MATH 173
                or an equivalent course with a grade of "C" or higher
                or appropriate score on the math assessment test
MATH 225   Mathematics as a Decision Making Tool*...............3
                Prerequisite: MATH 171 or MATH 173
                with a grade of "C" or higher
                or appropriate score on the math assessment test
MATH 231   Business and Applied Calculus I*.....................3
                Prerequisite: MATH 171 or MATH 173
                with a grade of "C" or higher
                or appropriate score on the math assessment test
MATH 232   Business and Applied Calculus II*....................3
                Prerequisites: MATH 231 and either MATH 172 or MATH 173
                with a grade of "C" or higher
                or appropriate score on the math assessment test
MATH 241   Calculus I*..........................................5
                Prerequisite: MATH 172 or MATH 173
                or an equivalent course with a grade of "C" or higher
                or an appropriate score on an assessment test
```

```
MATH 242   Calculus II*....................................5
           Prerequisite: MATH 237 or MATH 241
           or an equivalent course with a grade of "C" or higher
MATH 243   Calculus III*...................................5
           Prerequisite: MATH 242
           or an equivalent course with a grade of "C" or higher
MATH 244   Differential Equations*.........................3
           Prerequisite: MATH 243
           or an equivalent course with a grade of "C" or higher
*Prerequisite/Corequisite required
```

Health Care Interpreting Certificate

Health care interpreting (HCI) is designed to give bilingual (English and Spanish) students the awareness, knowledge and skills necessary to serve as entry-level interpreters and translators in health care settings, including hospitals, clinics, medical offices and similar environments. Program completers should be eligible for employment as salaried or on-call staff interpreters, or as self-employed freelance interpreters. Employment opportunities may also be available with professional interpreting and translating service companies. Although the emphasis of the program is medical interpreting, the skills gained could be applied to other interpreting and translating settings in the community, such as conference and escort interpreting and translation of written documents.

The health care interpreting program is a 20-credit hour vocational program leading to a certificate of completion. It is designed to be completed in three semesters, although there is enough flexibility in the curriculum to extend the time period for several additional semesters, if the student prefers a slower pace. The program is organized in a progression of courses leading the student from general concepts to increasingly complex skills and knowledge, culminating in a comprehensive skills exam and a professional practicum. It includes five courses developed specifically for the program plus two courses offered through other departments. Students must earn a grade of C or higher in each of the program's courses to continue in the program. The latter two courses, AAC 130, Medical Terminology, and HC 101, Introduction to Health Care Delivery, do not have prerequisites and could be taken at any time prior to completion of the program. Students must have all course work but the HC 101 course completed before beginning HCI 180, the medical interpreting practicum.

The HCI program is organized as part of the JCCC interpreter training program, although it has its own unique course prefix (HCI) and curriculum. Other courses in the interpreter training program emphasize deaf communication and sign language. HCI students should enroll only in courses with the HCI prefix, plus AAC 130 and HC 101.

Students must earn a grade of "C" or higher in all coursework and be able to demonstrate at least 85% accuracy in both English and Spanish while interpreting.

(Major Code 4390; CIP Code 16.0103)

Interpreter Training

Career Certificate

Fall Semester

```
HCI  110   Introduction to Interpreting*......................3
           Prerequisites: Interview and permission of the
           facilitator. Potential indicators of proficiency may be
           required.
HCI  120   Interpreting Skills I*.............................3
           Prerequisite or corequisite: HCI 110 with a grade of "C"
           or higher
           Total Semester Credit Hours.........................6
```

Spring Semester

```
HCI  130   Interpreting Skills II*............................3
           Prerequisites: HCI 110 with a grade of "C" or higher and
```

```
                HCI 120 with a grade of "C" or higher
HCI   140   Spanish Medical Interpreting*.........................3
                Prerequisite: HCI 120 with a grade of "C" or higher and
                Prerequisites or corequisites: HCI 130 with a grade of
                "C" or higher and AAC 130 with a grade of "C" or higher
AAC   130   Medical Terminology..................................3
                Total Semester Credit Hours.........................9
```

Fall Semester

```
HCI   180   Medical Interpreting Practicum*.......................2
                Prerequisites: HCI 130 with a grade of "C" or higher and
                HCI 140 with a grade of "C" or higher and
                Prerequisite or corequisite: HC 101 with a grade of "C"
                or higher
HC    101   Introduction to Health Care Delivery.................3
                Total Semester Credit Hours.........................5
                TOTAL PROGRAM CREDIT HOURS.........................20
*Prerequisite/Corequisite required
```

Health Care Interpreting Entrepreneurship Certificate

This certificate is designed to prepare students to open their own business providing health care interpreting services. The certificate will provide the student with instruction in the national standards; professional roles and responsibilities of interpreters; common medical conditions, treatments, protocols and procedures; medical terminology in both English and Spanish; culture competence; code of ethics and professional standards of practice; and legal aspects of interpreting. Students will successfully complete a field practicum course and a comprehensive skills test. Prospective students must demonstrate fluency in both English and Spanish through an oral interview and other documentation as needed. Additionally, the certificate provides the student instruction in small business development and management.

Students must earn a grade of "C" or higher in all coursework and be able to demonstrate at least 85% accuracy in both English and Spanish while interpreting.

(Major Code 4260; CIP Code 16.0103)

Interpreter Training

Career Certificate

Required Courses

```
HCI   110   Introduction to Interpreting*.........................3
                Prerequisites: Interview and permission of the
                facilitator. Potential indicators of proficiency may be
                required.
HCI   120   Interpreting Skills I*................................3
                Prerequisite or corequisite: HCI 110 with a grade of "C"
                or higher
AAC   130   Medical Terminology..................................3
ENTR  120   Introduction to Entrepreneurship....................2
ENTR  180   Opportunity Analysis................................2
HCI   130   Interpreting Skills II*...............................3
                Prerequisites: HCI 110 with a grade of "C" or higher and
                HCI 120 with a grade of "C" or higher
HCI   140   Spanish Medical Interpreting*.........................3
                Prerequisite: HCI 120 with a grade of "C" or higher and
                Prerequisites or corequisites: HCI 130 with a grade of
                "C" or higher and AAC 130 with a grade of "C" or higher
HC    101   Introduction to Health Care Delivery.................3
HCI   180   Medical Interpreting Practicum*.......................2
                Prerequisites: HCI 130 with a grade of "C" or higher and
                HCI 140 with a grade of "C" or higher and
                Prerequisite or corequisite: HC 101 with a grade of "C"
                or higher
```

```
ENTR 142   Fast Trac Business Plan..............................3
           TOTAL PROGRAM CREDIT HOURS.........................27
*Prerequisite/Corequisite required
```

```
Students may be interested in taking additional courses, as
noted below, to complement their certificate study.  These
courses are NOT part of the certificate requirements.
```

```
ENTR 220   Entrepreneurial Marketing*...........................2
           Prerequisite: BUS 230
ENTR 131   Financial Management for Small Business*.............2
           Prerequisite: ACCT 111 or ACCT 121
ENTR 160   Legal Issues for Small Business......................2
ENTR 195   Franchising*.........................................3
           Prerequisite: BUS 230
```

Land Surveying, A.A.S.

The Land Surveying, AAS degree program is granted by Metropolitan Community College, but coordinated at JCCC.

This program leads to an associate in applied science degree which provides students with the experience and knowledge they need to take the exam to become a land surveyor.

The JCCC land surveying program is offered to Johnson County residents in cooperation with MCC-Longview Community College. The support courses are held at JCCC. Program course and credit hours are subject to change because of the requirement changes at the degree-granting institution. It is the student's responsibility to check with a JCCC counselor or advisor before enrollment. Contact MCC-Longview Community College at 816-672-2510 for an application packet, which includes deadlines, program prerequisites and admission requirements.

Note: Johnson County Community College students should seek specific counsel from the MCC program personnel for the appropriate course plan and numbers.

Johnson County Community College students should refer to Cooperative Program Information.

Associate of Applied Science Degree

```
Degree Granted by Metropolitan Community College
```

General Education Requirements-must be taken at JCCC

```
ENGL 121   Composition I*.......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
ENGL 122   Composition II*......................................3
           Prerequisite: ENGL 121
ENGL 123   Technical Writing I*.................................3
           Prerequisite: ENGL 121
SPD  121   Public Speaking......................................3
MATH 171   College Algebra*.....................................3
           Prerequisite: MATH 116 with a grade of "C" or higher
           or MATH 134 with a grade of "C" or higher
           or appropriate score on the math assessment test
           Note: Not available to students with credit in MATH 173
           AND
MATH 172   Trigonometry*........................................3
           Prerequisite: MATH 171 with a grade of "C" or higher
           or appropriate score on the math assessment test
           Note: Not available to students with credit in MATH 173
           OR
MATH 173   Precalculus*.........................................5
           Prerequisite: MATH 116 with a grade of "C" or higher
           or appropriate score on the math assessment test
```

```
                    Note:Not available for credit for students with credit in
                    MATH 171 and/or MATH 172


                    American Institutions (choose one from the following list):
HIST 140    U.S. History to 1877.................................3
            OR
HIST 141    U.S. History Since 1877.............................3
            OR
ECON 132    Survey of Economics.................................3
            OR
ECON 230    Economics I.........................................3
            OR
PHIL 143    Ethics..............................................3
            OR
POLS 122    Political Science...................................3
            OR
POLS 124    American National Government........................3
            OR
POLS 126    State and Local Government...........................3


GEOS 140    Physical Geography..................................3
            AND
GEOS 141    Physical Geography Lab*.............................2
            Prerequisite or Corequisite: GEOS 140 or the equivalent
            OR
ASTR 122    Astronomy...........................................4
MATH 181    Statistics*.........................................3
            Prerequisite: MATH 171 or MATH 173
            or an equivalent course with a grade of "C" or higher
            or appropriate score on the math assessment test
```

Specific Program Requirements-may be taken at JCCC

```
ENGR 180    Engineering Land Surveying I*.......................3
            Corequisite: MATH 134 or MATH 172
ENTR 142    Fast Trac Business Plan.............................3
            Total JCCC Credit Hours........................33-35
```

Specific Program Requirements-taken at MCC-Longview

```
KSS  153    The Missouri Constitution...........................1
KSRV 152    Engineering Graphics & CADD I*......................5
            Prerequisite: MATH test
KSRV 120    Introduction to Geographic Information Systems.......3
KSRV 137    Subdivision Planning and Layout*....................3
            Prerequisites: ENGR 180 MCC's and DRAF 152
KSRV 235    Advanced Surveying*.................................3
            Prerequisite: ENGR 180
KSRV 236    Boundary Control & Legal Principles*................3
            Prerequisite: ENGR 180
KSRV 237    Evidence and Procedures for Boundary Locations*......3
            Prerequisite: ENGR 180
KSRV 244    Fundamentals of GPS Surveying*......................3
            Prerequisite: ENGR 180
```

Specific Program Requirements-taken at JCCC or MCC-Longview

```
Choose TWO courses from the following list:

ACCT 121    Accounting I........................................3
DRAF 230    Intermediate CAD: AutoCAD*..........................3
            Prerequisite: DRAF 130
            or approval of the program assistant dean
            OR
KSRV 269    Computer Aided Design II*...........................4
            Prerequisites: DRAF 152 or 169 (MCC)
KSRV 220    GIS Database and Design*............................3
            Prerequisite: KSRV 120
```

```
             Total MCC Credit Hours.............................30
             TOTAL PROGRAM CREDIT HOURS.......................63-65
    *Prerequisite/Corequisite required
```

Land Surveying Certificate

The Land Surveying Certificate program is granted by Metropolitan Community College, but coordinated at JCCC.

This certificate prepares an individual to take the state-licensing exam to become a registered land surveyor with the state of Missouri.

The JCCC land surveying certificate is offered to Johnson County residents in cooperation with MCC-Longview Community College. The support courses are held at JCCC. Program course and credit hours are subject to change because of the requirement changes at the degree-granting institution. It is the student's responsibility to check with a JCCC counselor or advisor before enrollment. Contact MCC-Longview Community College at 816-672-2510 for an application packet, which includes deadlines, program prerequisites and admission requirements.

Note: Johnson County Community College students should seek specific counsel from the MCC program personnel for the appropriate course plan and numbers.

Johnson County Community College students should refer to Cooperative Program Information.

Career Certificate

```
Certificate granted by Metropolitan Community College
```

Specific Program Requirements-must be taken at JCCC

```
MATH 171  College Algebra*..................................3
          Prerequisite: MATH 116 with a grade of "C" or higher
          or MATH 134 with a grade of "C" or higher
          or appropriate score on the math assessment test
          Note: Not available to students with credit in MATH 173
          AND
MATH 172  Trigonometry*...................................3
          Prerequisite: MATH 171 with a grade of "C" or higher
          or appropriate score on the math assessment test
          Note: Not available to students with credit in MATH 173
          OR
MATH 173  Precalculus*....................................5
          Prerequisite: MATH 116 with a grade of "C" or higher
          or appropriate score on the math assessment test
          Note:Not available for credit for students with credit in
          MATH 171 and/or MATH 172
ENGR 180  Engineering Land Surveying I*.........................3
          Corequisite: MATH 134 or MATH 172
```

Specific Program Requirements-taken at MCC-Longview

```
KSRV 152  Engineering Graphics & CADD I*.......................5
          Prerequisite: MATH test
KSRV 137  Subdivision Planning and Layout*.....................3
          Prerequisites: ENGR 180 MCC's and DRAF 152
KSRV 235  Advanced Surveying*..................................3
          Prerequisite: ENGR 180
KSRV 236  Boundary Control & Legal Principles*.................3
          Prerequisite: ENGR 180
KSRV 237  Evidence and Procedures for Boundary Locations*......3
          Prerequisite: ENGR 180
          TOTAL PROGRAM CREDIT HOURS.......................26-29
    *Prerequisite/Corequisite required
```

Paralegal, A.A.

The expanding role of the paralegal in the delivery of legal services has created increased opportunities with private law firms, corporate legal departments, insurance companies, real estate and title firms, banks, and government agencies. If you are interested in entering this career field, you should be aware that although the number of jobs for trained paralegals is rising, competition for these positions is increasing. A minimum of 18 hours of legal specialty courses must be taken at Johnson County Community College.

PARALEGALS MAY NOT PROVIDE LEGAL SERVICE DIRECTLY TO THE PUBLIC, EXCEPT AS PERMITTED BY LAW.

The paralegal program at JCCC

- has a challenging curriculum
- requires that you possess excellent communication skills, analytical ability and a high level of motivation
- is approved by the American Bar Association
- is a selective admission program based on various academic and testing criteria

(Major Code 264A; CIP Code 22.0302)

Paralegal

Associate of Arts Degree

Students graduating with an Associate of Arts degree or an Associate of Science degree must complete an approved cultural diversity course. Some of these courses are able to meet both a diversity requirement and a general education requirement.

The following courses must be completed with a minimum GPA of 2.0 prior to application for admission to the paralegal program. Upon successful completion of the requirements for the associate of arts degree, you will be eligible to receive an A.A. degree and a paralegal certificate.

```
ENGL 121  Composition I*......................................3
          Prerequisite: ENGL 106
          or appropriate placement test score or EAP 113 and
          EAP 117
LAW  121  Introduction to Law.................................3
LAW  123  Paralegal Professional Studies......................1
LIBR 125  Introduction to Library Research....................1
```

Suggested Order of Courses: Students may take any number of courses each semester that will also allow them to fulfill their other personal and professional responsibilities.

First Semester

```
          Humanities Elective.................................3
SPD  120  Interpersonal Communication.........................3
          or
SPD  121  Public Speaking.....................................3
          or
SPD  125  Personal Communication..............................3
          Science and Mathematics Electives...................3
          Total Semester Credit Hours........................17
```

Second Semester

Following admission to the paralegal program:

```
ENGL 122  Composition II*......................................3
          Prerequisite: ENGL 121
LAW  131  Legal Research*......................................3
          Prerequisite or corequisite:
          Legal nurse consultant students-
          LAW 225 and LAW 121
          Paralegal program students –
          Admission to the program or
          division administrator approval
LAW  132  Civil Litigation*....................................3
          Prerequisites: Admission to the paralegal program or
          division administrator approval.
          Legal nurse consultant students - LAW 225 and LAW 121
CPCA 128  PC Applications: MS Office...........................3
          or
CIS  124  Introduction to Computer Concepts and Applications...3
          or the following three:
CPCA 108  Word Processing I: MS Word*..........................1
          Prerequisites: CPCA 105 or CPCA 106 or CIS 124
          or CPCA 128 or appropriate score on a waiver test
          and
CPCA 110  Spreadsheets I: MS Excel*............................1
          Prerequisite: CPCA 105 or CPCA 106 or CIS 124
          or CPCA 128 or an appropriate score on a waiver test
          and
CPCA 114  Databases I: MS Access*..............................1
          Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124
          or an appropriate score on a waiver test
          Social Science and/or Economics Electives............3
          Total Semester Credit Hours.........................15
```

Third Semester

```
LAW  205  Legal Writing*.......................................3
          Prerequisite: Paralegal program students – LAW 131
          or division administrator approval.
          Legal nurse consultant students: LAW 131 or division
          administrator approval
          Paralegal Electives..................................6
          Health and/or Physical Education Elective............1
          Humanities Elective..................................3
          Science and Mathematics Elective.....................3
          Total Semester Credit Hours.........................16
```

Fourth Semester

```
LAW  271  Legal Ethics, Interviewing and Investigation*........3
          Prerequisite: Paralegal program students - LAW 132. Legal
          nurse consultant students – LAW 132 or LAW 260
          Corequisite: Paralegal program students – LAW 205. Legal
          nurse consultant students: LAW 205 or LAW 250
          Paralegal Electives..................................8
          Science and Mathematics Electives....................3
          Social Science and/or Economics Electives............3
          Total Semester Credit Hours.........................17
          TOTAL PROGRAM CREDIT HOURS..........................65
```

Paralegal Electives

```
LAW  140  Alternative Dispute Resolution*......................3
          Prerequisites: Legal nurse consultant students and
          paralegal program students – LAW 132
          and selective admission approval
LAW  142  Torts*...............................................3
          Prerequisites: Legal nurse consultant students and
```

```
                    paralegal program students - LAW 132
                    and selective admission approval
       LAW  148     Criminal Litigation*...............................3
                    Prerequisite: Legal nurse consultant students and
                    paralegal program students - LAW 132
       LAW  152     Real Estate Law*...................................3
                    Prerequisites: Paralegal program students - Admission to
                    the paralegal program or division administrator approval.
                    Legal nurse consultant students - LAW 225 and LAW 121
       LAW  162     Family Law*........................................3
                    Prerequisites: Paralegal program students - admission to
                    paralegal program or assistant dean's approval.
                    Legal nurse consultant students - LAW 225 and LAW 121
       LAW  171     Law Office Management*.............................3
                    Prerequisites: Paralegal program students - admission to
                    the paralegal program or division administrator approval.
                    Legal nurse consultant students - LAW 225 and LAW 121
       LAW  212     Business Organizations*............................3
                    Prerequisites: Paralegal program students - admission to
                    the paralegal program or division administrator approval.
                    Legal nurse consultant students - LAW 225 and LAW 121
       LAW  220     Computer-Assisted Legal Research*..................2
                    Prerequisite: Paralegal program students - LAW 131.
                    Legal nurse consultant students - LAW 131
       LAW  223     Law Office Computing*..............................3
                    Prerequisites: Paralegal program students - admission to
                    the paralegal program and either CIS 124 or  CPCA 128
                    or three hours of CPCA 108 and CPCA 110 and CPCA 114
                    or
       CIS  223     Law Office Computing*..............................3
                    Prerequisites: Paralegal program students - admission to
                    the paralegal program and either CIS 124 or CPCA 128
                    or three hours of CPCA 108 and CPCA 110 and CPCA 114
       LAW  241     Wills, Trusts and Probate Administration*..........3
                    Prerequisites: Paralegal program students - admission to
                    the paralegal program or division administrator approval.
                    Legal nurse consultant students -- LAW 225 and LAW 121
       LAW  245     Elder Law*.........................................3
                    Prerequisites: Paralegal program students - admission to
                    the paralegal program or division administrator approval.
                    Legal nurse consultant students - LAW 225 and LAW 121
       LAW  247     Intellectual Property Law*.........................3
                    Prerequisites: Paralegal program students - admission to
                    the paralegal program or division administrator approval.
                    Legal nurse consultant students - LAW 225 and LAW 121
       LAW  266     Employment Law*....................................3
                    Prerequisites: Paralegal program students - admission to
                    the paralegal program or division administrator approval.
                    Legal nurse consultant students - LAW 121 and LAW 225
       LAW  268     Bankruptcy*........................................2
                    Prerequisite: Paralegal program students - admission to
                    the paralegal program or division administrator approval.
                    Legal nurse consultant students - LAW 121 or LAW 225
       LAW  270     Administrative Law*................................3
                    Prerequisite: Admission to the legal nurse consultant
                    program and LAW 225 and LAW 121
                    or admission to the paralegal program
       LAW  275     Paralegal Internship I*............................1
                    Prerequisite or Corequisite: Paralegal program students -
                    LAW 271
       LAW  276     Paralegal Internship II*...........................1
                    Prerequisite: LAW 275
       *Prerequisite/Corequisite required
```

Legal Nurse Consultant Certificate

A legal nurse consultant (LNC) is a registered nurse who possesses both medical and legal knowledge. The LNC assists members of the legal profession with medical malpractice, personal injury and workers' compensation cases. The LNC

functions in two roles: a consulting expert and a testifying expert.

Prior to admission, you must have earned a registered nurse degree and have satisfied JCCC and American Bar Association general education requirements. Students will have fulfilled these general education requirements if they have 18 hours of general education. LNC applicants must also possess a current state license to practice nursing and have completed 2,500 hours of clinical work as a registered nurse. A minimum of 18 hours of legal specialty courses must be taken at Johnson County Community College.

LEGAL NURSE CONSULTANTS MAY NOT PROVIDE LEGAL SERVICES DIRECTLY TO THE PUBLIC, EXCEPT AS PERMITTED BY LAW.

(Major Code 5450; CIP 22.0302)

Legal Nurse Consulting

Career Certificate

Required Courses

```
LAW  225   Legal Nurse Consultant Profession*....................1
           Prerequisite: Admission to the legal nurse consultant
           program or assistant dean's approval
LAW  121   Introduction to Law..................................3
LIBR 125   Introduction to Library Research.....................1
LAW  131   Legal Research*.....................................3
           Prerequisite or corequisite:
           Legal nurse consultant students-
           LAW 225 and LAW 121
           Paralegal program students -
           Admission to the program or
           division administrator approval
LAW  250   Medicolegal Research and Writing*....................3
           Prerequisites: Admission to the legal nurse consultant
           program and LAW 131
           or
LAW  205   Legal Writing*......................................3
           Prerequisite: Paralegal program students - LAW 131
           or division administrator approval.
           Legal nurse consultant students: LAW 131 or division
           administrator approval
LAW  132   Civil Litigation*...................................3
           Prerequisites: Admission to the paralegal program or
           division administrator approval.
           Legal nurse consultant students - LAW 225 and LAW 121
LAW  270   Administrative Law*.................................3
           Prerequisite: Admission to the legal nurse consultant
           program and LAW 225 and LAW 121
           or admission to the paralegal program
LAW  271   Legal Ethics, Interviewing and Investigation*........3
           Prerequisite: Paralegal program students - LAW 132. Legal
           nurse consultant students - LAW 132 or LAW 260
           Corequisite: Paralegal program students - LAW 205. Legal
           nurse consultant students: LAW 205 or LAW 250


Note: Students must take one of the following courses:


LAW  140   Alternative Dispute Resolution*......................3
           Prerequisites: Legal nurse consultant students and
           paralegal program students - LAW 132
           and selective admission approval
LAW  142   Torts*..............................................3
           Prerequisites: Legal nurse consultant students and
           paralegal program students - LAW 132
           and selective admission approval
LAW  148   Criminal Litigation*...............................3
           Prerequisite: Legal nurse consultant students and
           paralegal program students - LAW 132
LAW  152   Real Estate Law*....................................3
           Prerequisites: Paralegal program students - Admission to
```

```
                    the paralegal program or division administrator approval.
                    Legal nurse consultant students - LAW 225 and LAW 121
LAW  162    Family Law*.........................................3
                    Prerequisites: Paralegal program students - admission to
                    paralegal program or assistant dean's approval.
                    Legal nurse consultant students - LAW 225 and LAW 121
LAW  171    Law Office Management*..............................3
                    Prerequisites: Paralegal program students - admission to
                    the paralegal program or division administrator approval.
                    Legal nurse consultant students - LAW 225 and LAW 121
LAW  212    Business Organizations*.............................3
                    Prerequisites: Paralegal program students - admission to
                    the paralegal program or division administrator approval.
                    Legal nurse consultant students - LAW 225 and LAW 121
LAW  220    Computer-Assisted Legal Research*...................2
                    Prerequisite: Paralegal program students - LAW 131.
                    Legal nurse consultant students - LAW 131
LAW  223    Law Office Computing*...............................3
                    Prerequisites: Paralegal program students - admission to
                    the paralegal program and either CIS 124 or  CPCA 128
                    or three hours of CPCA 108 and CPCA 110 and CPCA 114
LAW  241    Wills, Trusts and Probate Administration*...........3
                    Prerequisites: Paralegal program students - admission to
                    the paralegal program or division administrator approval.
                    Legal nurse consultant students -- LAW 225 and LAW 121
LAW  245    Elder Law*.........................................3
                    Prerequisites: Paralegal program students - admission to
                    the paralegal program or division administrator approval.
                    Legal nurse consultant students - LAW 225 and LAW 121
LAW  247    Intellectual Property Law*.........................3
                    Prerequisites: Paralegal program students - admission to
                    the paralegal program or division administrator approval.
                    Legal nurse consultant students - LAW 225 and LAW 121
LAW  266    Employment Law*....................................3
                    Prerequisites: Paralegal program students - admission to
                    the paralegal program or division administrator approval.
                    Legal nurse consultant students - LAW 121 and LAW 225
LAW  268    Bankruptcy*........................................2
                    Prerequisite: Paralegal program students - admission to
                    the paralegal program or division administrator approval.
                    Legal nurse consultant students - LAW 121 or LAW 225
                    TOTAL PROGRAM CREDIT HOURS.......................22-23
        *Prerequisite/Corequisite required
```

Legal Nurse Consultant Entrepreneurship Certificate

This 28 credit-hour certificate is designed to prepare students to open their own legal nurse consultant (LNC) service business providing two services to their clients: consulting testifying expertise. A legal nurse consultant is a registered nurse who possesses both medical and legal knowledge. The LNC assists members of the legal profession with medical malpractice, personal injury and workers' compensation cases.

This certificate is designed to provide the student with basic skills as a legal nurse consultant as well as small business development and management skills.

Prior to admission, you must have earned a registered nurse degree and have satisfied JCCC and American Bar Association general education requirements. Students will have fulfilled these general education requirements if they have 18 hours of general education credits. LNC applicants must also possess a current state license to practice nursing and have completed 2,500 hours of clinical work as a registered nurse. A minimum of 18 hours of legal specialty courses must be taken at Johnson County Community College.

LEGAL NURSE CONSULTANTS MAY NOT PROVIDE LEGAL SERVICES DIRECTLY TO THE PUBLIC, EXCEPT AS PERMITTED BY LAW.

(Major Code 4060; CIP Code 22.0302)

Paralegal

Career Certificate

Prerequisites for Required Courses

```
LAW  121  Introduction to Law...................................3
BUS  230  Marketing............................................3
```

Required Courses

```
LAW  225  Legal Nurse Consultant Profession....................1
          Prerequisite: Admission to the legal nurse consultant
          program or assistant dean's approval
LAW  131  Legal Research*......................................3
          Prerequisite or corequisite:
          Legal nurse consultant students-
          LAW 225 and LAW 121
          Paralegal program students -
          Admission to the program or
          division administrator approval
ENTR 120  Introduction to Entrepreneurship.....................2
ENTR 180  Opportunity Analysis.................................2
LAW  250  Medicolegal Research and Writing*....................3
          Prerequisites: Admission to the legal nurse consultant
          program and LAW 131
          or
LAW  205  Legal Writing*.......................................3
          Prerequisite: Paralegal program students - LAW 131
          or division administrator approval.
          Legal nurse consultant students: LAW 131 or division
          administrator approval
LAW  132  Civil Litigation*....................................3
          Prerequisites: Admission to the paralegal program or
          division administrator approval.
          Legal nurse consultant students - LAW 225 and LAW 121
LAW  270  Administrative Law*..................................3
          Prerequisite: Admission to the legal nurse consultant
          program and LAW 225 and LAW 121
          or admission to the paralegal program
LAW  271  Legal Ethics, Interviewing and Investigation*........3
          Prerequisite: Paralegal program students - LAW 132. Legal
          nurse consultant students - LAW 132 or LAW 260
          Corequisite: Paralegal program students - LAW 205. Legal
          nurse consultant students: LAW 205 or LAW 250
          LAW electives.......................................3
ENTR 142  Fast Trac Business Plan..............................3
ENTR 220  Entrepreneurial Marketing*..........................2
          Prerequisite: BUS 230
          TOTAL PROGRAM CREDIT HOURS..........................28
*Prerequisite/Corequisite required
```

LAW Electives

```
Students are encouraged to choose additional LAW coursework
which will enhance their ability to develop, grow, and
sustain their Legal Nurse Consultant entrepreneurial
business concept.

LAW  140  Alternative Dispute Resolution*......................3
          Prerequisites: Legal nurse consultant students and
          paralegal program students - LAW 132
          and selective admission approval
LAW  142  Torts*...............................................3
          Prerequisites: Legal nurse consultant students and
          paralegal program students - LAW 132
          and selective admission approval
LAW  148  Criminal Litigation*.................................3
          Prerequisite: Legal nurse consultant students and
          paralegal program students - LAW 132
LAW  152  Real Estate Law*.....................................3
```

```
                    Prerequisites: Paralegal program students - Admission to
                    the paralegal program or division administrator approval.
                    Legal nurse consultant students - LAW 225 and LAW 121
LAW   162   Family Law*.........................................3
                    Prerequisites: Paralegal program students - admission to
                    paralegal program or assistant dean's approval.
                    Legal nurse consultant students - LAW 225 and LAW 121
LAW   171   Law Office Management*..............................3
                    Prerequisites: Paralegal program students - admission to
                    the paralegal program or division administrator approval.
                    Legal nurse consultant students - LAW 225 and LAW 121
LAW   212   Business Organizations*.............................3
                    Prerequisites: Paralegal program students - admission to
                    the paralegal program or division administrator approval.
                    Legal nurse consultant students - LAW 225 and LAW 121
LAW   220   Computer-Assisted Legal Research*...................2
                    Prerequisite: Paralegal program students - LAW 131.
                    Legal nurse consultant students - LAW 131
LAW   241   Wills, Trusts and Probate Administration*...........3
                    Prerequisites: Paralegal program students - admission to
                    the paralegal program or division administrator approval.
                    Legal nurse consultant students -- LAW 225 and LAW 121
LAW   245   Elder Law*..........................................3
                    Prerequisites: Paralegal program students - admission to
                    the paralegal program or division administrator approval.
                    Legal nurse consultant students - LAW 225 and LAW 121
LAW   247   Intellectual Property Law*..........................3
                    Prerequisites: Paralegal program students - admission to
                    the paralegal program or division administrator approval.
                    Legal nurse consultant students - LAW 225 and LAW 121
LAW   266   Employment Law*.....................................3
                    Prerequisites: Paralegal program students - admission to
                    the paralegal program or division administrator approval.
                    Legal nurse consultant students - LAW 121 and LAW 225
LAW   268   Bankruptcy*.........................................2
                    Prerequisite: Paralegal program students - admission to
                    the paralegal program or division administrator approval.
                    Legal nurse consultant students - LAW 121 or LAW 225


Students may be interested in taking additional courses, as
noted below, to complement their certificate study.  These
courses are NOT part of the certificate requirements.

ENTR  160   Legal Issues for Small Business.....................2
ENTR  195   Franchising.........................................3
                    Prerequisite: BUS 230
```

Paralegal Certificate

You must have completed a two-year degree or a four-year degree and have satisfied JCCC and American Bar Association general education requirements prior to admission. Students will have fulfilled these general education requirements if they have 18 hours of general education credit, including Composition I and Introduction to Algebra or a higher math course.

The following courses must be completed with a minimum GPA of 2.0 prior to application for admission to the paralegal program. A minimum of 18 hours of legal specialty courses must be taken at Johnson County Community College.

LEGAL NURSE CONSULTANTS MAY NOT PROVIDE LEGAL SERVICES DIRECTLY TO THE PUBLIC, EXCEPT AS PERMITTED BY LAW.

(Major Code 489A; CIP Code 22.0302)

Paralegal

Career Certificate

```
LAW   121   Introduction to Law.................................3
LAW   123   Paralegal Professional Studies......................1
```

```
LIBR 125   Introduction to Library Research.....................1
```

Suggested order of courses: Students may take any number of courses each semester that will also allow them to fulfill their other personal and professional responsibilities.

First Semester

```
CPCA 128   PC Applications: MS Office...........................3
           or
CIS  124   Introduction to Computer Concepts and Applications...3
           or the following three:
CPCA 108   Word Processing I: MS Word*..........................1
           Prerequisites: CPCA 105 or CPCA 106 or CIS 124
           or CPCA 128 or appropriate score on a waiver test
           and
CPCA 110   Spreadsheets I: MS Excel*............................1
           Prerequisite: CPCA 105 or CPCA 106 or CIS 124
           or CPCA 128 or an appropriate score on a waiver test
           and
CPCA 114   Databases I: MS Access*..............................1
           Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124
           or an appropriate score on a waiver test
           Total Semester Credit Hours..........................8
```

Second Semester

```
Following admission to the paralegal program
LAW  131   Legal Research*......................................3
           Prerequisite or corequisite:
           Legal nurse consultant students-
           LAW 225 and LAW 121
           Paralegal program students –
           Admission to the program or
           division administrator approval
LAW  132   Civil Litigation*....................................3
           Prerequisites: Admission to the paralegal program or
           division administrator approval.
           Legal nurse consultant students – LAW 225 and LAW 121
           Paralegal Electives..................................7
           Total Semester Credit Hours.........................13
```

Third Semester

```
LAW  205   Legal Writing*.......................................3
           Prerequisite: Paralegal program students – LAW 131
           or division administrator approval.
           Legal nurse consultant students: LAW 131 or division
           administrator approval
LAW  271   Legal Ethics, Interviewing and Investigation*........3
           Prerequisite: Paralegal program students - LAW 132. Legal
           nurse consultant students – LAW 132 or LAW 260
           Corequisite: Paralegal program students – LAW 205. Legal
           nurse consultant students: LAW 205 or LAW 250
           Paralegal Electives..................................7
           Total Semester Credit Hours.........................13
           TOTAL PROGRAM CREDIT HOURS..........................34
```

Paralegal Electives

```
LAW  140   Alternative Dispute Resolution*......................3
           Prerequisites: Legal nurse consultant students and
           paralegal program students – LAW 132
           and selective admission approval
LAW  142   Torts*...............................................3
           Prerequisites: Legal nurse consultant students and
           paralegal program students – LAW 132
```

```
                and selective admission approval
LAW  148   Criminal Litigation*..................................3
           Prerequisite: Legal nurse consultant students and
           paralegal program students - LAW 132
LAW  152   Real Estate Law*.....................................3
           Prerequisites: Paralegal program students - Admission to
           the paralegal program or division administrator approval.
           Legal nurse consultant students - LAW 225 and LAW 121
LAW  162   Family Law*..........................................3
           Prerequisites: Paralegal program students - admission to
           paralegal program or assistant dean's approval.
           Legal nurse consultant students - LAW 225 and LAW 121
LAW  171   Law Office Management*...............................3
           Prerequisites: Paralegal program students - admission to
           the paralegal program or division administrator approval.
           Legal nurse consultant students - LAW 225 and LAW 121
LAW  212   Business Organizations*..............................3
           Prerequisites: Paralegal program students - admission to
           the paralegal program or division administrator approval.
           Legal nurse consultant students - LAW 225 and LAW 121
LAW  220   Computer-Assisted Legal Research*....................2
           Prerequisite: Paralegal program students - LAW 131.
           Legal nurse consultant students - LAW 131
LAW  223   Law Office Computing*................................3
           Prerequisites: Paralegal program students - admission to
           the paralegal program and either CIS 124 or  CPCA 128
           or three hours of CPCA 108 and CPCA 110 and CPCA 114
LAW  241   Wills, Trusts and Probate Administration*............3
           Prerequisites: Paralegal program students - admission to
           the paralegal program or division administrator approval.
           Legal nurse consultant students -- LAW 225 and LAW 121
LAW  245   Elder Law*...........................................3
           Prerequisites: Paralegal program students - admission to
           the paralegal program or division administrator approval.
           Legal nurse consultant students - LAW 225 and LAW 121
LAW  247   Intellectual Property Law*...........................3
           Prerequisites: Paralegal program students - admission to
           the paralegal program or division administrator approval.
           Legal nurse consultant students - LAW 225 and LAW 121
LAW  266   Employment Law*......................................3
           Prerequisites: Paralegal program students - admission to
           the paralegal program or division administrator approval.
           Legal nurse consultant students - LAW 121 and LAW 225
LAW  268   Bankruptcy*..........................................2
           Prerequisite: Paralegal program students - admission to
           the paralegal program or division administrator approval.
           Legal nurse consultant students - LAW 121 or LAW 225
LAW  270   Administrative Law*..................................3
           Prerequisite: Admission to the legal nurse consultant
           program and LAW 225 and LAW 121
           or admission to the paralegal program
LAW  275   Paralegal Internship I*..............................1
           Prerequisite or Corequisite: Paralegal program students -
           LAW 271
LAW  276   Paralegal Internship II*.............................1
           Prerequisite: LAW 275
*Prerequisite/Corequisite required
```

Marketing and Management, A.A.S.

Merchandising, marketing and management-related fields have recently experienced tremendous growth and expansion in Johnson County. Surveys indicate that few other areas offer greater opportunity to qualified people. In fact, employment of people in this field is expected to increase faster than the average for all occupations nationwide.

JCCC's marketing and management program prepares you for jobs in this field. Graduates of JCCC's program are ready for entry-level management or sales positions in retail, wholesale or manufacturing and marketing services.

Through marketing and management courses and in the case studies capstone course, you learn the latest in business trends. You also learn the importance of good customer service and the skills needed to deliver that service. The curriculum reflects current industry standards, including an emphasis on personal computer use, interpersonal communications and human relations.

Because all marketing and management students work at least 15 hours a week each semester in a store or business, you can apply what you learn in the classroom to your job. You also can take your work experiences back to the classroom for analysis and a greater understanding of the problems businesses face. You acquire basic merchandising information and learn how to work with people. By integrating coursework and on-the-job experience, you are given the knowledge, skills and attitudes necessary to reach your career objectives.

(Major Code 2620; CIP Code 52.1401)

Marketing and Management

Associate of Applied Science Degree

First Semester

```
MKT  134   Professional Selling.................................3
ENGL 121   Composition I*......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
MATH 120   Business Math or higher*............................3
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
BUS  121   Introduction to Business............................3
BUS  230   Marketing...........................................3
MKT  284   Marketing and Management Internship I...............1
           Total Semester Credit Hours........................16
```

Second Semester

```
ACCT 111   Small Business Accounting...........................3
           or
ACCT 121   Accounting I........................................3
MKT  121   Retail Management...................................3
MKT  202   Consumer Behavior...................................3
BUS  150   Business Communications*............................3
           Prerequisite: ENGL 121
BUS  141   Principles of Management............................3
MKT  286   Marketing and Management Internship II*.............1
           Prerequisite: MKT 284
           Total Semester Credit Hours........................16
```

Third Semester

```
MKT  234   Services Marketing*.................................3
           Corequisite: BUS 230
MKT  240   Advertising and Promotion...........................3
ECON 132   Survey of Economics.................................3
           or
ECON 230   Economics I.........................................3
HUM  122   Introduction to Humanities..........................3
CIS  124   Introduction to Computer Concepts and Applications...3
           and
           CPCA/CDTP elective..................................1
Note: CPCA 105/106 will not meet this one hour requirement.

           or
           CPCA/CDTP electives.................................4
MKT  288   Marketing and Management Internship III*............1
           Prerequisite: MKT 286
           Total Semester Credit Hours........................17
```

Fourth Semester

```
MKT  221  Sales Management*...................................3
          Prerequisite: MKT 134 or MKT 133
MKT  290  Capstone: Marketing and Management Case Studies*.....3
          Prerequisites: BUS 141 and BUS 230 and MKT 284 and
          MKT 286 or assistant dean's approval
BUS  261  Business Law I......................................3
HIST 141  U.S. History Since 1877.............................3
          Health and/or Physical Education Elective...........1
PHIL 138  Business Ethics.....................................1
MKT  289  Marketing and Management Internship IV*.............1
          Prerequisite: MKT 288
          Total Semester Credit Hours.......................15
          TOTAL PROGRAM CREDIT HOURS........................64
*Prerequisite/Corequisite required
```

Marketing Specialist Entrepreneurship Certificate

The marketing specialist entrepreneurship certificate prepares students to open their own service business providing marketing services to businesses. This certificate is designed to provide the student with basic skills in marketing as well as basic skills in small business development and management.

(Major Code 4250; CIP Code 52.1401)

Marketing and Management

Career Certificate

Required Courses

```
BUS  230  Marketing...........................................3
MKT  134  Professional Selling................................3
MKT  121  Retail Management...................................3
ACCT 111  Small Business Accounting...........................3
          or
ACCT 121  Accounting I........................................3
ENTR 120  Introduction to Entrepreneurship....................2
ENTR 180  Opportunity Analysis................................2
MKT  202  Consumer Behavior...................................3
MKT  240  Advertising and Promotion...........................3
ENTR 131  Financial Management for Small Business*............2
          Prerequisite: ACCT 111 or ACCT 121
ENTR 220  Entrepreneurial Marketing*..........................2
          Prerequisite: BUS 230
ENTR 142  Fast Trac Business Plan.............................3
MKT  284  Marketing and Management Internship I...............1
          TOTAL PROGRAM CREDIT HOURS........................30
*Prerequisite/Corequisite required


Students may be interested in taking additional courses, as
noted below, to complement their certificate study.  These
courses are NOT part of the certificate requirements.

ENTR 195  Franchising*........................................3
          Prerequisite: BUS 230
ENTR 160  Legal Issues for Small Business.....................2
MKT  234  Services Marketing*.................................3
          Corequisite: BUS 230
```

Retail Sales Representative Certificate

This retail sales representative certificate is designed for students seeking positions in the growing retail industry in Johnson County.

(Major Code 5260; CIP Code 52.1803)

Marketing and Management

Career Certificate

Required Courses

```
BUS  230   Marketing.........................................3
FASH 135   Image Management..................................1
MKT  121   Retail Management.................................3
MKT  134   Professional Selling.............................3
MKT  202   Consumer Behavior................................3
MKT  234   Services Marketing*..............................3
           Corequisite: BUS 230
MKT  284   Marketing and Management Internship I...............1
           TOTAL PROGRAM CREDIT HOURS......................17
*Prerequisite/Corequisite required
```

All 17 credit hours in the retail sales representative certificate program apply to the 35-credit-hour sales and customer service certificate.

Sales and Customer Relations Certificate

JCCC's sales and customer relations program is designed for people employed in sales who wish to refine their skills or those who are contemplating a career in sales. The program focuses on the steps involved in the selling process and the delivery of effective customer service. Students who complete the program may find careers in sales (retail, wholesale or manufacturing) or in the customer service departments of stores, businesses and manufacturers.

All of the 30 credit hours required for the sales and customer relations certificate apply toward JCCC's 64-credit-hour marketing and management associate of applied science degree.

Overall, employment in the selling field is expected to increase significantly through the year 2005.

(Major Code 4920; CIP Code 52.1804)

Marketing and Management

Career Certificate

Prerequisite for Required Courses

```
ENGL 121   Composition I*...................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
```

Required Courses

```
MKT  134   Professional Selling.............................3
MKT  121   Retail Management.................................3
BUS  150   Business Communications*.........................3
           Prerequisite: ENGL 121
BUS  230   Marketing........................................3
FASH 135   Image Management.................................1
MKT  284   Marketing and Management Internship I...............1
MKT  202   Consumer Behavior................................3
MKT  221   Sales Management*................................3
           Prerequisite: MKT 134 or MKT 133
MKT  234   Services Marketing*..............................3
           Corequisite: BUS 230
MKT  240   Advertising and Promotion.......................3
CIS  124   Introduction to Computer Concepts and Applications...3

           or
```

```
        CPCA/CDTP electives..................................3
MKT  286  Marketing and Management Internship II*..............1
          Prerequisite: MKT 284
          TOTAL PROGRAM CREDIT HOURS.........................30
*Prerequisite/Corequisite required
```

Supervision Management Certificate

The supervision management certificate is a 25-credit-hour program designed for students who desire to be or have been designated as managers. The certificate meets the basic core competencies of being a manager or a supervisor.

(Major Code 5280; CIP Code 52.1401)

Marketing and Management

Career Certificate

Prerequisite for Required Courses

```
ENGL 121  Composition I*......................................3
          Prerequisite: ENGL 106
          or appropriate placement test score or EAP 113 and
          EAP 117
```

Required Courses

```
BUS  121  Introduction to Business............................3
BUS  140  Principles of Supervision...........................3
BUS  141  Principles of Management............................3
BUS  150  Business Communications*............................3
          Prerequisite: ENGL 121
BUS  230  Marketing...........................................3
MKT  202  Consumer Behavior...................................3
BUS  120  Management Attitudes and Motivation.................3
          or
BUS  225  Human Relations.....................................3
MKT  234  Services Marketing*.................................3
          Corequisite: BUS 230
MKT  284  Marketing and Management Internship I...............1
          TOTAL PROGRAM CREDIT HOURS.........................25
*Prerequisite/Corequisite required
```

Teleservice Representative Certificate

The teleservice representative certificate program at JCCC was developed in conjunction with the Kansas City Area Call Center Managers Users Group with the objective of providing students with business and practical skills that will help make them successful in the teleservice industry. Twenty-four of the 33 credit hours required for the teleservice representative certificate apply toward JCCC's 64-credit-hour marketing and management associate of applied science degree.

(Major Code 5250; CIP Code 52.0411)

Marketing and Management

Career Certificate

Prerequisite for Required Courses

```
ENGL 121  Composition I*......................................3
          Prerequisite: ENGL 106
          or appropriate placement test score or EAP 113 and
          EAP 117
```

First Semester

```
BUS  121  Introduction to Business.............................3
BUS  150  Business Communications*.............................3
          Prerequisite: ENGL 121
BUS  230  Marketing...........................................3
MKT  140  Teleservice Communication Skills....................3
MATH 120  Business Mathematics*...............................3
          Prerequisite: MATH 111 with a grade of "C" or higher
          or appropriate score on the math assessment test
MKT  284  Marketing and Management Internship I................1
          Total Semester Credit Hours........................16
```

Second Semester

```
BUS  123  Personal Finance....................................3
MKT  202  Consumer Behavior...................................3
MKT  234  Services Marketing*.................................3
          Corequisite: BUS 230
BOT  130  Office Systems Concepts.............................3
CIS  124  Introduction to Computer Concepts and Applications^...3
          and
          CPCA/CDTP elective..................................1
          or
          CPCA/CDTP electives.................................4
Note: CPCA 105 and 106 do not meet requirements.


MKT  286  Marketing and Management Internship II*..............1
          Prerequisite: MKT 284
          Total Semester Credit Hours........................17
          TOTAL PROGRAM CREDIT HOURS.........................33
*Prerequisite/Corequisite required
NOTE: ^Recommended for students who intend to transfer to a
baccalaureate degree program
```

Teletrac Certificate

This certificate program meets the core competencies outlined by the Call Center User's Group, a group of area business leaders in the teleservice industry. This program includes one internship during which students will learn through hands-on industry experience. All 14 credit hours in this certificate can be applied toward the 33-credit-hour teleservice representative certificate program.

(Major Code 5270; CIP Code 52.0411)

Marketing and Management

Certificate of Completion

```
BUS  121  Introduction to Business.............................3
MKT  140  Teleservice Communication Skills....................3
MKT  202  Consumer Behavior...................................3
MATH 120  Business Mathematics*...............................3
          Prerequisite: MATH 111 with a grade of "C" or higher
          or appropriate score on the math assessment test
BOT  101  Computerized Keyboarding**..........................1
MKT  284  Marketing and Management Internship I................1
          TOTAL PROGRAM CREDIT HOURS.........................14
*Prerequisite/Corequisite required
**Assessment test may be used to satisfy course requirement
```

Metal Fabrication Technology, A.A.S.

The welding technology/metal fabrication is a safety-oriented program that provides students the opportunity to learn practical knowledge and skill competencies associated with welding, metal fabrication and related processes.

The JCCC welding technology/metal fabrication curriculum is designed to prepare students for various phases and levels of occupational skills. The program also offers currently employed professional welders the opportunity to upgrade their skills by taking advanced welding courses. Day and evening classes are available. Opportunities for those who wish to become welders, cutters and machine operators should be good through the year 2015. The number of qualified (certified) welders graduating from technical schools and community colleges is expected to be in balance with the number of future job openings. Welding technology/metal fabrication offers the service of five welding instructors and two machine tool instructors. Three are American Society (AWS) Certified Welding Inspectors (CWIs) for the inspection and testing of welds. JCCC welding technology professors can customize welding and machine programs to provide course materials utilizing many processes, materials or welding positions that can meet a particular company's needs.

JCCC provides well-equipped laboratories that enable students to receive instruction in blueprint and symbol reading for welders. The welding technology program consists of individual welding processes that allow students time to master each. After students master the Introduction to Welding course, other welding processes can be selected to meet individual needs. They are oxyacetylene welding (OAW) and cutting (OFC), plasma arc cutting (PAC), shielded metal arc welding (SMAW), gas metal arc welding (GMAW), flux cored arc welding (FCAW), gas tungsten arc welding (GTAW), metallurgy and allied processes. Basic machining includes hands-on training with milling machines, turning lathes, surface grinders, band saws and the use of hand tools. The program is accredited as an American Welding Society Participating Organization in the Training and Testing of Entry Level Welders and the National Center for Construction Education and Research (NCCER). Eligible students may elect to test under AWS QC10 certification guidelines and, if successful, be listed in the AWS National Registry of Entry Level Welders and/or the NCCER National Registry for Construction Workers.

A series of welder related certificates or completion and career certificates are offered, all leading toward the associate of applied science degree.

(Major Code 2460; CIP Code 48.0508)

Metal Fabrication (Welding) Technology

Associate of Applied Science Degree

Prerequisite/Corequisite for Required Courses

```
MFAB 120   MFAB Tools and Equipment............................2
           or
           approval of career program facilitator
           or
           prior learning credit (contact the Testing Center)
```

First Semester

```
INDT 125   Industrial Safety...................................3
MFAB 121   Introduction to Welding*...........................4
           Prerequisite or Corequisite: MFAB 120 or
           program facilitator approval or contact testing office
           for Prior Learning Assessment
ENGL 121   Composition I*.....................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
MATH 133   Technical Mathematics I*...........................4
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
MFAB 127   Welding Processes..................................2
           Prerequisite or Corequisite: MFAB 120 or program
           facilitator approval or contact testing office for Prior
           Learning Assessment
MFAB 180   Blueprint and Symbols Reading for Welders...........2
           Total Semester Credit Hours......................18
```

Second Semester

```
MFAB 125  Advanced Gas and Arc Welding*........................4
          Prerequisite:  MFAB 121
MFAB 240  Metallurgy...........................................2
MFAB 130  Gas Metal Arc Welding I*.............................4
          Prerequisite or Corequisite: MFAB 120 or program
          facilitator approval or testing office for Prior
          Learning Assessment
ENGL 123  Technical Writing I*.................................3
          Prerequisite: ENGL 121
INDT 155  Workplace Skills.....................................1
          Social Science Elective..............................3
          Total Semester Credit Hours.........................17
```

Third Semester

```
MFAB 160  Gas Tungsten Arc Welding*............................4
          Prerequisite: MFAB 121 or MFAB 130
MFAB 260  Fabrication Practices I*.............................4
          Prerequisite: Metal Fabrication Combination Welder
          Certificates I and II or have earned the Metal
          Fabrication Vocational Certificate or equivalent
          advanced welder training course work to be approved
          by program administrator/facilitator
MFAB 152  Manufacturing Materials and Processes................3
HPER 200  First Aid and CPR....................................2
          Humanities Elective..................................3
          Total Semester Credit Hours.........................16
```

Fourth Semester

```
MFAB 170  Basic Machine Tool Processes.........................4
MFAB 230  Gas Metal Arc Welding II*............................4
          Prerequisite:  MFAB 130
MFAB 261  Fabrication Practices II*............................4
          Prerequisite: Metal Fabrication Welder Certificates I
          and II, or have earned the Metal Fabrication Vocational
          Certificate or equivalent advanced welders training
          coursework to be approved by program
          administrator/facilitator
          Related Electives....................................2
          Total Semester Credit Hours.........................14
          TOTAL PROGRAM CREDIT HOURS..........................65
```

Related Electives

```
AUTO 121  Small Engine Service.................................3
BUS  120  Management Attitudes and Motivation..................3
BUS  140  Principles of Supervision............................3
BUS  145  Small Business Management............................3
ENTR 142  Fast Trac Business Plan..............................3
CET  105  Construction Methods.................................3
CIS  124  Introduction to Computer Concepts and Applications...3
ELEC 131  Introduction to Sensors and Actuators................3
ELEC 133  Programmable Controllers.............................3
HVAC 167  Sheet Metal Layout and Fabrication...................3
MATH 134  Technical Mathematics II*............................5
          Prerequisite: MATH 133 or an equivalent course with a
          grade of "C" or higher
MFAB 140  Maintenance Repair Welding*..........................3
          Prerequisite: MFAB 121 or MFAB 130
MFAB 271  Metal Fabrication Internship*........................3
          Prerequisite: Program facilitator approval
*Prerequisite/Corequisite required
```

Metal Fabrication Technology Certificate

The welding/metal fabrication vocational certificate program teaches welding skills in the areas of shielded metal arc welding (SMAW), gas metal arc welding (GMAW), oxyacetylene welding (OAW) and cutting (OFC), plasma arc cutting (PAC), shielded metal arc welding (SMAW), gas metal arc welding (GMAW), and gas tungsten arc welding (GTAW). The students also will receive training in safety and basic blueprint reading. This should give the student the skills needed to successfully enter the field of welding.

(Major Code 4790; 48.0508)

Metal Fabrication (Welding) Technology

Career Certificate

Prerequisite/Corequisite for Required Courses

```
MFAB 120   MFAB Tools and Equipment............................2
           or
           approval of career program facilitator
           or
           prior learning credit (contact the Testing Center)
```

Required Courses

```
INDT 125   Industrial Safety.................................3
MFAB 180   Blueprint and Symbols Reading for Welders............2
MFAB 121   Introduction to Welding*..........................4
           Prerequisite or Corequisite: MFAB 120 or
           program facilitator approval or contact testing office
           for Prior Learning Assessment
MFAB 125   Advanced Gas and Arc Welding*......................4
           Prerequisite:  MFAB 121
           or
MFAB 140   Maintenance Repair Welding*.........................3
           Prerequisite: MFAB 121 or MFAB 130
MFAB 130   Gas Metal Arc Welding I*...........................4
           Prerequisite or Corequisite: MFAB 120 or program
           facilitator approval or testing office for Prior
           Learning Assessment
MFAB 160   Gas Tungsten Arc Welding*.........................4
           Prerequisite: MFAB 121 or MFAB 130
MFAB 230   Gas Metal Arc Welding II*.........................4
           Prerequisite:  MFAB 130
INDT 155   Workplace Skills..................................1
           TOTAL PROGRAM CREDIT HOURS.....................25-26
*Prerequisite/Corequisite required
```

Combination Welder I Certificate

This certificate is the second step to the achievement of the MFAB A.A.S. degree. It is 11 college credit hours of general basic knowledge in welding.

The Combination Welder I certificate could be a completion point, for employment as a combination welder. This certificate verifies that the student has an understanding of several welding and cutting processes, and is entry level skilled with two basic welding processes, shielded metal arc welding (SMAW) and gas metal welding (GMAW). The student should have an understanding of basic metallurgy or welding symbols and blue print reading for welders.

Students are encouraged to pursue other welding certificates that will enhance their knowledge of welding and metal fabrication.

(Major Code 4600; CIP Code 48.0508)

Metal Fabrication (Welding) Technology

Certificate of Completion

Prerequisite/Corequisite for Required Courses

```
MFAB 120   MFAB Tools and Equipment............................2
           or
           approval of career program facilitator
           or
           prior learning credit (contact the Testing Center)
```

Required Courses

```
MFAB 121   Introduction to Welding*............................4
           Prerequisite or Corequisite: MFAB 120 or
           program facilitator approval or contact testing office
           for Prior Learning Assessment
MFAB 130   Gas Metal Arc Welding I*............................4
           Prerequisite or Corequisite: MFAB 120 or program
           facilitator approval or testing office for Prior
           Learning Assessment
MFAB 240   Metallurgy.........................................2
INDT 155   Workplace Skills...................................1
           TOTAL PROGRAM CREDIT HOURS........................11
*Prerequisite/Corequisite required
```

Combination Welder II Certificate

This certificate is the third step to achievement of the MFAB A.A.S. degree. It is 14 college credit hours of advanced welding knowledge.

Entry into this vocational certificate will depend on the applicant's past experience as a welder and on the prerequisites of course materials.

This certificate is a completion point if an advanced combination welder with entry level skills in several welding processes is needed. Both certificates, general basic welding and the combination welder I, must be completed before the combination welder II can be taken.

This certificate verifies that the student has entry level skills in at least four main welding processes, Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding I (GMAW), Gas Tungsten Arc Welding (GTAW) and Gas Metal Arc Welding-S (GMAW-S) and aluminum wire and stainless steel. The student should have successfully completed work place skills. Blue print and symbol reading for welders and/or metallurgy.

(Major Code 4610; CIP Code 48.0508)

Metal Fabrication (Welding) Technology

Certificate of Completion

Required Courses

```
MFAB 125   Advanced Gas and Arc Welding*......................4
           Prerequisite:  MFAB 121
MFAB 160   Gas Tungsten Arc Welding*..........................4
           Prerequisite: MFAB 121 or MFAB 130
MFAB 180   Blueprint and Symbols Reading for Welders..........2
           or
MFAB 240   Metallurgy.........................................2
MFAB 230   Gas Metal Arc Welding II*..........................4
           Prerequisite:  MFAB 130
           TOTAL PROGRAM CREDIT HOURS........................14
```

Combination Welder/Machinist I Certificate

This certificate is the fourth step to the achievement of the MFAB A.A.S. degree. It is 15 college credit hours with an emphasis on machine tool materials and processes.

Completion of this vocational certificate will depend on the applicants past experience as a welder, and/or machinist, and on the prerequisites of course

materials and successfully completing the basic machine tool processes class.

The advanced combination welder/machinist provides entry level skills in several welding processes. Both certificates, general basic welding and combination welder I, must be completed before starting this certifficate. Combination Welder II is optional welding training and can be taken before or after this certificate is pursued.

This vocational certificate verifies that the student understands and has entry level skills with several basic machines and processes welding and cutting skills needed for entry level repair welding with multiple welding processes and machine tool skills.

The student should also have an understanding of metallurgy and blueprint and symbols for welders.

(Major Code 4620; CIP Code 48.0508)

Metal Fabrication (Welding) Technology

Certificate of Completion

Prerequisite/Corequisite for Required Courses

```
MFAB 120   MFAB Tools and Equipment............................2
           or
           approval of career program facilitator
           or
           prior learning credit (contact the Testing Center)
```

Required Courses

```
MFAB 121   Introduction to Welding*............................4
           Prerequisite or Corequisite: MFAB 120 or
           program facilitator approval or contact testing office
           for Prior Learning Assessment
           or
MFAB 130   Gas Metal Arc Welding I*............................4
           Prerequisite or Corequisite: MFAB 120 or program
           facilitator approval or testing office for Prior
           Learning Assessment
MFAB 140   Maintenance Repair Welding*.........................3
           Prerequisite: MFAB 121 or MFAB 130
MFAB 152   Manufacturing Materials and Processes...............3
MFAB 170   Basic Machine Tool Processes........................4
INDT 155   Workplace Skills....................................1
           TOTAL PROGRAM CREDIT HOURS.........................15
*Prerequisite/Corequisite required
```

General Basic Welding Certificate

This certificate is the recommended first step to employment in the welding field. It is 9 college credit hours of general basic knowledge in welding.

The general basic welding certificate verifies that the student can demonstrate several welding and cutting processes. It is designed for automotive students, artists, hobby welders or students interested in exploring welding as a possible career.

(Major Code 4590; CIP Code 48.0508)

Metal Fabrication (Welding) Technology

Certificate of Completion

Prerequisite/Corequisite for Required Courses

```
MFAB 120   MFAB Tools and Equipment............................2
           or
           approval of career program facilitator
```

```
                     or
                     prior learning credit (contact the Testing Center)
```

Required Courses

```
MFAB 127   Welding Processes*..................................2
           Prerequisite or Corequisite: MFAB 120 or program
           facilitator approval or contact testing office for Prior
           Learning Assessment
MFAB 121   Introduction to Welding*...........................4
           Prerequisite or Corequisite: MFAB 120 or
           program facilitator approval or contact testing office
           for Prior Learning Assessment
           or
MFAB 130   Gas Metal Arc Welding I*...........................4
           Prerequisite or Corequisite: MFAB 120 or program
           facilitator approval or testing office for Prior
           Learning Assessment
MFAB 180   Blueprint and Symbols Reading for Welders...........2
           or
MFAB 240   Metallurgy.........................................2
INDT 155   Workplace Skills...................................1
           TOTAL PROGRAM CREDIT HOURS.........................9
*Prerequisite/Corequisite required
```

Welder Fabricator Advanced Certificate

This certificate is the capstone for the MFAB program. It will allow all previous certificate completers along with current degree seeking students to continue their education as a professional metal fabricator-certified welder, and American Welding Society (AWS) certified welder. Coursework will focus on modern welding fabrication techniques and practices used in the manufacturing and installation of structural steel, piping systems, tank and vessel systems, and miscellaneous welded mechanical items. Students will work in teams as workers do on the job. All teams will work from discipline specific drawings to manufacture and assemble a mock building section using acquired skills. Fabrication Practices I focuses on structural steel and Fabrication Practices II focuses on tanks and vessels.

Completers with this certificate may elect to test to the AWS Entry Level I and Level II Welder program and the National Center for Construction Education and Research (NCCER) accreditation and national registry.

(Major Code: 4990; CIP Code 48.0508)

Metal Fabrication (Welding) Technology

Career Certificate

Prerequisite

```
Note: Students must have completed MFAB Combination
Welder certificates I & II or have earned the MFAB career
certificate or equivalent advanced welder training course
work to be approved by program administrator/facilitator.
```

Required Courses

```
MFAB 260   Fabrication Practices I*...........................4
           Prerequisite: Metal Fabrication Combination Welder
           Certificates I and II or have earned the Metal
           Fabrication Vocational Certificate or equivalent
           advanced welder training course work to be approved
           by program administrator/facilitator
MFAB 261   Fabrication Practices II*..........................4
           Prerequisite: Metal Fabrication Welder Certificates I
           and II, or have earned the Metal Fabrication Vocational
           Certificate or equivalent advanced welders training
           coursework to be approved by program
```

```
                administrator/facilitator
HVAC 167    Sheet Metal Layout and Fabrication...................3
INDT 125    Industrial Safety...................................3
CET  105    Construction Methods................................3
            TOTAL PROGRAM CREDIT HOURS.........................17
*Prerequisite/Corequesite required
```

Nursing - Registered Nurse, A.A.S.

Nursing is a rewarding and challenging career with an optimistic employment future. JCCC's registered nurse program is fully accredited by the National League for Nursing Accrediting Commission and Kansas State Board of Nursing. It is designed with the assistance of a community advisory committee composed of men and women who work in the nursing health care fields and are aware of the requirements for a successful nursing career. Our faculty are well qualified and experienced in the practice and teaching of nursing.

Students receive clinical practice in a variety of settings, including hospitals, long-term care facilities and clinics. Experiences are offered in maternal child nursing, pediatric nursing, operating room nursing, medical-surgical nursing, mental health nursing and gerontology.

A registered nurse with an associate's degree is a skilled health care provider who administers nursing care directly to patients and their families in a variety of settings. The job outlook is very positive. Employment of registered nurses is expected to grow faster than the average for all occupations through 2005.

(Major Code 235A; CIP Code 51.1601)

Nursing

Associate of Applied Science Degree

```
Note: Kansas CNA certification is required for
application to the nursing program.
```

Prerequisites: Prior to enrolling in NURS 124

```
CHEM 122    Principles of Chemistry.............................5
MATH 116    Intermediate Algebra or Higher*....................3
            Prerequisite: MATH 115 with a grade of "C" or higher
            or appropriate score on the math assessment test
            Total Semester Credit Hours........................8
```

First Semester

```
BIOL 144    Human Anatomy and Physiology........................5
            or
BIOL 140    Human Anatomy......................................4
            AND
BIOL 225    Human Physiology*..................................4
            Prerequisites: CHEM 122 and either BIOL 140 or BIOL 144
PSYC 130    Introduction to Psychology.........................3
NURS 124    Foundations of Nursing*............................9
            Prerequisites: Admission to the Nursing Program and
            current certification in Kansas as
            Certified Nursing Assistant (CNA) and
            Cardiopulmonary Resuscitation Certification (CPR)
            for Health Care Providers and CHEM 122 and MATH 116 or
            higher level MATH course and
            corequisite: BIOL 144 and PSYC 130
            Total Semester Credit Hours....................17-20
```

Second Semester

```
            Communications Elective............................3
PSYC 218    Human Development*.................................3
            Prerequisite: PSYC 130
```

```
NURS 126   Nursing Care of the Adult: Health Alterations*.......9
           Prerequisites: BIOL 144 and PSYC 130 and NURS 124
           corequisite: PSYC 218
           Total Semester Credit Hours........................15
```

Summer

```
ENGL 121   Composition I*.....................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
           Total Semester Credit Hours.........................3
```

Third Semester

```
NURS 228   Nursing Care of the Childbearing Family*.............5
           Prerequisites: ENGL 121 and PSYC 218 and NURS 126
           Corequisites: BIOL 230 and either SOC 122 or SOC 125
           and NURS 230
NURS 230   Nursing Care of Children*...........................5
           Prerequisites: ENGL 121 and PSYC 218 and NURS 126
           Corequisites: BIOL 230 and SOC 122 or SOC 125 and
           NURS 228
SOC  122   Introduction to Sociology...........................3
           or
SOC  125   Social Problems.....................................3
BIOL 230   Microbiology*.......................................3
           Prerequisite: CHEM 122 or
           one year of high school chemistry
           Total Semester Credit Hours........................16
```

Fourth Semester

```
NURS 232   Complex Patient Care Management*....................9
           Prerequisites: NURS 228 and NURS 230
           Humanities Elective.................................3
           Health and/or Physical Education Elective...........1
           Total Semester Credit Hours........................13
           TOTAL PROGRAM CREDIT HOURS......................72-75
*Prerequisite/Corequisite required
```

PN to RN Transition, A.A.S

The LPN to RN bridge program provides those licensed practical nurses wanting to become registered nurses the opportunity to do so. Admission to the program is based on academic criteria.

All licensed practical nurses making application must have completed required general education courses before being accepted.

Following successful completion of the summer transition courses, students are admitted to the third semester of the program. At least 10 openings are available each year. Successful completion of the third and fourth semesters of the program allows the graduate to apply to take the national licensing examination for RNs. The application deadline is Jan. 15.

(Major Code 235A; CIP Code 51.1601)

Nursing

Associate of Applied Science Degree

```
Note: LPN to RN Transition
Students must successfully complete NURS 136 and
NURS 228 and NURS 230 before advanced standing credits
for NURS 124 and NURS 126 will be granted.
```

Prerequisite: Prior to enrolling in NURS 228 and NURS 230

```
BIOL 144  Human Anatomy and Physiology.........................5
CHEM 122  Principles of Chemistry...............................5
ENGL 121  Composition I*.......................................3
          Prerequisite: ENGL 106
          or appropriate placement test score or EAP 113 and
          EAP 117
PSYC 130  Introduction to Psychology...........................3
PSYC 218  Human Development*...................................3
          Prerequisite: PSYC 130
          Communications Elective..............................3
MATH 116  Intermediate Algebra or Higher*......................3
          Prerequisite: MATH 115 with a grade of "C" or higher
          or appropriate score on the math assessment test
          Total Prerequisite Credit Hours....................25
```

Summer

```
NURS 136  LPN-RN Transition Course*............................6
          Prerequisites: Completion of LPN program, Current
          Cardiopulmonary Resuscitation Certificate (CPR) for
          Health Care Providers and CHEM 122 and MATH 116 or higher
          and either BIOL 144 or BIOL 140
          and BIOL 225 and ENGL 121 and
          PSYC 130 and PSYC 218
Note: NURS 136 is not added into the total program hours.


          Total Semester Credit Hours..........................6
```

Third Semester

```
NURS 228  Nursing Care of the Childbearing Family*.............5
          Prerequisites: ENGL 121 and PSYC 218 and NURS 126
          Corequisites: BIOL 230 and either SOC 122 or SOC 125
          and NURS 230
NURS 230  Nursing Care of Children*............................5
          Prerequisites: ENGL 121 and PSYC 218 and NURS 126
          Corequisites: BIOL 230 and SOC 122 or SOC 125 and
          NURS 228
SOC  122  Introduction to Sociology............................3
          or
SOC  125  Social Problems......................................3
BIOL 230  Microbiology*........................................3
          Prerequisite: CHEM 122 or
          one year of high school chemistry
          Total Semester Credit Hours.........................16
```

Fourth Semester

```
NURS 232  Complex Patient Care Management*.....................9
          Prerequisites: NURS 228 and NURS 230
          Humanities Elective..................................3
          Health and/or Physical Education Elective............1
          Total Semester Credit Hours.........................13
          TOTAL PROGRAM CREDIT HOURS..........................72
*Prerequisite/Corequisite required

Note: Total Program Hours include 18 hours APL
for NURS 124/126
```

Practical Nursing Day Certificate

The health care industry needs informed, skilled and dependable workers to complete the care team. The licensed practical nurse assists registered nurses and physicians in caring for physically or mentally ill clients. In the long-term care

setting and home health, the LPN may supervise other nursing care personnel.

Practical nursing offers employment in many health care settings. Long-term care, physicians' offices, home care, hospitals and clinics provide opportunity for the practical nurse to administer care to a variety of clients. Job outlook for the Kansas City area is good, with an average starting salary of $35,152-$37,400.

Upon successful completion of the program, graduates are eligible to apply to take the Practical Nursing Licensing exam. After completing the practical nursing program, LPNs may continue their education to become a registered nurse.

The program, which can be completed in 10 months, provides approximately 1,100 hours of instruction. This includes classroom and clinical laboratory experiences in many areas of nursing. The application deadline is March 15, 2009 for the August 2009 start date. Admission to this program requires successful completion of several prerequisites.

(Major Code 366A; CIP Code 51.1613)

Health Occupations

Career Certificate

Prerequisite for Required Courses

```
Kansas CNA certificate & admission to PN program
BIOL 144   Human Anatomy and Physiology.........................5
PSYC 130   Introduction to Psychology...........................3
MATH 111   Fundamentals of Mathematics*.........................3
           Prerequisite: Appropriate score on the math
           assessment test
```

Fall Semester

```
AVPN 115   Nursing I*..........................................22
           Prerequisites: CNA certification
           and BIOL 144 and PSYC 130 and MATH 111
           and admission to the practical nursing program
```

Spring Semester

```
AVPN 117   Nursing II*.........................................22
           Prerequisite:  AVPN 115
           TOTAL PROGRAM CREDIT HOURS...........................44
*Prerequisite/Corequisite required
```

Practical Nursing Evening Weekend Certificate

The health care industry needs informed, skilled and dependable workers to complete the care team. The licensed practical nurse assists registered nurses and physicians in caring for physically or mentally ill clients. In the long-term care setting and home health, the LPN may supervise other nursing care personnel.

Practical nursing offers employment in many health care settings. Long-term care, physicians' offices, home care, hospitals and clinics provide opportunity for the practical nurse to administer care to a variety of clients. Job outlook for the Kansas City area is good, with an average starting salary of $35,152-$37,400.

Upon successful completion of the program, graduates are eligible to apply to take the Practical Nursing Licensing exam. After completing the practical nursing program, LPNs may continue their education to become a registered nurse.

The program, which can be completed in 18 months, provides approximately 1,100 hours of instruction. This includes classroom and clinical laboratory experiences in many areas of nursing. Classes begin in July or January depending on the 18 month cycle. Application deadlines are as follows: March 15, 2009 for July 2009 start date and October 1, 2010 for the January 2011 start date. Admission to this program requires successful completion of several prerequisites.

(Major Code 368A; CIP Code 51.1613)

Career Certificate

Prerequisites for Required Courses

```
Kansas CNA certificate & admission to PN program
BIOL 144  Human Anatomy and Physiology........................5
PSYC 130  Introduction to Psychology...........................3
MATH 111  Fundamentals of Mathematics*.........................3
          Prerequisite: Appropriate score on the math
          assessment test
```

Fall Semester

```
AVPN 115  Nursing I*.........................................22
          Prerequisites: CNA certification
          and BIOL 144 and PSYC 130 and MATH 111
          and admission to the practical nursing program
```

Spring Semester

```
AVPN 117  Nursing II*........................................22
          Prerequisite:  AVPN 115
          TOTAL PROGRAM CREDIT HOURS.........................44
*Prerequisite/Corequisite required
```

Polysomnography/Sleep Technology, A.A.S.

Polysomnographic technologists perform sleep diagnostics working in conjunction with physicians to provide comprehensive clinical evaluations that are required for diagnosis of sleep disorders. By applying non-invasive monitoring equipment, the technologist simultaneously monitors EEG (electroencephalography), EOG (electro-occulography), EMG (electromyography), ECG (electrocardiography), multiple breathing variables and blood oxygen and carbon dioxide levels during sleep. Interpretive knowledge is required to provide sufficient monitoring diligence to recording parameters and the clinical events observed during sleep. Technologists provide supportive services related to the ongoing treatment of sleep related problems. The professional realm of this support includes guidance on the use of devices for the treatment of breathing problems during sleep and helping individuals develop sleeping habits that promote good sleep hygiene. PSG technologists are employed in Sleep Disorders Centers and Labs, which may be located in medical centers, hospitals, or clinic/office settings.

Application for program accreditation will be made to the Commission on Accreditation of Allied Health Education Programs (CAAHEP). Graduates of the program will enter the field as Polysomnographic Technicians and be prepared to sit the national exam given by the Board of Registered Polysomnographic Technologists (BRPT) to gain the Registered Polysomnographic Technologist (RPSGT) credential.

This is a selective admission program with limited enrollment. Prospective students are encouraged to visit the program Web site at http://www.jccc.net/sleeptechnology or to contact JCCC program personnel for additional information and application materials at 913-469-7655.

Note: Metropolitan Community College students should seek specific counsel from the JCCC program personnel for the appropriate course plan and numbers.

Missouri students should refer to Cooperative Program Information, specifically the reverse cooperative section.

(Major Code 236A; CIP Code 51.0999)

Associate of Applied Science Degree

```
Prior to beginning professional courses
MATH 116  Intermediate Algebra or higher*.....................3
```

```
          Prerequisite: MATH 115 with a grade of "C" or higher
          or appropriate score on the math assessment test
CHEM 122  Principles of Chemistry...............................5
BIOL 144  Human Anatomy and Physiology.........................5
          or
BIOL 140  Human Anatomy.......................................4
          and
BIOL 225  Human Physiology*...................................4
          Prerequisites: CHEM 122 and either BIOL 140 or BIOL 144
          Total Semester Credit Hours.....................13-16
```

First Semester

```
ENGL 121  Composition I*......................................3
          Prerequisite: ENGL 106
          or appropriate placement test score or EAP 113 and
          EAP 117
AAC  130  Medical Terminology.................................3
          or
          satisfactory completion of a health related degree or
          certificate
EMS  121  CPR I - Basic Life Support for Healthcare Provider...1
          or
          current AHA BLS Health Care Provider Certification AND
          Health and/or Physical Education Elective............1
PSG  125  Introduction to Sleep Medicine*.....................4
          Prerequisite: Admission to the polysmonography program
          Corequisite: Current AHA BLS Health Care Provider
          Certification
PSG  130  Physiology of Sleep Medicine*.......................3
          Prerequisite: Admission to the polysomnography program
          Total Semester Credit Hours.....................11-14
```

Second Semester

```
PSG  140  Sleep Disorders*....................................4
          Prerequisites: PSG 125 with a grade of "C" or higher and
          PSG 130 with a grade of "C" or higher and
          Corequisite: Current AHA BLS for Health Care Providers
PSG  145  Sleep Study Instrumentation*........................4
          Prerequisites: PSG 125 with a grade of "C" or higher and
          PSG 130 with a grade of "C" or higher
PSG  150  Polysomnography I*..................................4
          Prerequisites: PSG 125 with a grade of "C" or higher and
          PSG 130 with a grade of "C" or higher and
          Prerequisites or Corequisites: PSG 145 with a grade of
          "C" or higher and PSG 140 with a grade of "C" or higher
          Communications Elective.............................3
          Total Semester Credit Hours........................15
```

Third Semester

```
PSG  245  Polysomnography Clinical I*.........................6
          Prerequisites: PSG 140 with a grade of "C" or higher and
          PSG 145 with a grade of "C" or higher and PSG 150
          with a grade of "C" or higher and
          Corequisites: Current AHA BLS Health Care Provider
          Certification
PSG  250  Polysomnography II*.................................4
          Prerequisite: PSG 150 with a grade of "C" or higher
          Social Science/Economics Elective...................3
          Total Semester Credit Hours........................13
```

Fourth Semester

```
PSG  255  Polysomnography Clinical II*........................6
          Prerequisites: PSG 245 with a grade of "C" or higher and
          PSG 250 with a grade of "C" or higher and
```

```
                Corequisites: Current AHA BLS Health Care Provider
                Certification
PSG  265    Polysomnography Capstone*...............................3
                Prerequisite or Corequisite: PSG 255 with a grade of "C"
                or higher
                Humanities/Art Elective................................3
                Total Semster Credit Hours.........................12
                TOTAL PROGRAM CREDIT HOURS.......................64-70
        *Prerequisite/Corequisite required
```

Professional Paraeducator Program, A.A.

The Professional Paraeducator Program is designed to recruit, educate and place well-qualified personnel who will function as effective partners to students, teachers, administrators and parents.
(Major Code 2390; CIP Code 13.1501)

Associate of Arts

```
Students graduating with an Associate of Arts degree or an
Associate of Science degree must complete an approved
cultural diversity course.  Some of these courses are able
to meet both a diversity requirement and a general education
requirement.
```

First Semester

```
ENGL 121    Composition I*.........................................3
                Prerequisite: ENGL 106
                or appropriate placement test score or EAP 113 and
                EAP 117
EDUC 121    Introduction to Teaching*..............................3
                 Note: For possible future elementary/secondary educators
PSYC 130    Introduction to Psychology.............................3
                Humanities Elective..................................3
                Science course with Lab............................4-5
                Total Semester Credit Hours......................16-17
```

Second Semester

```
ENGL 122    Composition II*........................................3
                Prerequisite: ENGL 121
EDUC 220    Survey of the Exceptional Child.......................3
PSYC 218    Human Development*....................................3
                Prerequisite: PSYC 130
MATH 171    College Algebra or higher*............................3
                Prerequisite: MATH 116 with a grade of "C" or higher
                or MATH 134 with a grade of "C" or higher
                or appropriate score on the math assessment test
                Note: Not available to students with credit in MATH 173
                Social Science/Economics Elective....................3
                PSYC Elective........................................3
                (Note: Any PSYC course will meet this
                requirement not already required in program.)
                Total Semester Credit Hours.........................18
```

Third Semester

```
EDUC 243    Issues and Skills for Paraeducators..................3
PSYC 225    Educational Psychology*...............................3
                Prerequisite: PSYC 130
                Education Elective...................................3
                Humanities Elective.................................3
                Science and/or Mathematics Elective*................3
                Total Semester Credit Hours........................15
```

Fourth Semester

```
EDUC 235   Parenting*.........................................2
           Prerequisite or corequisite:  PSYC 215 or PSYC 218 or
           EDUC 270
PSYC 215   Child Development*.................................3
           Prerequisite: PSYC 130
EDUC 246   Multicultural Issues in Education..................2
           Communications Elective............................3
           Social Science/Economics Elective..................3
           Health and/or Physical Education Elective..........2
           (Recommend HPER 200-First Aid and CPR)
           Total Semester Credit Hours.......................15
           TOTAL PROGRAM CREDIT HOURS.....................64-65
```

Education Electives

```
EDUC 210   Creative Experiences for Young Children*...........3
           Prerequisites:  EDUC 130 and one of the following:
           PSYC 215 or PSYC 218 or EDUC 270
EDUC 240   School-Age Programs and Curriculum I*..............3
           Prerequisite: EDUC 130
EDUC 245   School-Age Programs and Curriculum II*.............3
           Prerequisite: EDUC 240
EDUC 250   Child Health, Safety and Nutrition*...............3
```

```
*Prerequisite/Corequisite required
```

Railroad Electronics, A.A.S.

The associate of applied science in railroad electronics degree program is a restricted access program for those students enrolled in the railroad electronics certificate program who wish to progress to a degree. The certificate program has been an active program on the JCCC campus since 1993, with a total enrollment to date of almost 400 students.

The certificate program consists of 33 credit hours of electronics courses, previously designated as ELEC courses, currently designated as RREL courses. The total program content is equivalent to the electronics degree program, but the delivery differs. Content is divided into courses differently. Examples tend to be railroad-related where possible, and courses are delivered in alternative format, combining distance learning (using a remote access server) and classroom presentations.

Electronics technology influences almost every aspect of modern life. Skilled electronics technicians are needed to support growth in the railroad industry. These technicians must be able to fabricate, test, install, operate and maintain highly technical systems, such as communications systems networks, medical delivery systems, computers and computer networks, and industrial process control systems. The program focuses on the underlying principles of electronic devices used extensively in railroad signaling, circuit analysis and digital electronics and will provide a broad systems view of electronics.

Students in the railroad electronics technology program will work with outstanding facilities and the latest laboratory equipment. Graduates of the program will have the opportunity for employment in today's most challenging and exciting railroad signal career field.

No new courses are required for this program. All RREL courses are offered as closed courses for BNSF Railway, with the railroad furnishing all equipment, trainers, computers and software.

(Major Code 2820; CIP Code 49.0299)

Railroad Operations

Associate of Applied Science Degree

First Semester

```
RREL 180    Introduction to Railroad Electronics*................1
            Prerequisites: Approval of the railroad training
            administrator and the JCCC program assistant dean
RREL 181    Circuit Analysis DC/AC*..............................6
            Prerequisites: RREL 180
            and the approval of the railroad training administrator
            and the JCCC program assistant dean
ENGL 121    Composition I*......................................3
            Prerequisite: ENGL 106
            or appropriate placement test score or EAP 113 and
            EAP 117
            Science and/or Mathematics Elective*................3
            Elective............................................3
            Total Semester Credit Hours........................16
```

Second Semester

```
RREL 182    Semiconductor Devices and Circuits*.................6
            Prerequisites: RREL 181
            and the approval of the railroad training administrator
            and the JCCC program assistant dean
RREL 183    Digital Techniques*.................................6
            Prerequisites: RREL 182
            and approval of the railroad training administrator
            and the JCCC program assistant dean
            Humanities Elective.................................3
            Total Semester Credit Hours........................15
```

Third Semester

```
RREL 284    Electronic Communications*..........................6
            Prerequisites: RREL 183
            and approval of the railroad training director
            and the JCCC program assistant dean
            Social Science/Economics Elective...................3
            Technical Electives.................................6
            Total Semester Credit Hours........................15
```

Fourth Semester

```
RREL 285    Microprocessor Techniques*..........................6
            Prerequisites: RREL 183
            and approval of the railroad training director
            and the JCCC program assistant dean
RREL 286    Applied Microprocessors*............................2
            Prerequisites: RREL 285
            and approval of the railroad training director
            and the JCCC program assistant dean
            Health and/or Physical Education Elective...........1
            Communications Elective.............................3
            Technical Electives.................................6
            Total Semester Credit Hours........................18
            TOTAL PROGRAM CREDIT HOURS.........................64
```

Note: MATH 111 and MATH 115 will not meet math requirements.

Technical Electives

```
ASTR 120    Fundamentals of Astronomy...........................3
AUTO 121    Small Engine Service................................3
AUTO 122    Introduction to Automotive Glass....................3
AUTO 125    Introduction to Automotive Shop Practices...........3
BOT  101    Computerized Keyboarding............................1
BOT  103    Business English....................................3
BOT  105    Keyboarding and Formatting I........................3
BOT  115    Electronic Calculators..............................1
BOT  150    Records Management..................................3
CET  105    Construction Methods................................3
```

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CET  120  Engineered Plumbing Systems I........................3
CET  122  Engineered Plumbing Systems II.......................3
CET  129  Construction Management..............................3
CPCA 105  Introduction to Personal Computers: Windows..........1
CPCA 106  Introduction to Personal Computers: Macintosh........1
CPCA 128  PC Applications: MS Office...........................3
CIS  124  Introduction to Computer Concepts and Applications...3
CIS  134  Programming Fundamentals.............................4
DRAF 120  Introduction to Drafting.............................2
DRAF 123  Interpreting Machine Drawings*.......................2
          Prerequisite or corequisite: DRAF 120
          or approval of the program assistant dean
DRAF 129  Interpreting Architectural Drawings..................2
DRAF 132  Introduction to AutoCAD LT...........................3
DRAF 140  Topics in CAD I......................................2
DRAF 238  Architectural Drafting*..............................3
          Prerequisites: DRAF 129 and
          DRAF 230
ELEC 120  Introduction to Electronics..........................3
ELEC 126  Microcomputer A+ Preparation.........................4
ELEC 125  Digital Electronics I................................4
ELEC 131  Introduction to Sensors and Actuators................3
ELEC 133  Programmable Controllers.............................3
ELEC 150  Introduction to Telecommunications...................3
ELEC 185  LAN Cabling and Installation.........................3
ENGR 121  Engineering Orientation..............................2
GEOS 130  General Geology......................................5
GEOS 140  Physical Geography...................................3
GEOS 145  World Regional Geography.............................3
HVAC 125  Energy Alternatives..................................2
HVAC 143  Reading Blueprints and Ladder Diagrams...............2
HVAC 146  Plumbing Systems Applications........................3
HVAC 150  Refrigerant Management and Certification.............1
HVAC 155  Workplace Skills.....................................1
HVAC 167  Sheet Metal Layout and Fabrication...................3
INDT 125  Industrial Safety....................................3
INDT 140  Quality Improvement Using SPC........................2
INDT 155  Workplace Skills.....................................1
IT   200  Networking Technologies..............................3
IT   205  Implementing Windows Client*.........................3
          Prerequisite: IT 200
MFAB 121  Introduction to Welding*^............................4
          Prerequisite or Corequisite: MFAB 120 or
          program facilitator approval or contact testing office
          for Prior Learning Assessment
MFAB 152  Manufacturing Materials and Processes................3
MFAB 170  Basic Machine Tool Processes.........................4
MFAB 180  Blueprint and Symbols Reading for Welders............2
MFAB 240  Metallurgy...........................................2
RRT  120  History of Railroading...............................3
RRT  121  Railroad Technical Careers...........................3
RRT  150  Railroad Operations..................................3
RRT  165  Railroad Safety, Quality and Environment.............3
*Prerequisite/Corequisite required


^Note: MFAB 120-MFAB Tools and Equipment is a prerequisite/
corequisite to MFAB 121.  Students who may have the skills
needed for MFAB 120 may contact the career program
facilitator for a waiver or may contact the Testing Center
for prior learning credit.
```

Railroad Electronics Certificate

This certificate is a comprehensive program of study that covers the fundamental electronic principles used by railroad signal control systems technicians. Upon successful completion of this program, the student should be able to apply basic digital and analog theory required in the maintenance of right-of-way crossing and

train control systems.

Enrollment in the program is subject to the approval of the BNSF training director and JCCC division administrator.

(Major Code 4540; CIP Code 49.0299)

Railroad Operations

Career Certificate

Required Courses

```
RREL 180   Introduction to Railroad Electronics*................1
           Prerequisites: Approval of the railroad training
           administrator and the JCCC program assistant dean
RREL 181   Circuit Analysis DC/AC*..............................6
           Prerequisites: RREL 180
           and the approval of the railroad training administrator
           and the JCCC program assistant dean
RREL 182   Semiconductor Devices and Circuits*..................6
           Prerequisites: RREL 181
           and the approval of the railroad training administrator
           and the JCCC program assistant dean
RREL 183   Digital Techniques*..................................6
           Prerequisites: RREL 182
           and approval of the railroad training administrator
           and the JCCC program assistant dean
RREL 284   Electronic Communications*...........................6
           Prerequisites: RREL 183
           and approval of the railroad training director
           and the JCCC program assistant dean
RREL 285   Microprocessor Techniques*...........................6
           Prerequisites: RREL 183
           and approval of the railroad training director
           and the JCCC program assistant dean
RREL 286   Applied Microprocessors*.............................2
           Prerequisites: RREL 285
           and approval of the railroad training director
           and the JCCC program assistant dean
           TOTAL PROGRAM CREDIT HOURS.........................33
*Prerequisite/Corequisite required
```

Railroad Carman Welding Certificate

JCCC's railroad industrial technology certificate program is OPEN ONLY TO BNSF RAILWAY EMPLOYEES.

Enrollment is subject to the approval of the BNSF Railway training director and JCCC division administrator.

The railroad carman welding vocational certificate is designed to provide students with training in welding and cutting operations used by carmen employed in the railroad industry. Students completing the program should be able to demonstrate safe operating procedures for welding and cutting applications and perform skill competencies involving oxyacetylene cutting, shielded metal arc welding, gas metal arc welding and flux corded arc welding. Students should also be able to complete qualification tests according to industry standards.

(Major Code 4560; CIP Code 49.0299)

Railroad Welder Training Program

Certificate of Completion

Required Courses

```
RRIT 127   Welding Processes*...................................2
           Prerequisites: Approval of the BNSF training director
           and the JCCC program assistant dean
```

```
RRIT 140   Structural Quality SMAW*...........................3
           Prerequisites: RRIT 127
           or approval of the BNSF training director
           and the JCCC program assistant dean
RRIT 141   Structural Quality GMAW*...........................3
           Prerequisites: RRIT 127
           or approval of the BNSF training director
           and the JCCC program assistant dean
           TOTAL PROGRAM CREDIT HOURS.........................8
*Prerequisite/Corequisite required
```

Railroad Machinist Welding Certificate

JCCC's railroad industrial technology certificate program is OPEN ONLY TO BNSF RAILWAY EMPLOYEES.

Enrollment is subject to the approval of the BNSF Railway training director and JCCC division administrator.

The railroad machinist welding vocational certificate is designed to provide students with training in welding and cutting operations used by machinists employed in the railroad industry. Students completing the program should be able to demonstrate safe operating procedures for welding and cutting applications and perform skill competencies involving complete qualification tests according to industry standards.

(Major Code 4570; CIP Code 49.0299)

Railroad Welder Training Program

Certificate of Completion

Required Courses

```
RRIT 127   Welding Processes*.................................2
           Prerequisites: Approval of the BNSF training director
           and the JCCC program assistant dean
RRIT 140   Structural Quality SMAW*...........................3
           Prerequisites: RRIT 127
           or approval of the BNSF training director
           and the JCCC program assistant dean
           TOTAL PROGRAM CREDIT HOURS.........................5
*Prerequisite/Corequisite required
```

Railroad Structural Welding Certificate

JCCC's railroad industrial technology certificate program is OPEN ONLY TO BNSF RAILWAY EMPLOYEES.

Enrollment is subject to the approval of the BNSF Railway training director and JCCC division administrator.

This certificate is designed to address the training needs for railway structural welders. Upon successful completion of this program, you should be able to demonstrate safe operating procedures for welding applications, perform skill competencies involving a variety of processes and positions, pass code welding requirements according to AWS D1.5, and perform welding operations as needed.

(Major Code 4530; CIP Code 49.0299)

Railroad Welder Training Program

Certificate of Completion

Required Courses

```
RRIT 122   Elements of Welding*...............................3
           Prerequisites: Approval of the BNSF manager of
           track and roadway maintenance training
```

```
                and the JCCC program assistant dean
RRIT 123    Basic Welding*.......................................3
                Prerequisites: RRIT 122 or approval of the BNSF manager
                of engineering and maintenance training
                and the JCCC program assistant dean
RRIT 137    Structural Welding SMAW*.............................3
                Prerequisites: RRIT 123 and approval of the BNSF manager
                of engineering and maintenance training
                and the JCCC program assistant dean
RRIT 138    Structural Welding FCAW*.............................3
                Prerequisites: RRIT 137 and approval of the BNSF manager
                of engineering and maintenance training
                and the JCCC program assistant dean
RRIT 139    Structural Welding Pipe*.............................3
                Prerequisites: RRIT 137 and approval of the BNSF manager
                of engineering and maintenance training
                and the JCCC program assistant dean
                TOTAL CREDIT HOURS................................15
*Prerequisite/Corequisite required
```

Railroad Track Welding Certificate

Enrollment is subject to the approval of the BNSF Railway training director and JCCC division administrator.

This certificate is designed to provide a concentrated program for industry-specific training in track maintenance and repairs. Upon successful completion of this program, you should have the ability to safely operate track welding equipment, perform basic and advanced welding operations, and complete specialized procedures as needed to perform the job of railway track welder.

(Major Code 4520; CIP Code 49.0299)

Railroad Welder Training Program

Certificate of Completion

Required Courses

```
RRIT 122    Elements of Welding*................................3
                Prerequisites: Approval of the BNSF manager of
                track and roadway maintenance training
                and the JCCC program assistant dean
RRIT 123    Basic Welding*.....................................3
                Prerequisites: RRIT 122 or approval of the BNSF manager
                of engineering and maintenance training
                and the JCCC program assistant dean
RRIT 132    Thermite Welding*..................................3
                Prerequisites: Approval of the BNSF manager of
                engineering and maintenance training
                and the JCCC program assistant dean
RRIT 136    Rail and Switch Point Repair Welding*..............3
                Prerequisites: RRIT 123 and approval of the BNSF manager
                of engineering and maintenance training
                and the JCCC program assistant dean
RRIT 145    Frog Welding*......................................3
                Prerequisites: RRIT 123
                and approval of the BNSF manager of engineering and
                maintenance training
                and the JCCC program assistant dean
                TOTAL CREDIT HOURS................................15
*Prerequisite/Corequisite required
```

Railroad Operations - Conductor Option, A.A.S.

Conductors are responsible for supervising over-the-road operation of freight trains and are in demand throughout the railroad industry. They may choose

career paths leading to locomotive engineer service or railroad management. The final phase of this program consists of six weeks of full-time training provided in cooperation with the National Academy of Railroad Sciences on the campus of JCCC.

Note: Metropolitan Community College students should seek specific counsel from the JCCC program personnel for the appropriate course plan and numbers.

Missouri students should refer to Cooperative Program Information.

(Major Code 2810; CIP Code 49.0299)

National Academy of Railroad Sciences, Director

Associate of Applied Science Degree

First Semester

```
CPCA 105   Introduction to Personal Computers: Windows..........1
CPCA 108   Word Processing I: MS Word*..........................1
           Prerequisites: CPCA 105 or CPCA 106 or CIS 124
           or CPCA 128 or appropriate score on a waiver test
CPCA 110   Spreadsheets I: MS Excel*............................1
           Prerequisite: CPCA 105 or CPCA 106 or CIS 124
           or CPCA 128 or an appropriate score on a waiver test
ENGL 121   Composition I*.......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
MATH 133   Technical Mathematics I*.............................4
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
PHIL 124   Logic and Critical Thinking..........................3
RRT  120   History of Railroading...............................3
           Total Semester Credit Hours.........................16
```

Second Semester

```
ENGL 123   Technical Writing I*.................................3
           Prerequisite: ENGL 121
MATH 134   Technical Mathematics II*............................5
           Prerequisite: MATH 133 or an equivalent course with a
           grade of "C" or higher
PHYS 133   Applied Physics*.....................................5
           Prerequisite: MATH 133 or higher
RRT  121   Railroad Technical Careers...........................3
           Health and/or Physical Education Elective............1
           Total Semester Credit Hours.........................17
```

Third Semester

```
BUS  121   Introduction to Business.............................3
ECON 132   Survey of Economics..................................3
           or
ECON 230   Economics I..........................................3
PHIL 138   Business Ethics......................................1
RRT  150   Railroad Operations..................................3
RRT  165   Railroad Safety, Quality and Environment.............3
SPD  125   Personal Communication...............................3
           Total Semester Credit Hours.........................16
```

Fourth Semester

```
RRTC 123   Introduction to Conductor Service*...................4
           Prerequisite: Admission to the JCCC railroad
           operations program, conductor option
RRTC 175   Conductor Mechanical Operation*......................2
           Prerequisites: Admission to the JCCC railroad
           operations program, conductor option, and successful
           completion of RRTC 123 with a grade of "C" or higher
```

```
RRTC 261   Conductor Service*..................................2
           Prerequisite: Admission to the JCCC railroad operations
           program, conductor option, and successful completion of
           RRTC 175 with a grade of "C" or higher
RRTC 263   General Code of Operating Rules*.....................4
           Prerequisite: Admission to the JCCC railroad operations
           program, conductor option, and successful completion of
           RRTC 261 with a grade of "C" or higher
RRTC 267   Conductor Field Application*.........................4
           Prerequisite: Admission to the JCCC railroad operations
           program, conductor option, and successful completion of
           RRTC 263 with a grade of "C" or higher
           Total Semester Credit Hours..........................16
           TOTAL PROGRAM CREDIT HOURS...........................65
*Prerequisite/Corequisite required
```

Railroad Conductor Certificate

The 16-credit hour railroad conductor certificate program prepares students for an exciting and well-paying career as a railroad conductor. The more than 500 companies that make up the United States railroad industry provide the country's freight and passenger transportation service on a network of some 300,000 route-miles of track. Railroads employ a substantial workforce.

(Major Code 4410; CIP Code 49.0299)

Railroad Operations

Career Certificate

Required Courses

```
RRTC 123   Introduction to Conductor Service*...................4
           Prerequisite: Admission to the JCCC railroad
           operations program, conductor option
RRTC 175   Conductor Mechanical Operation*......................2
           Prerequisites: Admission to the JCCC railroad
           operations program, conductor option, and successful
           completion of RRTC 123 with a grade of "C" or higher
RRTC 261   Conductor Service*..................................2
           Prerequisite: Admission to the JCCC railroad operations
           program, conductor option, and successful completion of
           RRTC 175 with a grade of "C" or higher
RRTC 263   General Code of Operating Rules*.....................4
           Prerequisite: Admission to the JCCC railroad operations
           program, conductor option, and successful completion of
           RRTC 261 with a grade of "C" or higher
RRTC 267   Conductor Field Application*.........................4
           Prerequisite: Admission to the JCCC railroad operations
           program, conductor option, and successful completion of
           RRTC 263 with a grade of "C" or higher
           TOTAL PROGRAM CREDIT HOURS...........................16
```

Railroad Operations - General Option, A.A.S.

JCCC's associate's degree program in railroad operations can prepare you for an exciting and well-paying career. The more than 500 companies that make up the U.S. railroad industry provide the country's freight and passenger transportation service on a network of some 300,000 route-miles of track. Railroads employ a substantial workforce to service, maintain and manage this extensive transportation network. JCCC's program offers five options. The general option requires 66 credit hours, the conductor option 65 credit hours, the mechanical option 65 credit hours and the maintenance of way welding option 65 credit hours.

In general, this option is designed to provide the student with general knowledge and skills for entry-level employment in the railroad industry. The student is introduced to the history of railroading and the various railroad crafts. Railroad

operations, safety, environment and quality also are covered. The student will choose from a list of business and technical electives in order to provide a basis for possible employment and further post-employment training.
(Major Code 2800; CIP Code 49.0299)
Railroad Operations

Associate of Applied Science Degree

First Semester

```
CPCA 105   Introduction to Personal Computers: Windows..........1
CPCA 108   Word Processing I: MS Word*..........................1
           Prerequisites: CPCA 105 or CPCA 106 or CIS 124
           or CPCA 128 or appropriate score on a waiver test
CPCA 110   Spreadsheets I: MS Excel*............................1
           Prerequisite: CPCA 105 or CPCA 106 or CIS 124
           or CPCA 128 or an appropriate score on a waiver test
ENGL 121   Composition I*.......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
MATH 133   Technical Mathematics I*.............................4
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
PHIL 124   Logic and Critical Thinking..........................3
RRT  120   History of Railroading...............................3
           Total Semester Credit Hours.........................16
```

Second Semester

```
ENGL 123   Technical Writing I*.................................3
           Prerequisite: ENGL 121
MATH 134   Technical Mathematics II*............................5
           Prerequisite: MATH 133 or an equivalent course with a
           grade of "C" or higher
PHYS 133   Applied Physics*.....................................5
           Prerequisite: MATH 133 or higher
RRT  121   Railroad Technical Careers...........................3
           Health and/or Physical Education Elective............1
           Total Semester Credit Hours.........................17
```

Third Semester

```
BUS  121   Introduction to Business.............................3
ECON 132   Survey of Economics..................................3
           or
ECON 230   Economics I..........................................3
PHIL 138   Business Ethics......................................1
RRT  150   Railroad Operations..................................3
RRT  165   Railroad Safety, Quality and Environment.............3
SPD  125   Personal Communication...............................3
           Total Semester Credit Hours.........................16
```

Fourth Semester

```
INDT 140   Quality Improvement Using SPC........................2
           Business/Related Electives...........................6
           Technical/Related Electives..........................9
           Total Semester Credit Hours.........................17
           TOTAL PROGRAM CREDIT HOURS..........................66
```

Business/Related Electives

```
ACCT 121   Accounting I.........................................3
BUS  123   Personal Finance.....................................3
BUS  140   Principles of Supervision............................3
```

```
BUS  141  Principles of Management.............................3
BUS  225  Human Relations.....................................3
BUS  230  Marketing...........................................3
BUS  243  Human Resource Management...........................3
BUS  261  Business Law I......................................3
ENGL 210  Technical Writing II*...............................3
          Prerequisite: ENGL 123
BOT  101  Computerized Keyboarding............................1
```

Technical/Related Electives

```
AUTO 125  Introduction to Automotive Shop Practices............3
AUTO 165  Automotive Engine Repair*...........................4
          Prerequisite or corequisite: AUTO 125 or
          approval of the program administrator
CET  105  Construction Methods................................3
CET  129  Construction Management.............................3
CPCA 138  Windows for Microcomputers*.........................1
          Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124
          or an appropriate score on an assessment
          test
DRAF 123  Interpreting Machine Drawings*......................2
          Prerequisite or corequisite: DRAF 120
          or approval of the program assistant dean
DRAF 129  Interpreting Architectural Drawings.................2
ELEC 120  Introduction to Electronics.........................3
ELEC 126  Microcomputer A+ Preparation........................4
ELEC 133  Programmable Controllers............................3
ELEC 150  Introduction to Telecommunications..................3
ENGR 180  Engineering Land Surveying I*.......................3
          Corequisite: MATH 134 or MATH 172
GEOS 140  Physical Geography..................................3
GEOS 141  Physical Geography Lab*.............................2
          Prerequisite or Corequisite: GEOS 140 or the equivalent
HVAC 123  Electromechanical Systems...........................4
INDT 125  Industrial Safety...................................3
MFAB 121  Introduction to Welding*............................4
          Prerequisite or Corequisite: MFAB 120 or
          program facilitator approval or contact testing office
          for Prior Learning Assessment
MFAB 130  Gas Metal Arc Welding I*............................4
          Prerequisite or Corequisite: MFAB 120 or program
          facilitator approval or testing office for Prior
          Learning Assessment
MFAB 152  Manufacturing Materials and Processes...............3
MFAB 240  Metallurgy..........................................2
*Prerequisite/Corequisite required
```

^Note: MFAB 120-MFAB Tools and Equipment is a prerequisite/ corequisite to MFAB 121 and MFAB 130. Students who may have the skills needed for MFAB 120 may contact the career program facilitator for a waiver or may contact the Testing Center for prior learning credit.

Railroad Operations - Mechanical Option, A.A.S.

Mechanical services include a variety of responsibilities for the maintenance, service and repair of locomotives, freight cars and other rolling stock. Skills include diesel engine repair, electrical and electronic system repair, freight car repair and inspection, and welding processes. The final phase of the program consists of training provided in cooperation with the National Academy of Railroad Sciences. Selective admission to the program is based upon various criteria. Interested students should meet with a JCCC counselor as early as possible.

(Major Code 2840; CIP Code 49.0299)

Railroad Operations

Associate of Applied Science Degree

Note: MFAB 120-MFAB Tools and Equipment is a prerequisite/corequisite to MFAB 121. Students who may have the skills needed for MFAB 120 may contact the career program facilitator for a waiver or may contact the Testing Center for prior learning credit.

First Semester

```
CPCA 105   Introduction to Personal Computers: Windows..........1
CPCA 108   Word Processing I: MS Word*..........................1
           Prerequisites: CPCA 105 or CPCA 106 or CIS 124
           or CPCA 128 or appropriate score on a waiver test
CPCA 110   Spreadsheets I: MS Excel*............................1
           Prerequisite: CPCA 105 or CPCA 106 or CIS 124
           or CPCA 128 or an appropriate score on a waiver test
ENGL 121   Composition I*.......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
MATH 133   Technical Mathematics I*.............................4
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
PHIL 124   Logic and Critical Thinking..........................3
RRT  120   History of Railroading...............................3
           Total Semester Credit Hours.........................16
```

Second Semester

```
ENGL 123   Technical Writing I*.................................3
           Prerequisite: ENGL 121
MATH 134   Technical Mathematics II*............................5
           Prerequisite: MATH 133 or an equivalent course with a
           grade of "C" or higher
PHYS 133   Applied Physics*.....................................5
           Prerequisite: MATH 133 or higher
RRT  121   Railroad Technical Careers...........................3
           Health and/or Physical Education Elective............1
           Total Semester Credit Hours.........................17
```

Third Semester

```
BUS  121   Introduction to Business.............................3
ECON 132   Survey of Economics..................................3
           or
ECON 230   Economics I..........................................3
PHIL 138   Business Ethics......................................1
RRT  150   Railroad Operations..................................3
RRT  165   Railroad Safety, Quality and Environment.............3
SPD  125   Personal Communication...............................3
           Total Semester Credit Hours.........................16
```

Fourth Semester

```
RRIT 122   Elements of Welding*.................................3
           Prerequisites: Approval of the BNSF manager of
           track and roadway maintenance training
           and the JCCC program assistant dean
           or
MFAB 121   Introduction to Welding*.............................4
           Prerequisite or Corequisite: MFAB 120 or
           program facilitator approval or contact testing office
           for Prior Learning Assessment
RRIT 123   Basic Welding*.......................................3
           Prerequisites: RRIT 122 or approval of the BNSF manager
           of engineering and maintenance training
           and the JCCC program assistant dean
```

```
RRTM 124   Orientation to the Railroad Mechanical Craft*........2
           Prerequisite: Admission to the JCCC railroad
           operations program, mechanical option
RRTM 170   Railroad Mechanical Safety and Health*...............2
           Prerequisites: Admission to the JCCC's railroad
           operations program, mechanical option, and completion of
           RRTM 124 with a grade of "C" or higher
RRTM 251   Locomotive Diesel Engine Fundamentals*...............2
           Prerequisites: Admission to the JCCC railroad
           operations program, mechanical option, and completion of
           RRTM 124 and RRTM 170 with a grade of "C" or higher
RRTM 253   Freight Car Fundamentals*............................2
           Prerequisites: Admission to the JCCC's railroad
           operations program, mechanical option, and completion of
           RRTM 124 and RRTM 170 with a grade of "C" or higher
RRTM 254   Basic Locomotive Electricity and Electronics*........2
           Prerequisites: Admission to the JCCC's railroad
           operations program, mechanical option and completion of
           RRTM 124 and RRTM 170 with a grade of "C" or higher
           Total Semester Credit Hours.........................16
           TOTAL PROGRAM CREDIT HOURS..........................65
*Prerequisite/Corequisite required
```

Railroad Operations - Welding Option, A.A.S.

Maintenance of way welding involves maintenance and repair of rail and track components. The final phase of this program consists of course work provided in cooperation with the National Academy of Railroad Sciences. Selective admission to the program is based on various criteria. Interested students should meet with a JCCC counselor as early as possible.

For information visit the National Acadmy of Railroad Sciences

(Major Code 2850; CIP Code 49.0299)

Associate of Applied Science Degree

First Semester

```
CPCA 105   Introduction to Personal Computers: Windows..........1
ENGL 121   Composition I*......................................3
           Prerequisite: ENGL 106
           or appropriate placement test score or EAP 113 and
           EAP 117
MATH 133   Technical Mathematics I*............................4
           Prerequisite: MATH 111 with a grade of "C" or higher
           or appropriate score on the math assessment test
PHIL 124   Logic and Critical Thinking.........................3
RRT  120   History of Railroading..............................3
           Total Semester Credit Hours.........................14
```

Second Semester

```
ENGL 123   Technical Writing I*................................3
           Prerequisite: ENGL 121
INDT 125   Industrial Safety...................................3
PHYS 133   Applied Physics*....................................5
           Prerequisite: MATH 133 or higher
RRT  121   Railroad Technical Careers..........................3
           Health and/or Physical Education Elective...........1
           Total Semester Credit Hours.........................15
```

Third Semester

```
           Technical/Related Elective..........................3
ECON 132   Survey of Economics.................................3
           or
ECON 230   Economics I.........................................3
```

```
RRT  150   Railroad Operations..................................3
RRT  165   Railroad Safety, Quality and Environment.............3
SPD  125   Personal Communication...............................3
           Total Semester Credit Hours........................15
```

Fourth Semester

```
RRIT 122   Elements of Welding*.................................3
           Prerequisites: Approval of the BNSF manager of
           track and roadway maintenance training
           and the JCCC program assistant dean
RRIT 123   Basic Welding*......................................3
           Prerequisites: RRIT 122 or approval of the BNSF manager
           of engineering and maintenance training
           and the JCCC program assistant dean
RRIT 132   Thermite Welding*...................................3
           Prerequisites: Approval of the BNSF manager of
           engineering and maintenance training
           and the JCCC program assistant dean
RRIT 136   Rail and Switch Point Repair Welding*...............3
           Prerequisites: RRIT 123 and approval of the BNSF manager
           of engineering and maintenance training
           and the JCCC program assistant dean
RRIT 145   Frog Welding*.......................................3
           Prerequisites: RRIT 123
           and approval of the BNSF manager of engineering and
           maintenance training
           and the JCCC program assistant dean
RRIT 271   Railroad Welding Internship*........................6
           Prerequisites: Admission to the JCCC railroad program,
           welding option, and successful completion of RRIT 122 and
           RRIT 123 and RRIT 136 and RRIT 145 and RRIT 132 with a
           grade of "C" or higher
           Total Semester Credit Hours........................21
           TOTAL PROGRAM CREDIT HOURS.........................65
```

Technical/Related Electives

```
AUTO 125   Introduction to Automotive Shop Practices............3
AUTO 165   Automotive Engine Repair*...........................4
           Prerequisite or corequisite: AUTO 125 or
           approval of the program administrator
CET  105   Construction Methods................................3
CET  129   Construction Management.............................3
CPCA 138   Windows for Microcomputers*.........................1
           Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124
           or an appropriate score on an assessment
           test
DRAF 123   Interpreting Machine Drawings*......................2
           Prerequisite or corequisite: DRAF 120
           or approval of the program assistant dean
DRAF 129   Interpreting Architectural Drawings.................2
ELEC 120   Introduction to Electronics.........................3
ELEC 126   Microcomputer A+ Preparation........................4
ELEC 133   Programmable Controllers............................3
ELEC 150   Introduction to Telecommunications..................3
GEOS 140   Physical Geography..................................3
GEOS 141   Physical Geography Lab*.............................2
           Prerequisite or Corequisite: GEOS 140 or the equivalent
HVAC 123   Electromechanical Systems...........................4
MFAB 130   Gas Metal Arc Welding I*^...........................4
           Prerequisite or Corequisite: MFAB 120 or program
           facilitator approval or testing office for Prior
           Learning Assessment
MFAB 152   Manufacturing Materials and Processes...............3
MFAB 240   Metallurgy..........................................2
*Prerequisite/Corequisite required
```

^Note: MFAB 120-MFAB Tools and Equipment is a prerequisite/

```
corequisite to MFAB 130.  Students who may have the skills
needed for MFAB 120 may contact the career program
facilitator for a waiver or may contact the Testing Center
for prior learning credit.
```

Respiratory Care, A.A.S.

The respiratory therapist is involved in a variety of lifesaving and life-supporting situations. Respiratory therapists treat patients ranging in age from newborns to senior citizens in the prevention, treatment, management and rehabilitation of lung problems. Employment is typically in hospitals but is available in several other health delivery venues. The health care needs of an aging population will play a role in the future of respiratory care.

JCCC's associate of applied science program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP http://www.caahep.org) in collaboration with the Committee on Accreditation for Respiratory Care (CoARC http://coarc.com). Graduates are eligible to take the National Board for Respiratory Care examinations for both the certified (CRT) and registered (RRT) respiratory therapist.

This is a selective admission program with limited enrollment. Prospective students are encouraged to visit the program Web site at http://www.jccc.net/respiratorycare or to contact JCCC program personnel for additional information and application materials at 913-469-2583.

Note: Metropolitan Community College students should seek specific counsel from the JCCC program personnel for the appropriate course plan and numbers.

Missouri students should refer to Cooperative Program Information, specifically the reverse cooperative section.

(Major Code 237A; CIP Code 51.0908)

Associate of Applied Science Degree

Summer

```
        Social Science/Economics Elective....................3
ENGL 121 Composition I*^.......................................3
        Prerequisite: ENGL 106
        or appropriate placement test score or EAP 113 and
        EAP 117
        Total Semester Credit Hours..........................6
```

First Semester

```
BIOL 140 Human Anatomy^.......................................4
MATH 116 Intermediate Algebra*^...............................3
        Prerequisite: MATH 115 with a grade of "C" or higher
        or appropriate score on the math assessment test
Note: MATH 116 or MATH 171 or higher

CHEM 122 Principles of Chemistry^.............................5
        Humanities/Art Elective..............................3
        Total Semester Credit Hours.........................15
```

Second Semester

```
BIOL 225 Human Physiology*^...................................4
        Prerequisites: CHEM 122 and either BIOL 140 or BIOL 144
BIOL 230 Microbiology*^.......................................3
        Prerequisite: CHEM 122 or
        one year of high school chemistry
BIOL 231 Microbiology Lab.....................................2
        BIOL 231 students must be currently enrolled in BIOL 230
        or have successfully completed BIOL 230 within the
        last three years.
```

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Note: BIOL 231 is optional but strongly suggested.


EMS   121   CPR I - Basic Life Support for Healthcare Provider...1
HC    101   Introduction to Health Care Delivery**..............3
            Communications Elective............................3
            Total Semester Credit Hours....................11-16
```

Note: ^Indicates prerequisite courses that must be completed
before the clinic-year. Electives not completed by the
clinic-year will delay credentialing eligibility.

Note: **HC 101 is not a required course for the degree but
is strongly encouraged. See the program application
packet for details on how this course may be used to
meet clinic-year eligibility requirements.

Summer (clinic-year)

```
RC    125   Beginning Principles of Respiratory Care*............4
            Prerequisite: Admission to the respiratory care program
RC    130   Respiratory Care Equipment*.........................4
            Prerequisite: Admission to the respiratory care program
RC    135   Cardiopulmonary Medicine I*.........................1
            Prerequisite: Admission to the respiratory care program
            (Current BCLS for Health Care Provider required)
            Total Semester Credit Hours.........................9
```

Third Semester

```
RC    220   Cardiopulmonary Physiology*.........................2
            Prerequisite: Successful completion of the summer
            Prerequisite: Successful completion of the summer
            sequence of respiratory care courses
            sequence of respiratory care courses
RC    230   Clinical Topics and Procedures I*...................4
            Prerequisite: Successful completion of the summer
            sequence of respiratory care courses
RC    235   Cardiopulmonary Medicine II*........................2
            Prerequisite: Successful completion of the summer
            sequence of respiratory care courses
RC    240   Cardiopulmonary Pharmacology*.......................2
            Prerequisite: Successful completion of the summer
            sequence of respiratory care courses
RC    271   Clinical Practice I*................................6
            Prerequisite: Successful completion of the summer
            sequence of respiratory care courses
            Total Semester Credit Hours........................16
```

Fourth Semester

```
RC    231   Clinical Topics and Procedures II*..................4
            Prerequisite: Successful completion of the fall sequence
            of respiratory care courses
RC    233   Respiratory Care of Children*.......................2
            Prerequisite: RC 230
RC    236   Cardiopulmonary Medicine III*.......................2
            Prerequisite: Successful completion of the fall sequence
            of respiratory care courses
RC    272   Clinical Practice II*...............................6
            Prerequisite: Successful completion of the fall sequence
            of respiratory care courses
            Total Semester Credit Hours........................14
            TOTAL PROGRAM CREDIT HOURS.......................71-73
            WITH HC ELECTIVE COURSE..........................74-76
*Prerequisite/Corequisite required
```

Veterinary Technology, A.A.S.

The Veterinary Technology, AAS degree program is granted by Metropolitan Community College, but coordinated at JCCC.

A background in veterinary technology provides opportunities for employment with veterinarians, assisting them in providing professional services and performing veterinary-related tasks. Opportunities also exist with pharmaceutical companies in technical services or laboratory animal care.

The program features supervised intensive clinical study under the direction of a licensed veterinarian and is fully accredited by the American Veterinary Medical Association. Students study sanitation, animal care, preparation of animals for surgery and anesthetic management as well as laboratory techniques and radiology.

JCCC's veterinary technology program is offered to Johnson County residents in cooperation with MCC-Maple Woods Community College. You must be accepted as a student at JCCC and accepted into the program at MCC-Maple Woods Community College. Consult with a JCCC counselor for more information.

Program courses and credit hours are subject to change because of requirement changes at the degree-granting institution. Contact MCC-Maple Woods Community College at 816-437-3235 or www.mcckc.edu for an application packet, which includes deadlines, program prerequisites, admission requirements and performance standards.

For enrollment information regarding this cooperative program, go to Cooperative Program Information.

Associate of Applied Science Degree

Degree granted by Metropolitan Community College

General Education Requirements-must be taken at JCCC

```
ENGL 121  Composition I*.......................................3
          Prerequisite: ENGL 106
          or appropriate placement test score or EAP 113 and
          EAP 117
SPD  121  Public Speaking......................................3
          General Education Electives........................3-5
          Note: ENGL 122-Composition II is highly recommended.
```

American Institutions

```
HIST 140  U.S. History to 1877................................3
          or
HIST 141  U.S. History Since 1877.............................3
          or
POLS 122  Political Science....................................3
          or
POLS 124  American National Government........................3
          or
POLS 126  State and Local Government...........................3
```

Specific Program Requirements-must be taken at JCCC

```
BIOL 127  General Zoology......................................5
BIOL 230  Microbiology*........................................3
          Prerequisite: CHEM 122 or
          one year of high school chemistry
BIOL 231  Microbiology Lab*....................................2
          BIOL 231 students must be currently enrolled in BIOL 230
          or have successfully completed BIOL 230 within the
          last three years.
CHEM 122  Principles of Chemistry..............................5
CPCA 128  PC Applications: MS Office...........................3
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Specific Program Requirements-taken at MCC-Maplewoods

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KSS  153  The Missouri Constitution.............................1
KSAH 108  Clinical Mathematics for Veterinary Technicians......1
          Prerequisites: Admission into the Veterinary Technician
          Program
KSAH 100  Introduction to Veterinary Technology................2
KSAH 101  Principles of Animal Science I.......................3
KSAH 110  Principles of Animal Science II*.....................3
          Prerequisite: KSAH 101
KSAH 111  Sanitation and Animal Care...........................2
KSAH 200  Veterinary Hospital Technology I*....................3
          Prerequisites: KSAH 101 and KSAH 110
KSAH 201  Clinical Pathology Techniques I......................4
KSAH 202  Veterinary Anatomy*..................................5
          Prerequisite: BIOL 101 (Maple Woods) or BIOL 127 and
          KSAH 101 and 110
KSAH 203  Laboratory Animal Technology*........................2
          Prerequisites: KSAH 101, KSAH 110 and KSAH 201
KSAH 209  Equine Medicine and Management*......................3
          Prerequisite: KSAH 212
KSAH 210  Veterinary Hospital Technology II*...................3
          Prerequisite: KSAH 200
KSAH 211  Clinical Pathology Techniques II*....................5
          Prerequisite: KSAH 201
KSAH 212  Large Animal Technology*.............................4
          Prerequisites: KSAH 101 and KSAH 110
KSAH 213  Radiology and Electronic Procedures..................2
KSAH 214  Veterinary Technician Internship*....................6
          Prerequisite: Two semesters of first-year veterinary
          technology courses
          TOTAL PROGRAM CREDIT HOURS.......................79-81
*Prerequisite/Corequisite required
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General Education Electives

```
ART  180  Art Hist:Ancient/Renaissance.........................3
ART  182  See ARTH 182 for Art History: Renaissance to Moder...3
ART  184  See ARTH 184 for Art History: Twentieth Century......3
ANTH 125  Cultural Anthropology................................3
ANTH 126  Physical Anthropology................................3
ANTH 130  World Cultures.......................................3
ECON 132  Survey of Economics..................................3
ECON 230  Economics I..........................................3
ECON 231  Economics II.........................................3
ENGL 130  Introduction to Literature*..........................3
          Prerequisite: ENGL 121
ENGL 230  Introduction to Fiction*.............................3
          Prerequisite: ENGL 122
FL   130  Elementary Spanish I.................................5
FL   131  Elementary Spanish II*...............................5
          Prerequisite: FL 130 with a grade of C or higher
          or two years of high school Spanish;
          or the appropriate score on the placement test
FL   140  Elementary French I..................................5
FL   141  Elementary French II*................................5
          Prerequisite: FL 140 or one year of high school French
FL   180  Elementary American Sign Language I..................3
FL   181  Elementary American Sign Language II*................3
          Prerequisite: FL 180 or INTR 120 with a grade of "C" or
          higher
HIST 125  Western Civilization: Readings and Discussion I......3
HIST 126  Western Civilization: Readings and Discussion II.....3
HUM  122  Introduction to Humanities...........................3
MUS  121  Introduction to Music Listening......................3
PHIL 121  Introduction to Philosophy...........................3
PHIL 124  Logic and Critical Thinking..........................3
PHIL 143  Ethics...............................................3
PHIL 154  History of Ancient Philosophy........................3
PHIL 176  Philosophy of Religion...............................3
POLS 132  Introduction to Comparative Government...............3
POLS 135  International Relations..............................3
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PSYC 121  Applied Psychology...................................3
PSYC 130  Introduction to Psychology...........................3
SOC  122  Introduction to Sociology............................3
SOC  125  Social Problems......................................3
SOC  131  Marriage and the Family..............................3
SPD  120  Interpersonal Communication..........................3
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Credit Course Descriptions

The following course offerings at JCCC are listed alphabetically by subject area. Clicking on the subject in which you are interested will give you a list of all courses that fall under that subject and a course description (including credit hour value) for each of those courses. If you then click on a particular course (ANTH 125, for example), you will be directed to a copy of the course outline, which includes the objectives and competencies covered in the course.

- A -

Academic Achievement Center (AAC)
Accounting (ACCT)
Administration of Justice (ADMJ)
American Sign Language (ASL)
Animation (ANI)
Anthropology (ANTH)
Architecture (ARCH)
Art (ART)
Art History (ARTH)
Astronomy (ASTR)
Automotive Technology (AUTO)

- B -

Biology (BIOL)
Biotechnology (BIOT)
Business (BUS)
Business Logistics Management (KSCL)
Business Office Technology (BOT)

- C -

Chemistry (CHEM)
Civil Engineering Technology (CET)
Computer Desktop Publishing (CDTP)
Computer Digital Image Editing (CDIE)
Computer Forensics (CFOR)
Computer Information Systems (CIS)
Computer Personal Computer App (CPCA)
Computer Science (CS)
Computer Web (CWEB)
Cosmetology (AVCO)

- D -

Dental Assisting (KDA)

Dental Hygiene (DHYG)
Drafting/CAD/AutoCAD (DRAF)

- E -

Economics (ECON)
Education and Early Childhood (EDUC)
Electrical Technology (ELTE)
Electronics (ELEC)
Emergency Medical Science/MICT (EMS)
Engineering (ENGR)
English (ENGL)
English for Academic Purposes (EAP)
Entrepreneurship (ENTR)

- F -

Fashion Merchandising/Design (FASH)
Fire Services Administration (FIRE)
Floriculture (FLR)
Foreign Language (FL)

- G -

Game Development (GAME)
Geographic Information Systems (KEOG)
Geoscience (GEOS)
Graphic Design (GDES)

- H -

Health Care (HC)
Health Care Interpreting (HCI)
Health Information Technology (KMRT)
Health Occupations (AVHO)
Heating,Vent.,Air Conditioning (HVAC)
History (HIST)
Home Economics (HMEC)
Honors Program (HON)
Horticulture (HORT)
Hospitality Management (HMGT)
Hospitality Mgt Pastry Baking (HMPB)
Humanities (HUM)

- I -

Industrial Technology (INDT)
Information Technology (IT)
Interactive Media (CIM)
Interior Design (ITMD)
Interpreter Training (INTR)

- J -

Journalism/Media Communication (JOUR)

- L -

Land Surveying (KSRV)
Leadership (LEAD)
Learning Communities (LCOM)
Learning Strategies (LS)
Legal Studies (LAW)
Library (LIBR)

- M -

Marketing Management (MKT)
Mathematics (MATH)
Metal Fabrication and Welding (MFAB)
Music (MUS)

- N -

Nursing (NURS)

- O -

Occupational Therapy Assistant (KOT)

- P -

Philosophy (PHIL)
Photography (PHOT)
Physical Ed, Health & Rec (HPER)
Physical Science (PSCI)
Physical Therapist Assistant (KPT)
Physics (PHYS)
Political Science (POLS)
Polysomnography/Sleep Tech (PSG)
Power Plant Technology (PPT)
Practical Nursing (AVPN)
Psychology (PSYC)

- R -

Radiologic Technology (KRAD)
Railroad Conductor (RRTC)
Railroad Dispatcher (RRTD)
Railroad Electronics (RREL)
Railroad Industrial Technology (RRIT)
Railroad Maintenance of Way (RRMW)
Railroad Operations (RRT)
Railroad Operations-Mechanical (RRTM)
Railroad Work Equipment (RRWE)

Reading (RDG)
Religion (REL)
Respiratory Care (RC)

- S -

Sociology (SOC)
Speech/Debate (SPD)
Surgical Technology (KST)

- T -

Theater (THEA)

- V -

Veterinary Technology (KSAH)

- W -

Women and Gender Studies (WGS)

Academic Achievement Center (AAC)

AAC 100
Study Skills (1 CR)
This self-instructional course is designed to improve students' ability to study efficiently. Based on the results of a study skills survey administered during the student's initial visit to the center, an individualized program is established. Using instructional material provided by the A.A.C., students will master a variety of concepts, including time management, goal setting, textbook reading, note taking from textbook and from lecture, stress management, test taking and using college resources. An Academic Achievement Center instructor is available to work with the student to establish specific instructional goals, administer tests, and provide individualized instruction as it is needed to complete the student's program. This course does not fulfill degree requirements.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $2 to $5.

AAC 101
Study Skills Mini-Course (1 CR)
This class is designed to improve students' ability to study efficiently. The focus is an array of skills the college student needs, i.e., test-taking skills and note-taking skills, using a textbook, critical reading and memory recall, and effective listening and classroom strategies. Also covered are services the college offers to facilitate the learning experience for the college student, i.e., the Writing Center, the Math Resource Center, the Academic Achievement Center, the Student Success Center and the Billington Library. The format includes reading, discussion and application activities. This course does not fulfill degree requirements.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $2 to $5.

AAC 102
Basic Spelling (3 CR)
This self-instructional course is for students who wish to improve their spelling ability but who have not been successful in the traditional spelling program. This

course provides a highly structured approach to spelling improvement through mastery of morphographs (units of meaning) and guidelines for combining morphographs. A limited number of spelling rules are taught in the course. This course is ideal for students for whom English is a second language. An Academic Achievement Center instructor is available to work with students to establish specific goals, administer tests, and provide individualized instruction as needed to complete the students' program. This course does not fulfill degree requirements.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $2 to $5.

AAC 103
Advanced Spelling (1 CR)

This self-instructional course is for students who need to learn or review the basic spelling concepts and to improve their level of spelling mastery. Based on the results of a pretest administered during the student's initial visit, an individualized program is established. Using instructional material provided by the AAC, students will master a variety of concepts, including the final-e rule, the doubling rule, the y-to-i rule, forming the plurals and using possessives. In addition, students will monitor misspellings that occur in their own writing and will master the correct spelling of those words. A post-test will be administered at the end of the program to measure progress. An Academic Achievement Center instructor is available to work with students to establish specific instructional goals, administer tests and provide individualized instruction as needed to complete the students' program. This course does not fulfill degree requirements.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $2 to $5.

AAC 104
Reading Comprehension (1 CR)

This self-instructional course is designed for students who wish to improve their understanding of written language. A pretest is administered to determine a baseline reading comprehension level. An individualized program of study will be developed for each student, which includes both instructional and practice material provided by the A.A.C. Textbooks, computer software and handouts are some of the materials used in this course. This course does not fulfill degree requirements. Students learn techniques for increasing reading comprehension, which include previewing, questioning, careful reading with note taking, reciting and reviewing. An Academic Achievement Center instructor is available to work with students to establish specific goals, administer tests and provide individualized instruction as needed to complete the student's program. This course does not fulfill degree requirements.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $2 to $5.

AAC 105
Reading Rate (1 CR)

This self-instructional course is designed for students who demonstrate strong comprehension skills and wish to improve the rate at which they process written language. Students learn techniques for increasing reading rate and for improving skimming and scanning levels. A pretest will be administered to determine a baseline reading efficiency rate. An individualized program of study will be developed for each student, which includes both instructional and practice material provided by the A.A.C. Textbooks, computer software and handouts are some of the materials used in this course. An Academic Achievement Center instructor is available to work with students to establish specific instructional goals, administer tests and provide individualized instruction as needed to complete each student's program. This course does not fulfill degree requirements.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $2 to $5.

AAC 106
Vocabulary Development (1 CR)

This self-instructional course is designed for college students who wish to expand both their receptive and expressive vocabulary levels. College students are expected to be able to recognize and use vocabularies specific to specialized and changing contents, i.e., data processing, sociology and business. A vocabulary placement test will be administered to determine a starting level. Instructional material provided by the A.A.C. includes Latin and Greek derivatives, specialized vocabulary, stated and implied meanings as well as the process of acquisition (context clues, etymology and derivatives). An Academic Achievement Center instructor is available to work with the student to establish specific instructional goals, administer tests and provide individualized instruction as needed to complete the student's program. This course does not fulfill degree requirements.
<u>Associated Costs</u>: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $2 to $5.

AAC 112
Basic Math Review (1 CR)

This self-instructional course is designed for students who need to learn or review basic mathematical concepts. Based on the results of a pretest administered during the student's initial visit to the Center, an individualized program is established. While one student may begin the program with multiplication facts, another may begin with solving proportions or equations. Instructional material is provided by the A.A.C. An Academic Achievement Center instructor is available to work with the student to establish specific instructional goals, administer tests and to provide individualized instruction as needed to complete the student's program. This course does not fulfill degree requirements.
<u>Associated Costs</u>: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $30 to $35.

AAC 113
Algebra Preparation (1 CR)

This self-instructional course is designed for students who possess basic math skills and want to learn basic concepts in algebra. Based on the results of a pretest administered during the student's initial visit to the center, an individualized program is established. Using instructional material provided by the A.A.C., students will master a variety of concepts, including the terminology of mathematics and algebra, simplifying open expressions, solving algebraic equations and other concepts. An Academic Achievement Center instructor will be available to work with the student to establish specific instructional goals, administer tests and provide individualized instruction as needed to complete the student's program. This course does not fulfill degree requirements.
<u>Associated Costs</u>: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $2 to $5.

AAC 114
Chemistry Preparation (1 CR)

This self-instructional course is designed for students who need to learn or review the basic chemistry concepts. Based on the results of a pretest administered during the student's initial visit to the center, an individualized program is established. Using instructional material provided by the A.A.C., students will master a variety of concepts, including chemical symbols and formulas, valences, chemical equations, the metric system, units and dimensions, temperature, numbers in exponent form, significant figures, electrical charges, acids, bases, salts and solubility. An Academic Achievement Center instructor is available to work with the student to establish specific instructional goals, administer tests and provide individualized instruction needed to complete the student's program. This course does not fulfill degree requirements.
<u>Associated Costs</u>: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $2 to $5.

AAC 115
College Skills Development (1 CR)

This course is designed to improve student self-awareness and institutional awareness. Focus is on strengthening the student's ability to use campus resources and services, as well as improving self-awareness in terms of communication skills, aptitudes, interests, values pertaining to career/life decisions, and self-advocacy. This course does not fulfill degree requirements.

AAC 120
Individualized Study (1 CR)

This self-instructional course is designed for students who want to improve in any of the following A.A.C. areas: study skills, reading comprehension, reading rate, vocabulary improvement, advanced spelling, basic math, algebra preparation or chemistry preparation. Once the area of study has been determined, a pretest will be administered by the instructor and a program of study will be developed using materials provided by the A.A.C. An Academic Achievement Center instructor is available to work with students to establish specific goals, administer tests, and to provide individualized instruction needed to complete the student's program. This course does not fulfill degree requirements.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $2 to $5.

AAC 121
Individualized Study (2 CR)

This self-instructional course is designed for students who want to improve in one or two of the following A.A.C. areas: study skills, reading comprehension, reading rate, vocabulary improvement, advanced spelling, basic math, algebra preparation or chemistry preparation. Once the areas of study have been determined, a pretest will be administered by the instructor in each of these areas, and a program of study will be developed using materials provided by the A.A.C. An Academic Achievement Center instructor is available to work with students to establish specific goals, administer tests, and to provide individualized instruction needed to complete the student's program. This course does not fulfill degree requirements.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $2 to $5.

AAC 122
Individualized Study (3 CR)

This self-instructional course is designed for students who want to improve in two or three of the following A.A.C. areas: study skills, reading comprehension, reading rate, vocabulary improvement, advanced spelling, basic math, algebra preparation or chemistry preparation. Once the areas of study have been determined, a pretest will be administered by the instructor in each of these areas, and a program of study will be developed using materials provided by the A.A.C. An Academic Achievement Center instructor is available to work with students to establish specific goals, administer tests, and to provide individualized instruction needed to complete the student's program. This course does not fulfill degree requirements.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $2 to $5.

AAC 130
Medical Terminology (3 CR)

This self-instructional course is designed for the student who wants to learn a systematic format for acquiring a medical vocabulary. The course begins with a study of suffixes and prefixes common to most of the body systems and guidelines for combining word parts and forming plurals. This is followed by a

study of each body system and oncological terminology. Any student who is planning a career in any facet of the health care industry will find this course beneficial. An Academic Achievement Center instructor is available to work with students to establish specific goals, administer tests and provide individualized instruction as needed to complete the student's program.

Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $30.

AAC 135
Career and Life Planning (3 CR)

This course helps students make decisions about their college majors, careers and other life goals. It emphasizes career research as a tool for making current career decisions and meeting changes in the future workplace. Students learn a systematic approach for making career and life decisions based on their personalities, interest, skills and values.

AAC 150
Job Search Skills (1 CR)

This class presents the skills students need to conduct an effective job search, including locating job leads, writing resumes, employment interviewing and job correspondence.   Additionally, students will explore the importance of adapting to changes in the workplace to ensure their job survival and success. The class consists of lectures, activities, discussion and exercises in the career planning and job search process.

Accounting (ACCT)

ACCT 109
Basics of Income Taxes (1 CR)

This course teaches the student federal income tax rules and the procedures for reporting federal income tax. Upon completion of this course, the student should be able to keep records that will provide appropriate information for use in preparing federal income tax. The student should also be able to prepare the basic individual federal income tax return. 1 hr. lecture/wk., 16 contact hours.

ACCT 111
Small Business Accounting (3 CR)

This course will introduce the basic accounting procedures needed to maintain daily records for a small business and the use of such records in the decision-making process. Upon successful completion of the course, the student will be able to maintain a set of financial records with the occasional help of an outside accountant. This course does not prepare the student for Accounting II. 3 hrs./wk.

ACCT 121
Accounting I (3 CR)

This course is an introduction to accounting fundamentals. Upon successful completion of this course, a student should be able to analyze transactions, use various journals and ledgers, prepare financial statements and summarize results at the close of the fiscal period for the sole proprietorship. 3 hrs./wk.

ACCT 122

Accounting II (3 CR)

Prerequisite: ACCT 121

This course is a continuation of ACCT 121. Upon successful completion of this course, the student should be able to prepare and use financial statements with increased emphasis on interpretation and use of accounting data peculiar to partnerships, corporations and manufacturing firms. 3 hrs./wk.

ACCT 131
Federal Income Taxes I (3 CR)

This course teaches the student federal income tax rules and the procedures for reporting federal income tax. Upon completion of this course, the student should be able to do short- and long-range tax planning and keep records that will provide appropriate information for use in preparing federal income tax. The student should also be able to prepare the standard individual federal income tax return. 3 hrs./wk.

ACCT 135
Computerized Accounting Applications (3 CR)

Prerequisite: ACCT 121 or ACCT 111

Upon successful completion of this course, a student will be able to use the microcomputer to create a chart of accounts, accounts receivable and payable subsidiary ledgers, transaction journals, general ledgers, financial statements, reports and forecasts. 3 hrs./wk.

ACCT 140
Computerized Accounting Problems (3 CR)

Prerequisite or corequisite: ACCT 122

The course will teach students how to use spreadsheet and database software to set up and solve accounting problems. 3 hrs/wk.

ACCT 215
Accounting for Nonprofit Organizations (3 CR)

Prerequisite: ACCT 121

This course is a three-hour survey course of not-for-profit accounting and its primary users: federal, state and local governments; hospitals; and schools. Upon successful completion of the course, the student should be able to describe the primary funds and accounting groups, assist in the budget process, and practice variances among the major nonprofit organizations according to their authoritative pronouncements. 3 hrs./wk.

ACCT 221
Cost Accounting (3 CR)

Prerequisite: ACCT 122

Upon completion of this course, the student should be able to develop and use accounting information to plan and control operations, value inventory, determine income in a manufacturing environment, and evaluate subsequent results. 3 hrs./wk.

ACCT 222
Managerial Accounting (3 CR)

Prerequisite: ACCT 122

Upon completion of this course, the student should be able to develop and use accounting information as an instrument of management control. Students will recognize needed information, determine where it can be obtained and decide how this information can be used by managers to plan, control and make decisions. Material covered includes financial statement analysis, cost application and budgeting reports management. 3 hrs./wk.

ACCT 231
Intermediate Accounting I (3 CR)

Prerequisite: ACCT 122

The course will present the use of accounting theory in the preparation of financial reports. Upon successful completion of this course, the student should be able to solve problems that arise in the presentation of cash, receivables, inventories, tangible and intangible assets on the statement of financial position, and their related effect on the statement of income. 3 hrs./wk.

ACCT 232
Intermediate Accounting II (3 CR)

Prerequisite: ACCT 122

Accounting theory learned through the study of accounting concepts and technical procedures will be presented in this course. Upon completion, the student should be able to solve problems in the presentation of capital structures, long-term investments, debts, leases, pensions, the analysis of financial statements, and price-level, and fair value accounting and reporting. 3 hrs./wk.

ACCT 240
Fraud Examination (3 CR)

Prerequisite: ACCT 121 and ACCT 122 and ACCT 222

This course teaches the principles involved in the detection and prevention of fraud as it pertains to financial matters. The course will explore the vast body of knowledge gained by accounting practitioners and will utilize critical thinking to apply these factors to the prevention of financial statement and employee fraud. Upon completion of this course, the student should be able to describe how and why fraud is committed, to use creative ways to detect and prevent fraudulent conduct, and to understand how allegations of fraud should be investigated and resolved. 3 hrs. lecture/wk.

ACCT 278
Accounting Internship (1 CR)

Prerequisites: ACCT 121 plus 12 additional ACCT hours beyond ACCT 121 and Assistant Dean's Approval

The student will be able to gain work experience in an approved training station under instructional supervision in an accounting or an accounting-related occupation. This internship is designed to give students the opportunity to apply the skills they have acquired in accounting specialty courses. The internship will require an average of 12 hours of job training per week by arrangement.

ACCT 285
Accounting Capstone (3 CR)

Prerequisites: ACCT 121 and ACCT 122 plus 15 hours of accounting courses and Assistant Dean's Approval

This course is designed as a capstone experience before entering the workplace. Students will maintain a complete set of books and related financial statements both manually and electronically through an accounting cycle. Students will use

previously prepared financial statements to make informed judgments and solve problems, identify and apply ethical positions and effectively communicate this information to others both orally and in writing.

Administration of Justice (ADMJ)

ADMJ 121
Introduction to Administration of Justice (3 CR)

This course provides a detailed description of the components of the American criminal justice system: police, courts and corrections. Students utilize critical thinking skills to discern the balance between individual rights and public order as it pertains to the criminal justice process. Students demonstrate knowledge of criminal justice processes through examinations, assigned papers and reports. Additionally, students are required to participate in field and classroom experiences designed to explore the various career opportunities within the criminal justice system. 3 hrs. lecture/wk.

ADMJ 124
Criminal Justice and Corrections (3 CR)

This course will explore the correctional system and trace the evolution of criminal sanctions from early English common law to the present. An examination of local, state, and federal correctional systems will provide an overview of society's response to criminal behavior. Students will be introduced to a detailed examination of jails, prisons, and community corrections. 3 hrs. lecture/ wk.

ADMJ 127
Criminology (3 CR)

This class will explore various explanations for criminal behavior including choice, biosocial, psychological, social structure and social process theories. Society's responses to crime will also be examined. 3 hrs. lecture/wk. ADMJ 127 and SOC 127 are the same course. Do not enroll in both.

ADMJ 130
Crime Prevention (3 CR)

Topics of special interest include the techniques public service agencies use to operate crime-prevention programs and provide technically accurate, cost-effective security recommendations to the community. 3 hrs. lecture/wk.

ADMJ 133
Juvenile Delinquency (3 CR)

This class will provide an analysis of detention procedures, disposition, custody and treatment of juvenile offenders throughout the United States with a specific interest in area systems. The origin and development of juvenile agencies, as well as the organization, functions, and jurisdiction of juvenile courts will be studied. 3 hrs. lecture/wk.

ADMJ 140
Constitutional Case Law (3 CR)

Constitutional Case Law is an exploration of those provisions of the U.S. Constitution that impact the way in which the criminal justice system operates. Students will learn through discussion of important U.S. Supreme Court cases that have shaped the way the Constitution is interpreted followed by analysis of

hypothetical fact patters that require the student to apply the knowledge they have gained. 3 hrs. lecture/wk.

ADMJ 141
Criminal Law (3 CR)

Prerequisite: ADMJ 121 or LAW 121

After taking this course, the student will be able to state the two basic elements necessary for any crime and the philosophy behind these two elements. After a detailed exploration of common law crimes and selected Kansas and Missouri statutes, the student will be able to classify common law crimes and state the difference between a felony and a misdemeanor. The student will understand the significance of the separation of powers doctrine and its application to criminal law and the constant interplay of the U.S. Constitution in criminal law. 3 hrs. lecture/wk.

ADMJ 143
Crime Analysis (3 CR)

Students will learn crime profiling skills and specialized techniques of conducting research, analyzing data and producing crime analysis products. Students will survey existing computer applications and learn practical use and evaluation of these applications. Students will become familiar with the common written reports, charts and graphs used to describe crime analysis products. Students will survey the variety of customers served by crime analysts and the integral part crime analysis plays within the community. 3 hrs. lecture/wk.

ADMJ 145
Fundamentals Private Security (3 CR)

In addition to understanding the general field of private security, the student will be able to differentiate between the security needs of industry, private business, government and selected educational institutions. 3 hrs. lecture/wk.

ADMJ 146
Retail Security (3 CR)

This is a study of retail security supervision and management. Topics will include employment practices, employee dishonesty, controlling shoplifters, and building and perimeter protection. 3 hrs. lecture/wk.

ADMJ 148
Family Violence/Sexual Abuse (3 CR)

A description and causal analysis of the different physical, psychological, and sexual abuse acts that may occur within the primary family unit will be provided in this course. The study will include possible causative factors; psychological and social effects on the various family members; psychological, social and legal implications; treatments; and the relationship between abuse and crime. 3 hrs. lecture/wk.

ADMJ 154
Fundamentals of Criminal Investigation (3 CR)

Prerequisite: ADMJ 124

This course is designed to give fundamental information that serves as an overview of the entire field as well as a solid foundation for specialized course work. The course focuses on investigation of property crimes, homicide investigation, crimes against children and sex-related offenses. 3 hrs. lecture/wk.

ADMJ 170
Introduction to Substance Use and Abuse (3 CR)

This course explores the relationship between drugs and crime. Students will become familiar with the effects of drugs on the body. Interventions for individuals harmfully involved with drug use will be explored. Local and federal laws regulating substance use will also be examined. 3 hrs. lecture/wk.

ADMJ 180
Correctional Casework (3 CR)

This course helps prepare students for positions in correctional agencies. Students will learn how parole officers, probation officers, facility based caseworkers and para-professional treatment providers perform their roles. Students will review casework in the classroom for all types of offenders, including adults and juveniles in facility and community-based environments. 3 hrs. lecture/wk.

ADMJ 201
Police Interrogation (3 CR)

Prerequisite: Suggested course: ENGL 121

This class will assist students in developing the specific verbal and written communication skills used in the criminal justice field. Emphasis will be placed on the development of interviewing, interrogation, and report writing skills. Course content will focus on interviewing victims, witnesses and suspects and utilizing the information to write accurate and complete narrative reports. 3 hrs. lecture/wk.

ADMJ 220
Writing for Criminal Justice (1 CR)

Prerequisites: ENGL 121 and ENGL 122

Writing for Criminal Justice is designed to complement the Administration of Justice program by emphasizing the types of writing required in a criminal justice career. Students are required to gather pertinent information and then record that information by writing a variety of report narratives representative of those prepared by individuals working in a profession within the criminal justice system. Students document criminal incidents depicted in videotaped scenarios as well as participate in active information gathering during incidents simulated in class. 1 hr. lecture/wk.

ADMJ 221
Introduction to Forensics (3 CR)

This course provides an overview of forensic science by focusing on the current technologies police rely on to apprehend criminal perpetrators and to link them through trace evidence to crime scenes. Emphasis is on crime scene investigation, physical evidence, organic and inorganic analysis, forensic toxicology and use of DNA in investigations. 3 hrs. lecture/wk.

ADMJ 224
Introduction to Terrorism (3 CR)

This course defines and describes for students and current police officers the following terms: terrorism, current terrorist organizations, which includes their history, their personnel and their capacity to threaten the security and interests of the United States. Within this context, students learn how law enforcement officials can predict patterns of terrorist activities. The course focuses especially on law enforcement's methods for combating terrorism within multiple arenas, including deterrence, detection, prevention, and swift response. The course further addresses the challenges facing law enforcement and intelligence

agencies in developing a coordinated response to terrorism. 3 hrs. lecture/wk. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.

ADMJ 230
Criminal Behavior (3 CR)

Prerequisite: PSYC 130

This course explores the relationship between psychology, criminal behavior, and the criminal justice system. The foundation of the course will be a detailed examination of the various theories used to explain the causation of criminal behavior. Special emphasis will be placed on exploring how this understanding is applied in various settings within the criminal justice system; including police departments, the courts, and corrections. 3 hrs. lecture/wk.

ADMJ 235
Community Based Corrections (3 CR)

This course is a comprehensive examination of community based corrections. The history of probation and parole is discussed as a foundation for the expanded coverage of correctional services offered in the community. Emphasis is given to modern correctional paradigms including diversion, intermediate sanctions and restorative justice. Practical field experience will broaden the students? understanding of this population and successful best practices of existing federal, state and county agencies will be examined. 3 hrs. lecture/wk.

ADMJ 265
Advanced Police Training

Prerequisite: Selective Admissions - open only to currently employed full-time police officers attending the Police Academy under sponsorship of a law enforcement agency

This course consists of 60 clock hours of law enforcement training provided in addition to the 540 hours required by the Kansas Minimum Standards Training Act for recruits attending the Police Academy. While the required 600-hour curriculum is provided without fee, enrollment in advanced training is required of all those attending the academy. The curriculum covers law, criminal investigations, patrol procedures, defensive tactics, report writing and specialized training required by local law enforcement agencies.

ADMJ 280
Criminal Justice and the Public (3 CR)

Prerequisites: ADMJ 121 and ADMJ 124 and ADMJ 127 and ADMJ 220 and at least five (5) additional credit hours of Administration of Justice course work

This capstone course for Administration of Justice majors assists students in preparing for a career in the field of criminal justice or an advanced program of study. The course is designed to integrate knowledge and skills acquired from prior ADMJ coursework. Additionally, students study concepts of ethics and professionalism as they relate to criminal justice professionals and the communities they serve. 3 hrs. lecture/wk.

ADMJ 281
Readings in Police Science (3 CR)

Prerequisite: 15 credit hours in ADMJ courses

The class will consist of selected readings in police science on topics such as police administration, criminal investigation, criminology, corrections, juvenile problems and evidence. By arrangement.

ADMJ 285
Administration of Justice Internship (3 CR)

Prerequisites: Fifteen credit hours in ADMJ courses or program facilitator approval and a grade point average of 2.0 or higher

Students augment their academic course work with an internship in an appropriate setting under instructional supervision. Internship projects are cooperative efforts between appropriate federal, state or local criminal justice agencies or not-for-profit organizations, and college staff and students. Internships give students the opportunity to participate in the real-world application of their academic studies. In addition, this synthesis of classroom study with practical experience provides students with skills and insights useful in selecting a career in the field of criminal justice. The student spends the equivalent of 12 hours per week for 14 weeks performing internship duties over the course of the semester or a total of 168 hours.

American Sign Language (ASL)

ASL 120
Elementary American Sign Language I (3 CR)

This class will focus on the development of beginning American Sign Language communication skills. Comprehension skills and linguistic features of the language taught in context will be emphasized. A minimum grade of "C" is required to continue in the ASL program. 1 hr. lecture 4 hrs instructional lecture-lab/wk. ASL 120 and FL 180 are the same course. Do not enroll in both.

ASL 121
Elementary American Sign Language II (3 CR)

Prerequisite: INTR 120 or ASL 120 or FL 180 with a grade of "C" or higher

This course will focus on continued development of elementary American Sign Language skills beyond those taught in Elementary ASL I. Students will work on developing communication competencies, concentrating on comprehension and production skills. Information about the linguistic and cultural features will be included in the context of language learning experiences. 1 hr. lecture and 4 hrs. instructional lecture-lab/wk. ASL 121 and FL 181 are the same course. Do not enroll in both.

ASL 122
Intermediate American Sign Language I (3 CR)

Prerequisites: INTR 121 or ASL 121 or FL 181 with a grade of "C" or higher

This course will focus on the development of intermediate American Sign Language communication skills. Comprehension skills and linguistic features of the language taught in context will be emphasized. 6 hrs.lecture-lab/wk. The daytime sections only are open to students in the interpreter training program. INTR 122, FL 270 and ASL 122 are the same courses; only enroll in one. Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

ASL 123
Intermediate American Sign Language II (3 CR)

Prerequisites: INTR 122 or ASL 122 or FL 270 with a grade of "C" or higher

The course will continue study of intermediate American Sign Language. It is designed to develop further intermediate communication skills in American Sign Language. Information about the linguistic and cultural features will be included in the context of language learning experiences. 6 hrs. integrated lecture-lab/ wk. The daytime sections are open only to students in the interpreter training program.

INTR 123, FL 271 and ASL 123 are the same courses; only enroll in one.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

ASL 135
Intro to American Sign Language Linguistics (3 CR)

Prerequisites: INTR 122 or ASL 122 or FL 270 with a grade of "C" or higher

This course introduces students to the structural and grammatical principles of ASL. Students will explore concepts of equivalency between English and ASL 3 hrs. lecture/wk. The daytime sections are open only to students in the interpreter training program. INTR 135 and ASL 135 are the same course; do not enroll in both.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $50.

ASL 145
Introduction to the Deaf Community (3 CR)

Prerequisites or Corequisite: INTR 120 or ASL 120 or FL 180 with a grade of "C" or higher

This course will prepare students to develop and recognize the diversity within the Deaf Community, significant events and figures in Deaf History, and basic norms and values of Deaf Culture. Students will examine and compare Deaf Culture and hearing culture in America. The daytime sections are open only to students in the interpreter training program. 3 hrs./wk. INTR 145 and ASL 145 are the same course; do not enroll in both.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $50.

ASL 147
Fingerspelling I (2 CR)

Prerequisites: INTR 121 or ASL 121 or FL 181. with a grade of "C" or higher

Students will work on developing beginning expressive and receptive fingerspelling skills based on word recognition principles. 1 hr. lecture, 2 hrs. lab/wk. The daytime sections are open only to students in the interpreter training program. INTR 147 and ASL 147 are the same course; do not enroll in both.

ASL 150
American Sign Language Literature (3 CR)

Prerequisite: INTR 122 or ASL 122 with a grade of "C" or higher

This course will provide introduction, discussion, and demonstration of literature in American Sign Language (ASL). The literature involves ASL Poetry, ASL Storytelling/Narratives, Deaf Humor, Deaf Folklore and other genres that have been passed on from one generation to another by culturally deaf people. Students will receive, analyze and retell a variety of ASL literature. 3 hrs. lecture/wk. INTR 150 and ASL 150 are the same course; do not enroll in both.

Animation (ANI)

ANI 120
Conceptual Art for Animation (1 CR)

Prerequisite: CDTP 135

In this basic concept art course designed specifically for the game artist, graphic artist and animator, students will study basic and advanced drawing elements and

principles. Students will produce conceptual artwork used in animation, graphic arts and gaming, including realistic and cartoon character design, landscape environments, architecture, and vehicles. 2 hr. integrated lecture-studio/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

ANI 145
Introduction to 3D Animation (3 CR)

Prerequisites: CDTP 135 and ANI 120

This introductory course will provide a historical background and general design and production issues for 3D animation and game art creation. The details of modeling dimensional objects and environments and a range of simple to complex rendering techniques will be covered. Issues associated with telling a story through moving pictures such as screenplay writing, storyboarding and techniques for bringing an animated character to life will be explored. 6 hrs. integrated lecture-studio/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

ANI 245
Character Animation (3 CR)

Prerequisite: ANI 145

Students will continue to refine their skills in a variety of character animation media. The computer and cutting edge software has become an increasingly important tool in creating character animatics, 2D and 3D character animations. More principles and elements of character animation will be introduced to create more realistic, believable and engaging stories. Continued focus on the importance of plot, character development, key principles of animation and artistic skill will push students into realms of endless creativity and imagination. 6 hrs. integrated lecture-studio/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

ANI 255
Advanced Animation and Effects (3 CR)

Prerequisite: ANI 245

The Advanced Animation and Effects course exposes students to various Hollywood style effects, from viscous liquid to open ocean effects. Through hands-on tutorials students will simulate and render a variety of visual effects including fire, explosions, smoke, steam, lightning, rain, snow storms and tornados. These are just a few of the many limitless possibilities that are required by today's demanding visual effects companies. The students will also explore compositing, combining CG (computer generated) and live video together to create stunning imagery. 6 hrs. integrated lecture-studio/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

ANI 260
Animation Capstone (3 CR)

Prerequisite: ANI 255

In this course, the student will use all the knowledge attained in previous core animation courses and develop a finished 1-2 minute independent movie following a predetermined animation production process and schedule. Students will develop a portfolio including an auto-run DVD or VHS tape, and a hard copy portfolio including illustrations of characters, model sheets, storyboards, props, environments, textures and final rendered scenes created for the movie. 6 hrs. integrated lecture-studio/wk.

Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

ANI 272
Animation Internship (1 CR)

Prerequisite: Facilitator approval required

Students will work in an approved training situation under instructional supervision. The internship is designed to give the student the opportunity to use the skills learned in the interactive media program. Student interns will be required to complete a minimum of 180 hours of on-the-job training. ANI 272 and CIM 272 are the same course; do not enroll in both.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

ANI 273
Career Preparation (4 CR)

Prerequisite or corequisite: ANI 260

This course will provide interactive media majors instruction in the presentation of his or her work in a digital portfolio format of professional quality. A printed and written resume will be produced. Self-promotion, networking, job searches and interview skills will also be covered. 3 hrs. lecture, 2 hrs. lab/wk. ANI 273 is the same course as CIM 273; do not enroll in both. This course is taught in the spring semester.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

Anthropology (ANTH)

ANTH 125
Cultural Anthropology (3 CR)

This introductory course will employ various anthropological theories, perspectives, and methodologies to critically and comparatively examine an array of cultural and social topics as they relate to selected Western and Non-Western cultures and societies. 3 hrs./wk.

ANTH 126
Physical Anthropology (3 CR)

This course is an introduction to selected concepts and principles important to an understanding of evolutionary forces and their influence on the physiology and behavior of humans. The importance of the scientific method will be explored. Awareness of humans and their place in nature will be achieved by examining basic genetics, micro- and macroevolution, primate ecology and behavior, the paleoanthropological evidence for human evolution, and modern human adaptation and variation. 3 hrs./wk.

ANTH 130
World Cultures (3 CR)

This introductory course will utilize an ethnographic approach to introduce students to various cultural and social practices of Westernized and non-Westernized cultures and societies from around the world. This course will examine a wide range of topics including economic production, religion, world view, kinship patterns and political and economic institutions. 3 hrs./wk.

ANTH 134
Native Americans (3 CR)

This ethnographic course will introduce students to the indigenous peoples and First Nations of North, Central and South America, with particular attention being paid to North America. This course will focus on selected First Nations cultures and societies to examine a wide range of topics including arts, oral traditions, religions, and Indian-White relations. 3 hrs. lecture/wk.

ANTH 135
American Indian Artistic Tradition (3 CR)

This course introduces students to many art forms of the various American Indian nations of the United States, Canada, and Mexico. Mediums to be explored include traditional and contemporary visual art, traditional and contemporary music and dance, oral tradition, and film. In addition, social, political, economic, and legal influences on art will be discussed. Lectures, discussions, readings, and films will be utilized to accomplish this. 3 hrs. lecture/wk.

ANTH 142
World Prehistory (3 CR)

This course is an introduction to the variety and continuity of the prehistoric human past. Through the archaeological record we will consider the evolution of humans, the transition of foraging to farming economies, the rise of complex societies, secondary state formation, and the collapse of complex societies. 3 hrs. lecture/wk.

ANTH 144
Archaeology (3 CR)

This course is an introduction to the basic concepts, methods, and findings in archaeology. The historical origins of the discipline and modern approaches to understanding the past will be presented. The course will describe the range of archaeological evidence and techniques for locating, analyzing, and interpreting these remains. 3 hrs. lecture/wk.

ANTH 150
People and Cultures of Mesoamerica (3 CR)

This course is a survey of Mesoamerican cultural beliefs, traditions, and practices from the prehistoric era to the present day. Through the archaeological, historical, and ethnographic record we will adopt an anthropological perspective on the global, national, regional, and local forces on everyday life in Mesoamerica. 3 hrs.lecture/wk.

ANTH 205
Archaeological Field Methods (5 CR)

This course is a practicum of archaeological field methods and techniques. The fundamental principles of archaeological research will be considered. Students will create and implement their own research design in the context of on-going investigations. Emphasis will be placed on practicing the essential skills needed to conduct archaeological research. 160 integrated lecture lab hrs./semester

Architecture (ARCH)

ARCH 120

Introduction to Architecture (3 CR)

This course is an introduction to the profession of architecture through a study of its history, vocabulary, theories and practices. The facets that make up the total architectural curriculum as well as the various professional roles that architects can be expected to perform will be covered. Architectural study is seen as both an art and a science. The interdisciplinary character of architectural practice is emphasized. 3 hrs. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $50 to $100.

ARCH 123
Architectural Principles (3 CR)
Prerequisite: ARCH 120

This course will elaborate on the concepts first presented in introduction to architecture. General focus will be on the modern profession and architects dealing with past, present and emerging ideas as they relate to physical and social context including landscaping, buildings and cities. Unifying themes will be presented of formal architectural principles in relation to modernism and the impact on design, the site, landscaping, and site planning issues. 3 hrs. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $30.

ARCH 127
Introduction to Architectural Graphics (4 CR)

This course is designed to build a conceptual and manual foundation for professional architectural education. Students will learn to apply a variety of media and drawing systems such as freehand drawing, architectural lettering and equipment usage. Students will also learn applied geometry including line, tone, texture and utilizing sun, shade and shadows. Multi-view, paraline, axonometric and oblique drawings will be taught and students will build models related to architectural forms. Emphasis will be on learning to think in spatial terms while introducing professional, conceptual and visual vocabulary. Graphic presentation skills will be developed using standard graphic conventions, basic computer skills, and basic material investigations. 8 hrs. integrated lecture, studio/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $125 to $200.

ARCH 131
Architectural Graphics (3 CR)
Prerequisite: ARCH 127 or ARCH 130

This course builds upon the conceptual and manual skills acquired in Introduction to Architectural Graphics. Students will expand their ability by learning to apply a variety of media and advanced drawing systems, such as design drawing techniques, model building, graphic diagramming, grid perspective drawing, projection perspective drawing, and shade and shadow studies. Emphasis will continue to be on learning to think in spatial terms as well as developing a new repertoire of graphic presentation skills. 6 hrs. integrated lecture, studio/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100 to $300.

ARCH 140
Architectural Design (3 CR)
Prerequisite: ARCH 127 or ARCH 130

This course introduces the student to the process and vocabulary of design. The purpose of the content is to develop the ability to solve two- and three-dimensional design problems with basic methods, vocabulary and media appropriate to the architectural profession. 6 hrs. integrated lecture, studio/wk.

Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100 to $300.

ARCH 240
Architectural History: Ancient to Middle Ages (3 CR)

This course will trace the development of the built environment from Antiquity to the Middle Ages and explore pre-Columbian and Islamic architecture. Emphasis will be placed on how materials, technological advances and natural environment influence architecture. The shaping of architecture through cultural forces will be stressed. Fundamental design principles and analyses of the built form will also be covered. 3 hrs. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $25 to $100.

ARCH 241
Architectural History: Renaissance to Enlightenment (3 CR)

This course will investigate the architecture of the Renaissance, Baroque and Enlightenment periods. A brief exploration into non-Western architecture will also be presented. The focus of this course will be on the principles of design, cultural forces and concept of the built environment within its historical context. The work of prominent architects from each period will be highlighted and analyzed. 3 hrs. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $25 to $50.

Art (ART)

ART 124
Design 2D (3 CR)

This is an introductory study of the principles of visual perception, two-dimensional space organization and the visual elements of line, shape, texture and space. Concepts, materials and processes necessary to an understanding of two-dimensional form are explored using traditional and digital tools and techniques. Working knowledge of Adobe Illustrator is required. 6 hrs. lecture and studio/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $200 to $400.

ART 127
Design 3D (3 CR)
Prerequisite: ART 124

This is a study of the function of three-dimensional organization in the development of visual ideas. Concepts, materials and processes necessary to an understanding of the three-dimensional relationships of space, form, form evolution and the dynamics of structure are explored. 6 hrs. lecture and studio/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $200 to $400.

ART 129
Design Color (3 CR)

This is a study of the nature of color, its physical properties and visual qualities. Basic theories, phenomena and their applications will be explored using pigment, colored paper and digital color systems. Working knowledge of Adobe Photoshop

is required. 6 hrs. lecture and studio/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $200 to $400.

ART 130
Drawing I (3 CR)

This is an introductory course with an emphasis on the development of fundamental drawing skills, increased power of observation and an awareness of the personally expressive and compositional aspects of drawing. 6 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100 to $200.

ART 131
Drawing II (3 CR)

Prerequisite: ART 130

This course involves intermediate problems in drawing with emphasis on individual expression based on historical as well as contemporary concerns and approaches in art. Students will work from models, still-life, and conceptual presentations. A variety of media will be explored. 6 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100 to $200.

ART 135
Painting I (3 CR)

This course is an introduction to the basic elements of painting. Students will learn basic painting skills, color properties, color mixing, color relationships, applications and proper use of tools and equipment. 6 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100 to $200.

ART 136
Painting II (3 CR)

Prerequisite: ART 135

This course involves intermediate problems in painting with emphasis on individual expression based on historical as well as contemporary concerns and approaches in art. 6 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100 to $200.

ART 138
Digital Imaging for Artists (3 CR)

This course is an introduction to the use of the computer as a medium for making fine art. The course will emphasize developing the student's skill in making expressive visual statements using computer technology. 6 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100 to $200.

ART 142
Ceramics I (3 CR)

This course is designed to build a conceptual and manual foundation for future ceramics education. Students will study the properties of clay, its preparation, hand and wheel techniques, surface design, firing methods, fundamental ceramic terms, principles of design, introductory ceramic history and orientation to safe

practices for the ceramic artist. Emphasis will be on developing skills appropriate to the beginning student for the purpose of creative and technical expression. 6 hrs./wk.

Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100 to $250.

ART 143
Ceramics II (3 CR)

Prerequisite: ART 142

This course covers more advanced methods and studio practices in creative ceramic wheel expression and glaze formation. Emphasis is on development of a sense of thrown form and creative decoration or optional creative non-wheel ceramic form development. The course focuses on advanced ceramic form production, aesthetic issues, investigative study and practice. Clay, glaze and firing techniques are investigated in depth. The student acquires a repertoire of studio skills, a deeper awareness of ceramic history and articulated criteria of judgment. Individual interpretation and conceptual development are expected. The study of aesthetics of ceramic form is undertaken. 6 hrs./wk.

Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100 to $250.

ART 145
Sculpture I (3 CR)

Students will explore and study natural and synthetic sculptural forms as they create work using traditional or contemporary media and techniques. Assignments require work in limestone, clay, wax, bronze, aluminum and steel, and involve carving, modeling and building up. 6 hrs./wk.

Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $50 to $200.

ART 146
Sculpture II (3 CR)

Prerequisite: ART 145

This continuation of ART 145 will focus on advanced methods and techniques with emphasis on materials, forms and the student's selection of an individual direction with individual material choices. 6 hrs./wk.

Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $50 to $200.

ART 148
Metal and Silversmithing I (3 CR)

This course is a basic introduction to the terms, tools and techniques involved in creating jewelry and other wearables as they relate to the human figure. Casting, fabrication and construction will be explored. 6 hrs./wk.

Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $50 to $200.

ART 149
Metal and Silversmithing II (3 CR)

Prerequisite: ART 148

Students will study advanced casting and construction techniques. Projects should show a higher degree of design and function. 6 hrs./wk.

Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $50 to $200.

ART 172
Watercolor Painting (3 CR)

This course is an introduction to transparent water media with emphasis on learning fundamental painting skills, the visual elements, composition, visual perception and an awareness of personal expression. 6 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100 to $200.

ART 180
Art Hist:Ancient/Renaissance (3 CR)

ART 180 is now ARTH 180

ART 182
See ARTH 182 for Art History: Renaissance to Modern (3 CR)

ART 182 is now ARTH 182

ART 184
See ARTH 184 for Art History: Twentieth Century (3 CR)

ART 184 is now ARTH 184

ART 186
See ARTH 186 for Art History: Introduction to Asian Art (3 CR)

ART 186 is now ARTH 186

ART 231
Life Drawing I (3 CR)

Prerequisite: ART 130

This course is an introduction to the basic elements of drawing for students wanting a concentration in drawing the human figure. Students will acquire basic competence in developing drawings involving the human form. 6 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100 to $200.

ART 232
Life Drawing II (3 CR)

Prerequisite: ART 231

This course is an intermediate investigation of drawing from the human form. This class is for students wanting to concentrate on figure drawing beyond Life Drawing I. 6 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100 to $200.

ART 235
Studio Workshop I (3 CR)

Prerequisite: ART 131 or ART 136

This course involves advanced problems in painting (or drawing) with emphasis on individual expression based on historical as well as contemporary concerns and approaches in art. 6 hrs./wk.

Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100 to $200.

ART 236
Studio Workshop II (3 CR)

Prerequisite: ART 235

This course involves advanced problems in painting (or drawing), above and beyond those experienced in Workshop I, with emphasis on individual expression. 6 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100 to $200.

ART 244
Ceramics Workshop I (3 CR)

Prerequisites: ART 143 and permission of the assistant dean

Students will have the opportunity to pursue advanced individual research under the direction of the instructor. Emphasis is on creative expression and development of technical skills as well as the further pursuit of technical studies that have relevance for emerging personal specializations. Students will conduct a personal program of study on one aesthetic issue that emerges as personally significant and present the outcomes in an appropriate and acceptable manner at the close of the semester. Students should initiate and pursue studies in directions that inform and further their individual professional and creative growth, which leads to invention, innovation and refinement of their personal semester work, as agreed upon with the instructor. This course enables further pursuit of technical studies that have relevance for these emerging personal specializations. Skill refinement, three-dimensional imagination, with increased creative expression and creative product generation are anticipated. 6 hrs. lecture, lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100 to $250.

Art History (ARTH)

ARTH 180
Art History: Ancient to Renaissance (3 CR)

This course will acquaint students with the arts and ideas of world civilizations from the prehistoric period to the beginning of the Italian Renaissance. The course will examine the aesthetic elements that mark the styles of major periods in two-dimensional, three-dimensional and architectural works. Particular attention will be paid to the relationship between artistic elements and their various cultural and historical contexts. 3 hrs./wk.

ARTH 182
Art History: Renaissance to Modern (3 CR)

This course will acquaint students with the arts and ideas of Western cultures from the beginning of the Italian Renaissance to the present. The course will examine the aesthetic elements that mark the styles of major periods in two-dimensional, three-dimensional and architectural works. Particular attention will be paid to the relationship between artistic elements and their various cultural and historical contexts. 3 hrs./wk. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.

ARTH 184
Art History: Twentieth Century (3 CR)

This course introduces the student to the arts and ideas of Western Europe and the United States from the late 19th century to the present. The course will examine the aesthetic elements that mark the styles of major movements in two-dimensional, three-dimensional and architectural works. Particular attention will be paid to the relationship between artistic elements and their various cultural and historical contexts. 3 hrs. lecture/wk.

ARTH 186
Art History: Introduction to Asian Art (3 CR)

This course will acquaint students with the arts and ideas that arose in India, China and Japan from the prehistoric to the early modern periods. The course will examine the aesthetic elements that mark the styles of major periods in two-dimensional, three-dimensional and architectural works. Particular attention will be paid to the relationship between artistic elements and their various cultural and historical contexts. 3 hrs. lecture/wk.

ARTH 188
History of Photography (3 CR)

This course provides an introduction to the history of photography. Students will examine the aesthetic and technological evolution of photography as an art form, as a visual tool for and influence upon other artistic disciplines, and as a statement of perceived reality. The course will examine the elements that distinguish various aesthetic movements, the styles of major periods and the influences of individual photographers. Attention will be paid to the relationship between photographic imagery and various cultural and historical contexts. Recommended prior course is PHOT 121. 3 hrs. lecture/wk.

Astronomy (ASTR)

ASTR 120
Fundamentals of Astronomy (3 CR)

This course is a study of the universe from the earth, moon and planets to the stars and the most distant galaxies. Topics include black holes, quasars, and the origin of the universe and the possibility of life on other planets. Current astronomical discoveries are discussed in class as they occur. Access to astronomical Web sites is available to students in this course. 3 hrs. lecture/wk.

ASTR 122
Astronomy (4 CR)

This course is a study of the universe from the earth, moon, and planets to the stars and the most distant galaxies. Topics include black holes, quasars, and the origin of the universe and the possibility of life on other planets. Current astronomical discoveries are discussed in class as they occur. Access to astronomical Web sites is available to students in this course. 3 hrs. lecture, 2 hrs. lab/wk., 5 nighttime telescope sessions are required.

Automotive Technology (AUTO)

AUTO 121
Small Engine Service (3 CR)

Upon successful completion of this course, the student should be able to compare and contrast operating principles of two-stroke and four-stroke cycle engines. The student should be able to describe lubricating, cooling, fuel and governor systems;

troubleshoot engine problems; inspect engine components; and service the fuel, cooling and exhaust systems. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 2 hrs. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $40 to $300.

AUTO 122
Introduction to Automotive Glass (3 CR)

Upon successful completion of this course, the student should be able to diagnose, service and repair various automotive glass problems, provide professional service to customers, and manage and supervise jobs and employees. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and /or equipment. 2 hrs. lecture, 1 1/2 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $40 to $300.

AUTO 123
Motorcycle Maintenance and Repair (2 CR)

Upon successful completion of this course, the student should be able to demonstrate the proper use of tools and equipment used in servicing motorcycles. Two-stroke and four-stroke cycle designs will be studied. Overhaul procedures will be demonstrated. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 1 hr. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $40 to $300.

AUTO 125
Introduction to Automotive Shop Practices (3 CR)

This is a beginning course that is appropriate for both the automotive major and other interested students. Upon successful completion of this course, the student should be able to develop shop safety habits and become proficient in tire, battery, cooling system, lubrication service and minor electrical diagnosis. This course is an introductory course required for all students in the Automotive Technology program. Emphasis will be placed on learning basic skills needed to enter advanced automotive classes. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 2 hrs. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $40 to $300.

AUTO 128
Automotive Parts Specialist (2 CR)

Upon successful completion of this course, the student should be able to demonstrate good communication and basic math skills. Ordering and maintaining correct inventory, as well as displaying and selling automotive parts for a fair profit, will be studied. Lectures will be supported by parts specialists in the industry. 2 hrs. lecture/wk.

AUTO 130
Diesel Fundamentals (2 CR)

Prerequisite or corequisite: AUTO 125

Upon successful completion of this course, the student should be able to identify diesel engine components and parts and troubleshoot and service all external

components with emphasis on glow plugs, injectors and injector pumps. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 1 hr. lecture, 3 hrs. lab/wk. This course is taught in the spring semester.

AUTO 163
Automotive Steering and Suspension (3 CR)
Prerequisite or corequisite: AUTO 125 or approval of program facilitator

Upon successful completion of this course, the student should be able to describe manual and power steering component operation, summarize construction and operation of front and rear suspension systems, perform four-wheel alignment on current vehicles and service steering and suspension components. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 2 hrs. lecture, 3 hrs. lab/wk. This course is taught in the fall semester.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $40 to $300.

AUTO 165
Automotive Engine Repair (4 CR)
Prerequisite or corequisite: AUTO 125 or approval of the program administrator

Upon successful completion of this course, the student should be able to demonstrate an understanding of the four-stroke cycle internal combustion engine. Students should be able to diagnose and repair cylinder heads and cylinder block assemblies to include lubrication and cooling systems. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 2 hrs. lecture, 6 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $1500.

AUTO 167
Automotive Brake Systems (2 CR)
Prerequisite or corequisite: AUTO 125 or approval of program administrator

Upon successful completion of this course, the student should be able to summarize disc and drum brake construction and operation, service all brake system components and describe anti-lock brake system services. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 1 hr. lecture, 3 hrs. lab/wk. This course is taught in the spring semester.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $300.

AUTO 168
Automotive Manual Drivetrain and Axles (3 CR)
Prerequisite or corequisite: AUTO 125 or approval of program administrator

Upon successful completion of this course, the student should be able to work safely in the shop; service the typical manual transmission/transaxle; service typical transfer cases; inspect, adjust and replace all clutch components; disassemble, reassemble and set up a differential; and service all front- and rear-wheel drive shaft components. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 2 hr. lecture, 3 hrs. lab/wk. This course is taught in the spring semester.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $300.

AUTO 201
ASE Certification Seminar (1 CR)

This course will prepare students to take any of the eight basic National Institute for Automotive Service Excellence (ASE) automotive certification tests. 1 hr. lecture/wk.

AUTO 206
Automotive Retailing Sales (3 CR)

Prerequisite: MKT 133 or MKT 134

Upon successful completion of this course, the student should be able to demonstrate the skills necessary for competency in automotive retailing. Student awareness and understanding will be directed toward an introduction to automotive retailing, past, present and future; professionalism in sales; the components of sales transactions; a structured sales program and product knowledge; customer satisfaction and follow-up; building a clientele; and success through self-improvement. 3 hrs. lecture/wk.

AUTO 210
Advanced Engine Repair (3 CR)

Prerequisite: AUTO 165

Upon successful completion of this course, the student should be able to plan, design, and build a performance engine. The student will also demonstrate knowledge of the relationships between displacement, horsepower and torque; regulations governing performance engines; and current trends in engine modification. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 1 hr. lecture, 6 hrs. lab/wk. This course is taught in the fall semester
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $3000.

AUTO 230
Automotive Heating and Air Conditioning (3 CR)

Prerequisite or corequisite: AUTO 125 or approval of program administrator

Upon successful completion of this course, the student should be able to operate, service and diagnose automotive heating, ventilation and air conditioning systems. The course will cover the theory and operation of these systems, major components, testing, recycling and other service procedures. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 2 hrs. lecture, 3 hrs. lab/wk. This course is taught in the spring semester.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $300.

AUTO 234
Automotive Electrical Systems (4 CR)

Prerequisite or corequisite: AUTO 125 or approval of program administrator

Upon successful completion of this course, the student should be able to service starting and charging system components; describe the operation and construction of starters, alternators and controlling devices; describe various lighting systems used in current automotive vehicles; and repair electrical lighting and accessory systems. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 3 hrs. lecture, 3 hrs. lab/wk. This course is taught in the fall semester.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $300.

AUTO 250
Automatic Transmissions and Transaxles (4 CR)

Prerequisite or corequisite: AUTO 125 or approval of program administrator

Upon completion of this course, the student should be able to diagnose, service and repair various automatic transmissions and automatic transaxles, including computer-controlled systems. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 3 hrs. lecture/demonstration, 3 hrs. lab/wk. This course is taught in the fall semester.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $300.

AUTO 254
Automotive Engine Performance (5 CR)

Prerequisites or corequisites: AUTO 165 and AUTO 234

Upon successful completion of this course, the student should be able to describe the operation of engine management systems to include: fuel systems, ignition systems, and emission control systems. The student should be able to diagnose and repair all drive ability and emission control systems on the automobile. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 3 hrs. lecture, 6 hrs. lab/wk. This course is taught in the fall semester.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $300.

AUTO 260
Automotive Service Management (3 CR)

Prerequisite: AUTO 254

Upon successful completion of this course, the student should understand the automotive service manager's job. The manager's job includes planning for inevitable change, maintaining flexibility, site planning, customer satisfaction, employee practices, meeting financial goals, and managing time, conflict and stress. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 2 hrs. lecture, 3 hrs. lab/wk. This course is taught in the spring semester.

AUTO 261
Automotive Service Techniques (3 CR)

Prerequisite: AUTO 254

Upon successful completion of this course, the student should become proficient in ordering of parts, writing repair orders, presenting work orders to customers, questioning customers about automobile service problems, answering the telephone, and supervising workloads. Students will also diagnose and perform service work on student and staff vehicles. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 1 hr. lecture, 6 hrs. lab/wk. This course is taught in the spring semester.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $40 to $300.

AUTO 271
Automotive Technology Internship (3 CR)

Prerequisite: Program facilitator approval required

Upon successful completion of this course, the student should be able to apply classroom knowledge to an actual work situation. The internship will provide advanced students on-the-job experience under the supervision of professionals

in the industry. The work will be developed cooperatively with area employers, college staff and each student to provide a variety of actual job experiences directly related to the student's career goals. 1 hr. lecture, 15 hrs. work min./wk

Biology (BIOL)

BIOL 110
Nutrition for Life (2 CR)

Designed for students who wish to apply nutrition information to their lives, this course explores how food selection affects body size, body composition, performance, disease resistance and longevity. Students will analyze the composition of their diets and develop a plan of action to improve their eating behaviors. 2 hrs. lecture/wk.

BIOL 115
Natural History of Kansas (3 CR)

Natural History of Kansas describes physical and biological processes that have led to the present Kansas landscape. Physical science topics include geology, climate patterns and soil formation. Biological science topics include ecology and a survey of the plants and animals of Kansas. The course will consider how the physical and biological environment relates to past and present human resource uses. 3 hrs. lecture/wk. Two 7-hr. Saturday labs required.

BIOL 122
Principles of Biology (3 CR)

This course is an introduction to selected concepts and principles important to an understanding of how biological systems operate. The importance of scientific methods and processes will be explored. Biological organization will be studied by examining the chemical, cellular, organismal and ecological properties that are unique to life. The diversity and unity of life will be explained in terms of classical and molecular genetics. 3 hrs./wk. BIOL 122 students see Memory Strategies classes on pg.? - Optional Enrollment. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.

BIOL 123
Principles of Biology Lab (1 CR)

Prerequisite or corequisite: BIOL 122 or consent of the assistant dean

This introductory lab examines basic biological concepts by focusing on the structures and functions of plants and animals. 2 hrs./wk. BIOL 123 students must be currently enrolled in BIOL 122 or have successfully completed BIOL 122 within the last three years.

BIOL 124
Oceanus: Essentials of Oceanography (3 CR)

This course for beginning students focuses on the marine environment as a unique feature of the planet earth and investigates areas of intense scientific and public concern: the pervasiveness of the ocean and its effect on the earth's weather, its stunning physical size and diversity of contained life forms, its contributions to the physical and historical development of man, its impact on geopolitical and economic matters, and the impact of oceanic pollutants and the potential exploitation of marine resources. 3 hrs. lecture/wk.

BIOL 125
General Botany (5 CR)

This is a survey of the life, growth and structure of plants. Divisions of the plant kingdom will be presented with emphasis on life cycles, anatomy, physiology and ecology of major groups. Students will do microscopic and macroscopic analysis of the major division. 3 hrs. lecture, 4 hrs. lab/wk.

BIOL 127
General Zoology (5 CR)

This is a survey of the life, structure, and growth of animals. Students will concentrate on identifying animals by their structural characteristics and looking at the role adaptation plays in anatomical and physiological features. Students will do dissections and microscopic analysis of the major phyla. 3 hrs. lecture, 4 hrs. lab/wk.

BIOL 130
Environmental Science (3 CR)

Environmental Science seeks to describe problems and solutions associated with human use of natural resources. Students will study the major physical and biological processes that govern the complex interactions in natural ecosystems. Major course topics include human population growth, resource use and pollution. Practical solutions aimed at sustainability will be identified and examined. This is an introductory, nonscience-major survey course. 3 hrs./wk. BIOL 131 students must be currently enrolled in BIOL 130 or have successfully completed BIOL 130 within the last three years. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.

BIOL 131
Environmental Science Lab (1 CR)

Prerequisite or corequisite: BIOL 130

In this lab, students will learn ecological principles that are necessary for understanding and solving environmental problems. Students will sample the local environment for various types of environmental pollution, conduct lab projects and computer simulations, and attend field trips. Field trips may include a visit to a local wastewater treatment plant, a stream ecosystem and a prairie ecosystem. 2 hrs.lab/wk. plus up to three field trips. BIOL 131 students must be currently enrolled in BIOL 130 or have successfully completed BIOL 130 within the last three years.

BIOL 135
Principles of Cell and Molecular Biology (4 CR)

This is an integrated lecture and laboratory course for biology majors and students planning to take additional courses in biology. Subjects covered include basic biochemistry, cell structure and function, cellular metabolism, Mendelian and molecular genetics, natural selection and evolution, cell physiology and development of plants and animals from the single-celled stage to the embryonic stage. 3 hrs. lecture, 2 hrs. lab/wk.

BIOL 140
Human Anatomy (4 CR)

Students will study gross and microscopic aspects of cells, tissues and organ systems of the human body. They will concentrate on a detailed analysis of the structure of each body system. 3 hrs. lecture, 3 hrs. lab/wk. The Open Anatomy Lab, 311 CLB, is available for students enrolled in Human Anatomy and Human Anatomy and Physiology classes at JCCC. Contact your professor, check the

schedule outside of 311 CLB or call 913-469-8500, ext. 4124, for hours. A current student ID is required for using the Open Anatomy Lab.

BIOL 144
Human Anatomy and Physiology (5 CR)

This course provides basic knowledge on human structures and their function. Students will study the relationship of structures to function in the organ systems of the human body. Emphasis will be on the identification of the anatomical features and their functions. This course is integrated lecture and laboratory. 3 hrs. lecture, 4 hrs. lab/wk. The Open Anatomy Lab, 311 CLB, is available for students enrolled in Human Anatomy and Human Anatomy and Physiology classes at JCCC. Contact your professor, check the schedule outside of 311 CLB or call 913-469-8500, ext. 4124, for hours. A current student ID is required for using the Open Anatomy Lab.

BIOL 145
Human Anatomy and Physiology Dissection (1 CR)

Prerequisites: BIOL 144 and Assistant Dean's Approval

Students will dissect the cat and study the relationship of structures to function in the organ systems of the cat. In this laboratory course, they will also dissect the cow kidney, heart, brain and eye. Students will compare and contrast these structures and functions with the organ systems of the human body. 2 hrs. lab/wk. Students enrolling in BIOL 145 should have completed BIOL 140 or BIOL 144 and have the approval of the assistant dean.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $35.

BIOL 150
Biology of Organisms (5 CR)

Prerequisite: BIOL 135 or consent of the assistant dean

This is a survey of the five kingdoms of life. Monera, fungi, protista, plant and animal kingdoms will be presented, with emphasis on life cycles, anatomy, physiology and ecology of the major groups. 4 hrs. lecture, 3 hrs. lab/wk.

BIOL 155
Introduction to Bioethics (3 CR)

Prerequisite: BIOL 122 or BIOL 135 or equivalent, or permission of the assistant dean

This course is an introductory course in ethics with an emphasis on the ethical content raised by the discipline of biology. The student will examine the major ethical theories, including deontology, act utilitarianism, rule utilitarianism, along with select others. Study of the theories will enable the analysis of case studies involving such issues as human populations problems, reproductive technologies, genetic engineering of humans and other organisms, stem cells and their use, beginning/ending of life, the human genome project, environmental impact of humans, cloning, medical and non-medical genetic interventions, and biological ethics. 3 hrs. lecture/wk.

BIOL 205
General Genetics (4 CR)

Prerequisite: BIOL 122 or the equivalent introductory college-level biology course

This introductory course emphasizes human heredity using concepts from classical and modern genetics. Themes of advancing technologies and bioethical issues are interwoven in the basic background fabric of the course. 3 hrs. lecture, 2 hrs. lab/wk.

BIOL 225
Human Physiology (4 CR)

Prerequisites: CHEM 122 and either BIOL 140 or BIOL 144

This is an introduction to the dynamic functions of the human organism from the chemical and molecular mechanisms that sustain cellular processes through the control systems responsible for homeostasis and the influence of these systems on the cellular function of organ and systems operation. Laboratory investigation using selected biochemical and physiological preparations allows correlation of theory with experimental observations. 3 hrs. lecture, 3 hrs. lab/wk.

BIOL 227
Human Pathophysiology (4 CR)

Prerequisite: BIOL 144 or BIOL 225

This introduction to the physiology of disease covers common disorders of the body from the cellular to the systemic level. Topics include causes, symptoms, diagnostic tests and treatments of disease. 4 hrs. lecture/wk.

BIOL 230
Microbiology (3 CR)

Prerequisite: CHEM 122 or one year of high school chemistry

This is a general introductory course in microbiology. It provides a background in many areas of microbiology with an emphasis on medical aspects. The structure, physiology, antimicrobial agents, immunology and host-parasite relationship of microorganisms will be studied, with an emphasis on bacteria. 3 hrs./wk.

BIOL 231
Microbiology Lab (2 CR)

BIOL 231 students must be currently enrolled in BIOL 230 or have successfully completed BIOL 230 within the last three years.

Students will learn aseptic techniques and apply them in the isolation of pure cultures of bacteria. Students will also perform various staining techniques and chemical tests to identify these bacteria. The response of bacteria to changes in environmental conditions will also be examined. Various life stages of medically important parasites will also be observed. 4 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $35.

BIOL 235
General Nutrition (3 CR)

Prerequisites: CHEM 122 and BIOL 144 or CHEM 122 and BIOL 140 and BIOL 225

This introductory course provides a basic knowledge of human nutrition. Students will learn the sources and functions of the various nutrients. They will also explore the interaction of diet, disease prevention and treatment. Through the use of a computerized nutrition program, students will analyze their diets for nutritional deficiencies and excesses. 3 hrs. lecture/wk.

BIOL 240
General Pharmacology (3 CR)

Prerequisite: BIOL 225

This course provides a basic understanding of the science of drugs-how they work and what they do. Students will study various drug concepts including mechanism of action, pharmacologic class, pharmaco-kinetics, pharmacodynamics and

clinical implications. 3 hrs. lecture/wk. Spring.

BIOL 250
Ecology (4 CR)

Prerequisites: BIOL 122 and BIOL 123 or BIOL 130 and BIOL 131 or equivalent courses or consent of the assistant dean

Major topics in this course will include population dynamics, competition, predation, mutualism, community structure, ecological succession, energy flow, nutrient cycling, and biogeography. Students will also review the major features of terrestrial, freshwater, and marine ecosystems. Field and laboratory experiments will introduce students to several different habitat types; various techniques commonly used in ecology; and engage students in collecting, analyzing and evaluating ecological data. Lab reports emphasize critical evaluation of ecological concepts and data and effective scientific communication. 3 hrs. lecture, 3 hrs. lab/wk.

Biotechnology (BIOT)

BIOT 160
Introduction to Biotechnology (2 CR)

Prerequisite: CHEM 122 and Prerequisite or corequisite: BIOL 135 or consent of assistant dean

This course is an introduction to biotechnology, including career exploration, history and applications of DNA/RNA technology, molecular biology, and bioethics. Topics include cloning, DNA, antibodies, gene therapy, plant biotechnology, the human genome project, DNA fingerprinting, genetic testing, diverse products made through biotechnology, and the ethical implications of this technology. The course is intended for those interested in pursuing a career in an industrial, academic, or biomedical research laboratory. 2 hrs. lecture/wk.

BIOT 165
Laboratory Safety (1 CR)

Prerequisite: CHEM 122 and Prerequisite or corequisite: BIOL 135 or consent of assistant dean

This course will emphasize laboratory safety and procedures. Additionally, regulations that govern the biotechnology laboratory will be discussed. Biological, chemical and radiation safety will all be handled through lectures, videotapes, demonstrations and field trips. There will also be exposure to good manufacturing practices (GMP), quality assurance and control procedures (QA/QC), and OSHA and FDA regulations. 1 hr. lecture/wk.

BIOT 230
Microbiology for Biotechnology (5 CR)

Prerequisites: BIOL 135 and BIOT 160 and BIOT 165

This is an introductory course in microbiology for biotechnology students. It provides a background in many areas of microbiology with an emphasis on molecular aspects and applications for biotechnology. Industrial and food microbiology will also be examined. The structure, physiology, antimicrobial agents, immunology and host-parasite relationship of microorganisms will also be studied, with an emphasis on bacteria. Students will learn aseptic techniques and apply them in the isolation, growth and maintenance of pure cultures of bacteria. Students will also perform various molecular and genetic techniques as well as chemical tests to identify these bacteria. The growth phases of bacteria and response of bacteria to changes in environmental conditions will be examined. 3 hrs lecture, 4 hrs lab /wk.

BIOT 260
Biotechnology Methods (5 CR)

Prerequisites: Either BIOT 160 or BIOL 160 and either BIOT 165 or BIOL 165 and Prerequisite or corequisite: BIOL 230 or consent of assistant dean

This course is an introduction to the theory and laboratory techniques in molecular biology, protein biochemistry and immunology with an emphasis on gene expression and regulation, recombinant DNA, RNA transcription, and protein translation. Laboratory emphasis will be on molecular biological techniques utilized in modern research and industrial laboratories. Techniques include growth and maintenance of E. coli, gene cloning, DNA and protein electrophoresis protein purification and enzymatic and immunology assays. Lecture and laboratory exercises on the principles and practices of initiation, cultivation, maintenance, preservation of cell culture lines and applications will also be covered. 6 hrs. lab/wk.

BIOT 265
Biotechnology Internship (4 CR)

Prerequisites: BIOT 260 and either BIOT 160 or BIOL 160 and either BIOT 165 or BIOL 165 and Assistant Dean's Approval

The internship will provide advanced students the opportunity to develop job and career-related skills while in a work setting. Upon successful completion of this course, the student should be able to apply classroom knowledge to an actual work situation. The work will be developed cooperatively with academic, industrial and private institutional biotechnology laboratories. 20 lab hrs./wk.

Business (BUS)

BUS 120
Management Attitudes and Motivation (3 CR)

Upon successful completion of this course, the student should be able to assess personal strengths and weaknesses and set goals for personal and professional life, define communication and listening skills, analyze human relations problems, apply problem-solving strategies to human relations issues in the workplace, and define and compare management styles. Class meets for 48 hrs.

BUS 121
Introduction to Business (3 CR)

Upon successful completion of this course, the student should be able to explain the basic principles of the American free enterprise economic system. In addition, the student should be able to explain the fundamentals of starting a business and the interrelationship among the four functional areas: accounting, finance, management and marketing. 3 hrs./wk.

BUS 123
Personal Finance (3 CR)

Upon successful completion of this course, the student should be able to define the role of a consumer in the economy; develop a basic financial plan; apply budgeting procedures in a daily and monthly spending plan; calculate principal and interest; define the types of consumer credit; identify the types of housing mortgages; and explain the important considerations in buying, selling and renting. In addition, the student should be able to calculate individual insurance needs in the areas of life insurance, health insurance, property and liability insurance, automobile insurance and other types of special insurance and be able to explain employee and retirement benefits, including tax-sheltered plans. 3 hrs./wk.

BUS 140
Principles of Supervision (3 CR)

Upon successful completion of this course, the student should be able to define the supervisor's role within a company and identify the skills necessary to successfully fulfill that role. In addition, the student should be able to determine the supervisor's role in supervising employees on an individual basis and as a group. The student should also be able to apply the principles of supervision in simulated work situations. 3 hrs./wk.

BUS 141
Principles of Management (3 CR)

Upon successful completion of this course, the student should be able to state the basic functions of management, explain the nature of organizations and organizational theories and types, explain the importance of effective communication within the organizational structure, develop and define the techniques for directing and motivating employees, explain the effects of change on an organization, and develop techniques for coping with those effects. In addition, the student should be able to explain and discuss the application of business ethics in managerial decision-making. 3 hrs./wk.

BUS 145
Small Business Management (3 CR)

Upon successful completion of this course, the student should be able to demonstrate an understanding of management techniques vital to small business. In addition, the student should be able to apply decision making skills in the areas of business start-up choosing the form of ownership, marketing, financial planning and managing the small business.

BUS 150
Business Communications (3 CR)

Prerequisite: ENGL 121

Upon successful completion of this course, the student should be able to explain the role of communication in the business environment and identify the most effective methods for creating, sending and receiving messages. In addition, the student should be able to use effective oral and written communication skills in business; write and evaluate business documents, including letters, memos, and reports using the principles of correct style, organization and format; and prepare an effective oral business presentation. 3 hrs./wk.

BUS 215
Savings and Investments (3 CR)

Upon successful completion of this course, the student should be able to define, analyze and evaluate types of savings instruments and other investments. In addition, the student should be able to determine which instruments are desirable for a personal financial plan. The student should also be able to demonstrate an understanding of basic financial-planning concepts and tax-planning procedures. 3 hrs./wk.

BUS 225
Human Relations (3 CR)

Upon successful completion of this course, the student should be able to evaluate the impact of human relations as it relates to the social system, technical system and administrative system of a work environment. In addition, the student should be able to analyze these systems and their effects on individual group and organizational performance. 3 hrs./wk.

BUS 230
Marketing (3 CR)

Upon successful completion of this course, the student should be able to explain the concepts of production, consumption and distribution in relation to a free enterprise economy; list the basic channels of distribution available to the manufacturer of consumer and industrial products; explain and compare the distribution functions of the manufacturer, wholesaler and retailer; and state the procedures necessary to develop a total marketing plan for a given product, service or product line. In addition, the student should be able to discuss the fundamental principles of consumer behavior in the buying process and apply those principles to target market strategies. 3 hrs./wk. BUS 230 is the same course as MKT 230; do not enroll in both.

BUS 235
Introduction to International Business (3 CR)

This course is designed to introduce the student to the global economy. Differences in political, economic and cultural forces within countries will be analyzed and national competitiveness assessed. Cross-border trade and investment and the global monetary system will be introduced and analyzed. Competition and a firm's international business strategy in the global marketplace will be examined. Ethical issues in international business will also be discussed. 3 hrs./wk.

BUS 240
Legal Environment of International Business (3 CR)
Prerequisites: BUS 235 and BUS 261 and BUS 263

This course provides an introduction to the legal aspects of contracts for international sale of goods. Topics include multinational enterprises, sovereignty, international finance, international transportation, international marketing, protection of intellectual property, international dispute resolution, negotiation and diplomacy. 3 hrs. lecture/wk.

BUS 243
Human Resource Management (3 CR)

Upon successful completion of this course, the student should be able to state the principles of human resource management; describe the human resource function as an integral part of management; differentiate between roles of the personnel and line manager in the management of human resources; define and evaluate strategic planning, recruitment, selection and training; define the primary methods of human resource development; employ methods of employer appraisal; and state the major components and coverages of the Equal Employment Opportunity Act and other personnel/human resource-related laws. 3 hrs./wk.

BUS 261
Business Law I (3 CR)

This course is designed to introduce the students to the American legal system. Principles of legal ethics in business will be introduced. Principles of common law of contracts will be discussed. Sections of Uniform Commercial Code as applied to the law of sales and law of negotiable instruments will be introduced. 3 hrs./wk.

BUS 263
Business Law II (3 CR)
Prerequisite: BUS 261

A continuation of Business Law I, this course will introduce the student to the principles of Uniform Commercial Code as applied to secured transactions. The

law of bankruptcy, principles of agency and business organizations such as partnerships, limited partnerships, joint ventures, corporations, and sole proprietorships will be discussed. Principles of real property, personal property, bailments, estate and trusts will be introduced. 3 hrs./wk.

Business Logistics Management (KSCL)

KSCL 210

Logistics Management (3 CR)

Logistics management is an integrated systems approach involving a variety of environments within a global marketplace. The course explores the logistic system from inbound movement of material and freight into the organization through physical distribution of the completed product to the consumer. Hands-on applications, activities and simulations. IAW Council of Logistics Management's guidelines will be emphasized. 3 hrs. lecture/wk. Course taught at MCC-Blue River Community College, 20301 East 78 Highway, Independence, MO. Students should contact the Blue River coordinator of supply chain logistics about the class meeting times and beginning and ending dates of classes. Call 816-220-6532.

KSCL 211

Operations Management (3 CR)

This course covers the central role and importance of the operations function in both service and product organizations. Strategy, design, scheduling, materials handling, inventory, production, MRP and distribution are covered. 3 hrs. lecture/wk. Course taught at MCC-Blue River Community College, 20301 East 78 Highway, Independence, MO. Students should contact the Blue River coordinator of supply chain logistics about the class meeting times and beginning and ending dates of classes. Call 816-220-6532.

KSCL 212

Transportation Operations and Management (3 CR)

This course covers the significance of an integrated, well-organized transportation system to a market-driven economy. The development of the transportation system of the United States from both historic and economic perspectives is included. 3 hrs. lecture/wk. Course taught at MCC-Blue River Community College, 20301 East 78 Highway, Independence, MO. Students should contact the Blue River coordinator of supply chain logistics about the class meeting times and beginning and ending dates of classes. Call 816-220-6532.

KSCL 213

Warehousing and Distribution Centers (3 CR)

This is an integrated systems approach involving a variety of environments within a global marketplace. The course covers the organization and operations of warehouses and distribution centers. The major components are warehousing and distribution center paradigms, system design, locations, technology and financial dimensions. 3 hrs. lecture/wk. Course taught at MCC-Blue River Community College, 20301 East 78 Highway, Independence, MO. Students should contact the Blue River coordinator of supply chain logistics about the class meeting times and beginning and ending dates of classes. Call 816-220-6532.

Business Office Technology (BOT)

BOT 101
Computerized Keyboarding (1 CR)

Upon successful completion of this course, the student should be able to operate a computer keyboard by touch to enter data with speed and accuracy. 1 hr./wk.

BOT 103
Business English (3 CR)

Upon successful completion of this course, the student should be able to demonstrate the basic rules of English, develop correct sentence structure and use accurate English grammar and mechanics when writing documents. Students also will be able to proofread written work using standard proofreading symbols. 3 hrs. lecture/wk.

BOT 105
Keyboarding and Formatting I (3 CR)

Upon successful completion of this course, the student should be able to develop speed and accuracy by learning to use the alphabetic, numeric and symbol keys by touch; identify and operate the basic machine parts and special purpose keys; and format and type personal correspondence and business documents - letters, reports, tables and memos. Microsoft Word will be used in this class to complete and format documents. 3 hrs./wk.

BOT 106
Intro to Business Computer Applications (3 CR)

Prerequisite or corequisite: BOT 105 or keyboarding proficiency test

Upon successful completion of this course, the student should be able to use the beginning features of an operating system and word processing, spreadsheet, database management, presentation graphics, and e-mail programs to prepare and manage documents simulating legal, medical and general business office applications. Proficiency will also be attained in selecting appropriate applications to use and to integrate all of the business computer application programs to complete projects. Document formatting and proofreading will also be introduced. Hands-on, practical projects will be performed to reinforce the concepts taught. 3 hrs. lecture/wk.

BOT 110
Skillbuilding I (1 CR)

Prerequisite: BOT 105 or equivalent

Upon successful completion of this course, the student should be able to use a diagnostic approach to develop typing speed and accuracy. Specific problems will be identified, and the student should be able to complete specialized drills and activities tailored to the student's own typing needs to improve or eliminate deficiencies. 1 hr./wk. Students attempting to take the short-term classes BOT 110 Skillbuilding I and BOT 118 Skillbuilding II in the same semester, should contact Kathy at 913-469-8500 ext 3145, and provide their student ID number and the CRN for the specific BOT 118 section

BOT 115
Electronic Calculators (1 CR)

Upon successful completion of this course, the student should be able to review basic arithmetic, operate the electronic calculator by touch to build speed and accuracy, use basic calculator functions and operating controls, and solve business application problems. 1 hr./wk.

BOT 118
Skillbuilding II (1 CR)

Prerequisite: BOT 110

Upon successful completion of this course, the student should further develop speed and accuracy. The student should be able to improve keyboard skills

through diagnostic evaluation and by completing individualized drills and activities. 1 hr. lecture/wk. Students attempting to take the short-term classes BOT 110 Skillbuilding I and BOT 118 Skillbuilding II in the same semester, should contact Kathy at 913-469-8500 ext 3145, and provide their student ID number and the CRN for the specific BOT 118 section

BOT 122
Medical Keyboarding (1 CR)

Prerequisite: BOT 105

Upon successful completion of this course, the student should be able to develop keyboarding speed and accuracy in medical formats. The student should also be able to improve keyboard skills by completing drills and activities pertaining to the transcription of medical reports. 1 hr. lecture/wk.

BOT 125
Document Formatting (1 CR)

Prerequisite: BOT 155

Upon successful completion of this course, the student should be able to type business letters with special features, memorandums, reports, tables and a variety of administrative documents. The student should also be able to use Microsoft Word to complete these activities. 1 hr./wk.

BOT 130
Office Systems Concepts (3 CR)

Upon successful completion of this course, the student should be able to understand and apply technological factors of contemporary office systems. Implementation of office automation concepts will be examined as they relate to people, technology and organizations. These concepts will be applied to organizational and strategic planning to enhance productivity in the office. 3 hrs./wk.

BOT 150
Records Management (3 CR)

Methods for developing and controlling an office records management program will be discussed. Selection of equipment for active and inactive records will be covered, along with procedures for document, card and special records; microrecords; mechanized and automated records; and records storage, retention and transfer. Upon successful completion of this course, the student should be able to file documents using alphabetic, subject, consecutive numeric, terminal digit numeric and geographic filing systems using requisition charge out and transfer procedures. The student should be able to create a computer database for records management; enter, modify and delete records; print reports; and determine disposition of records filed alphabetically, numerically, by subject and geographically. The course will cover the identification of evaluation methods and standards for both staff and programs in a records management department. 3 hrs./wk.

BOT 155
Word Processing Application I (2 CR)

Prerequisites: BOT 105 or equivalent and BOT 106

Upon successful completion of this course, the student should be able to demonstrate skill in creating, saving, opening, closing, printing and editing documents. The student should be able to use beginning and intermediate features of Microsoft Word. The student should be able to demonstrate file maintenance procedures. 2 hrs. lecture/demonstration/wk.

BOT 160
Legal Transcription (3 CR)

Prerequisite: BOT 155 or equivalent

Upon successful completion of this course, the student should be able to demonstrate skill in spelling, defining, pronouncing and using legal terms in proper context. The student should also be able to use legal reference resources and transcribe legal documents from dictation using proper formatting rules. 3 hrs./wk.

BOT 165
Medical Transcription (3 CR)

Prerequisites: AAC 130 and BOT 155 or equivalent

Upon successful completion of this course, the student should be able to transcribe medical reports using proper formats and transcription rules. These reports concern in-patients with a specific medical problem. Reports include history and physical examinations, radiology reports, operative reports, pathology reports, requests for consultation, death summaries, discharge summaries and autopsy reports. Students should be able to spell, define, pronounce and use medical terms in proper context and be able to use medical reference books. 3 hrs./wk.

BOT 170
Medical Coding and Billing (3 CR)

Prerequisite: AAC 130

This course is designed to give the student an overview of the medical insurance billing process. This includes becoming acquainted with ICD-9, HCPCS and CPT procedural coding systems as well as Blue Cross/Blue Shield, Medicaid, Medicare and Champus/Champva programs. Students will be given hands-on coding advice for optimal insurance reimbursement. 3 hrs. lecture/wk.

BOT 180
Business Spreadsheet Applications (1 CR)

Prerequisite: BOT 106 or CPCA 110 or extensive experience using Windows-based spreadsheets

Upon successful completion of this course, the student should be able to demonstrate competencies in using advanced formatting techniques, advanced features and advanced functions of Microsoft Excel. The following topics will be covered: working with templates, workbooks and lists; using Excel's analysis tools; managing and auditing worksheets; collaborating with workgroups; creating and editing macros; and importing and exporting data. 1 hr. lecture/wk.

BOT 185
Business Database Applications (1 CR)

Prerequisite: BOT 106 or CPCA 114 or extensive experience using Windows-based databases

Upon successful completion of this course, the student should be able to demonstrate database development skills by effectively identifying the types of projects that should be developed using Microsoft Access rather than a spreadsheet; build tables that can be related to each other in order to eliminate data entry duplication; customize forms and reports; create basic and advance queries; and define relational integrity between tables. The student should also be able to create basic and advanced queries with single and multiple tables using Boolean logic. The student should be able to identify and implement methods of troubleshooting and explain ways of getting additional help. 1 hr. lecture/wk.

BOT 205
Professional Image Development (1 CR)

Upon successful completion of this course, the student should be able to develop work habits and self-management skills that will affect performance on the job by reducing stress, conflict and miscommunication. 1 hr. lecture/wk.

BOT 210
Working in Teams (1 CR)

Upon successful completion of this course, the student should possess the necessary skills to work in teams. Students should also be able assess and adjust their perceptions of how they should communicate within a team environment and to assess their own workplace expectations, values and methods of communicating as a basis for understanding how to improve communication with others to achieve a common goal. 1 hr. lecture/wk.

BOT 220
Pharmacology Terminology (2 CR)

Prerequisite: AAC 130

Upon successful completion of this course, the student should be able to use pharmacological terminology in an appropriate context. This course includes an investigation of medication actions, dosage forms, routes of administration and uses. The course emphasizes the terminology necessary for transcription of medical reports. This course is taught in the spring semester. 2 hrs. lecture/wk.

BOT 255
Word Processing Applications II (2 CR)

Prerequisite: BOT 155 or extensive experience using the same software with approval of the program facilitator

Upon successful completion of this course, the student should be able to demonstrate word processing skills using such features as macros, styles, tables of contents and indexes, graphics, master and subdocuments, and other advanced features of Microsoft Word. 2 hrs. lecture-demonstration/wk.

BOT 260
Desktop Publishing for the Office (3 CR)

Prerequisite: BOT 155 or the equivalent

Upon successful completion of this course, the student should be able to use desktop publishing skills using Microsoft Publisher to produce publications such as fliers, newsletters, brochures, operating manuals, price lists and bulletins. 3 hrs. lecture/demonstration/wk.

BOT 265
Computerized Office Applications (3 CR)

Prerequisites: BOT 106 and also CPCA 141 and BOT 255 and BOT 130 (This capstone course should be taken near the end of the degree or certificate program)

Upon successful completion of this course, the student will be able to use the basic features of word processing, database, spreadsheet and presentation applications. The student will also use advanced features to complete simulated office applications and to perform multitasking projects. This course is taught in the spring semester. 3 hrs./wk.

BOT 270
Advanced Medical Transcription (3 CR)

Prerequisite: BOT 165

Upon successful completion of this course, the student will develop medical transcription skills with emphasis on additional speed and accuracy. Students will apply language skills, decision-making skills and "common- sense" skills during the transcription process. Students will become familiar with the medical transcription profession, employment opportunities, the important role of the medical transcriptionist in the health care team, and personal attributes, knowledge and skills required to produce error-free documents according to the employer's and AAMT standards. 3 hrs. lecture/wk.

BOT 275
Office Internship I (1 CR)

Prerequisite: Admission to the business office technology program

The student should be able to gain work experience in an approved training station under instructional supervision in Administrative Assistant, Medical, Legal, or Certificate Programs. The course will provide practical experience in the use of skills acquired in Business Office Technology specialty courses. The internship will require a minimum of 185 hours of job training.

BOT 280
Office Internship II (1 CR)

Prerequisite: BOT 275

The student should be able to gain work experience in an approved training station under instructional supervision in Administrative Assistant, Medical, Legal, or Certificate Programs. The course will provide practical experience using skills acquired in Business Office Technology courses. The internship will require a minimum of 185 hours per semester job training.

Chemistry (CHEM)

CHEM 120
Chemistry in Society (4 CR)

This course is designed for non-science majors who seek an understanding of the concepts of chemistry. Historical foundations of chemistry, applications to society and daily life, controversies of contemporary concern and current research topics are explored. Inquiry-based laboratory experiments will illustrate chemical principles. 3 hrs. lecture, 2 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $60.

CHEM 122
Principles of Chemistry (5 CR)

This course is an introduction to the fundamentals of chemistry, with emphasis on general concepts of inorganic chemistry and sufficient study of organic chemistry to introduce the student to biochemistry. The student will learn basic definitions and theories of chemistry, solve numerical problems related to chemical principles and apply chemical concepts in laboratory work. 4 hrs. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $60.

CHEM 124

General Chemistry I Lecture (4 CR)

Prerequisite or corequisite: MATH 171 or assessment test and Corequisite: CHEM 125

Students will relate atomic structure to chemical systems, calculate the amount of material used in chemical reactions, use the periodic table as an aid to understanding chemical systems and interpret chemical reactions. 4 hrs./wk.

CHEM 125
General Chemistry I Lab (1 CR)

Prerequisite or Corequisite: CHEM 124 Students who withdraw from GENERAL CHEMISTRY I LECTURE must also withdraw from the corresponding laboratory GENERAL CHEMISTRY I LABORATORY Students may not withdraw from the laboratory course GENERAL CHEMISTRY I LABORATORY without withdrawing from CHEMISTRY I LECTURE.

Experiments of a qualitative and quantitative nature that support topics from General Chemistry I Lecture will be carried out. 3 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $60.

CHEM 131
General Chemistry II Lecture (4 CR)

Prerequisites: CHEM 124 and CHEM 125 and Corequisite: CHEM 132

Chemistry 131 is the second semester of a two-semester course in general chemistry in which the student will develop a working knowledge of some of the fundamental concepts and quantitative relationships involved in the study of chemical reactivity. Topics include solutions, chemical kinetics, chemical equilibrium, acid-base chemistry, chemical thermodynamics, electrochemistry, and nuclear chemistry. 4 hrs./wk. CHEM 131 students are required to enroll concurrently in CHEM 132.

CHEM 132
General Chemistry II Lab (1 CR)

Prerequisites: CHEM 124 and CHEM 125 and Corequisite: CHEM 131 Students who withdraw from GENERAL CHEMISTRY II LECTURE must also withdraw from the corresponding laboratory GENERAL CHEMISTRY II LABORATORY. Students may not withdraw from the laboratory course GENERAL CHEMISTRY II LABORATORY without withdrawing from CHEMISTRY II LECTURE.

The laboratory consists of qualitative and quantitative experiments designed to parallel and support General Chemistry II Lecture. 3 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $60.

CHEM 140
Principles of Organic & Biological Chemistry (5 CR)

Prerequisites: BIOL 135 and CHEM 122 or permission of the assistant dean

This course covers nomenclature, theory and applications of basic organic chemistry and biochemistry in the area of carbohydrates, lipids, proteins and enzymes. The lab activities reinforce the topics presented in the lecture. 4 hrs. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $80.

CHEM 220
Organic Chemistry I (5 CR)

Prerequisites: CHEM 131 and CHEM 132

Organic Chemistry I is an introduction to the theories and principles of the chemistry carbon compounds. The student will develop an understanding of organic chemistry, which will be useful in the studies of chemistry and related fields such as medicine, engineering and pharmacy. The laboratory is supportive in nature, with a strong emphasis on developing laboratory techniques. Representative compounds will be prepared and used to introduce the student to instrumental analysis. 3 hrs. lecture, 6 hrs. lab/wk.
<u>Associated Costs</u>: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $80.

CHEM 221
Organic Chemistry II (5 CR)

Prerequisite: CHEM 220

Organic Chemistry II is a continuation of Organic Chemistry I, the nomenclature, principles and theories of organic chemistry, with emphasis on electronic theories and reaction mechanisms. Laboratory is supportive in nature with emphasis on developing laboratory techniques and preparation of representative compounds. Organic Chemistry II completes the study of organic chemistry designed to prepare the student for continued work in chemistry and related fields. 3 hrs. lecture, 6 hrs. lab/wk.
<u>Associated Costs</u>: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $80.

CHEM 250
Biochemistry (4 CR)

Prerequisites: CHEM 131 and CHEM 132 and CHEM 140 or CHEM 220

This course is an introduction to the major topics in biochemistry. Topics include the major classes of biological molecules, such as proteins, lipids and nucleic acid; an overview of the major metabolic pathways; and developments and topics relating to molecular biology. 4 hrs. lecture/wk.

CHEM 251
Biochemistry Laboratory (2 CR)

Prerequisites: CHEM 131 and CHEM 132 and CHEM 140 or CHEM 220
Corequisite: CHEM 250

The laboratory will consist of qualitative and quantitative experiments using biological molecules. Particular emphasis upon biochemistry laboratory techniques, including chromatography and spectroscopy, will be used. 3 hrs. lab, 1 hr. recitation/wk.
<u>Associated Costs</u>: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $60.

Civil Engineering Technology (CET)

CET 105
Construction Methods (3 CR)

This course introduces the student to the terms, methods, procedures, sequences of operation, and types of construction and planning in civil and building construction. This course is typically offered the first half of each semester. 3 hrs./wk.

CET 120
Engineered Plumbing Systems I (3 CR)

Upon successful completion of this course, the student should be able to use codes and engineering principles and design engineering practices to analyze and design basic plumbing systems. Topics covered include codes, materials, hangers, supports, and expansion and contraction. Plumbing systems covered include fuel gas, domestic water and soil waste/vent. The student should also be able to interpret drawings related to plumbing technology. 3 hrs. lecture/wk.

CET 122
Engineered Plumbing Systems II (3 CR)

Upon successful completion of this course, the student should be able to describe storm water, industrial wastes, compressed air and irrigation and fire sprinkler systems. Topics include water treatment, noise control, decorative pools, pumps, estimating, specifications and field inspection. 3 hrs. lecture/wk.

CET 125
Construction Specifications (2 CR)
Prerequisite or corequisite: CET 105 or equivalent

Upon successful completion of this course, the student will be able to describe the phases of a project, identify the bidding requirements, explain contractual relationships between parties, categorize the drawings, write specifications, list warranties and explain contract modifications. 2 hrs. lecture/wk.

CET 129
Construction Management (3 CR)

This course is intended for students interested in learning management principles for construction projects. Upon successful completion of this course, the student should be able to perform many processes associated with construction projects and complete forms typically used in project management. Topics include contract documents, scheduling, job costs and management issues. Project management software will be used to schedule and track project resources and progress. 2 hrs. lecture, 3 hrs. lab/wk.

CET 133
Concrete Testing (2 CR)

This course covers the principles of making and testing concrete. The emphasis will be on allowing concrete to reach the highest level of durability through proper mix design, placing and finishing techniques, and curing methods. This course will help prepare the student for ACI National Certification exam. 1.5 hrs. lecture, 1 hrs. lab/wk.

CET 140
Civil Engineering Materials (3 CR)
Corequisite: MATH 133

Upon successful completion of this course, the student will be able to analyze materials commonly used in civil engineering construction projects. Common properties of soil, concrete and asphalt will be studied for classification as engineering materials. Students will learn to perform typical materials tests in accordance with ASTM guidelines. This course is typically offered in the spring semester. 2 hrs. lecture, 3 hrs. lab/wk.

CET 150
Construction Safety (3 CR)

This course introduces the student to construction safety policies, procedures,

and standards. Topics include safety theories and concepts, OSHA (Occupational Safety and Health Administration) construction standards for safety and health, and safety application on the job site. Special emphasis is placed on those areas that are the most hazardous, using OSHA standards as a guide. Upon successful completion of the course, the student will receive the 30-hour OSHA Construction Safety Completion certificate. 3 hr. lecture/wk.

CET 211
Technical Statics and Design (3 CR)

Prerequisite: MATH 134 or MATH 172 or MATH 173 or MATH 241

Upon successful completion of this course, the student should be able to evaluate and design force systems in equilibrium. Topics include truss analysis, stress and strain, shear, loading conditions, steel member selection, and connection design. Computer applications are included. This course is typically offered in the fall semester. 3 hrs. lecture/wk.

CET 227
Construction Cost Estimating (3 CR)

Prerequisites: CET 105 and CET 125 or permission of program administrator and Prerequisite or corequisite: DRAF 129 or permission of program administrator

This course adds to the student's knowledge of the construction process by covering the principles of construction estimating. Topics include estimating quantities of material using reference books, tables and the Construction Specifications Institute (C.S.I.) format and preparing estimating reports. Students will use industry-standard software for construction estimating. The student needs a basic knowledge of spreadsheet software to be successful in this course. This course is typically taught on campus in the fall and online in the spring. 2 hrs. lecture & 3 hrs lab/wk.

CET 270
Fluid Mechanics (3 CR)

Prerequisites: MATH 172 or MATH 134

Upon successful completion of this course, the student should be able to analyze fluid systems using the fundamental properties of pressure, hydrostatic force, buoyancy, flow in pipes, open channel flow and hydrology. The student should also be able to solve practical problems related to engineering technology. Computer applications will be included. This course is typically offered in the spring semester. 3 hrs. lecture/wk.

Computer Desktop Publishing (CDTP)

CDTP 131
Desktop Publishing I: QuarkXpress (1 CR)

In this career-related course, students will create page layout documents using a variety of basic techniques on either the Macintosh or PC computer platform. Students will produce text material with complex tabs and indents and style attributes. Students will also be able to group and distribute multiple elements, demonstrate a basic proficiency with drawing tools, multiple document work, drop caps, text rotation, locking items and threading text blocks. 1 hr. lecture/wk.
<u>Associated Costs</u>: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $15 to $90.

CDTP 135
Desktop Photo Manipulation I: Photoshop (1 CR)

In this career-related short course, students will manipulate digital photographs and images using a variety of basic techniques on either the Macintosh or PC computer platform. Students will apply techniques to correct, repair, retouch, create selections, and work with layers on a variety of digital photographs and images, including basic scanning techniques. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $15 to $20.

CDTP 140
Desktop Publishing I: InDesign (1 CR)

In this career-related course, students will create page layout documents using a variety of basic techniques on either the Macintosh or PC computer platform. Students will produce text material with complex tabs and indents and style attributes. Upon successful completion of the course, students will also be able to group and distribute multiple elements and demonstrate a basic proficiency with drawing tools, multiple document work, drop caps, text rotation, locking items and threading text blocks. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $15 to $90.

CDTP 145
Desktop Illustration I: Illustrator (1 CR)

In this career-related course, students will create basic computer-generated illustrations using a variety of techniques on either the Macintosh or Windows PC computer platform. Students will draw simple paths and shapes, create layers, import graphics and add typographic elements in rows and columns with runarounds, baseline shifts and conversion to outlines. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $15 to $90.

CDTP 151
Desktop Publishing II: QuarkXpress (1 CR)
Prerequisite: CDTP 131

This course concentrates on text-handling skills, including converting text to graphics, super step and repeat, layering, Bezier paths, merge functions, repurposing files for Web viewing, creating encapsulated postscript graphic files from text, creating books with lists, and the basics of production preparation using spot colors. Demonstrations are given for embossing, drop shadow techniques and converting styles. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $15 to $90.

CDTP 155
Desktop Photo Manipulation II: Photoshop (1 CR)
Prerequisite: CDTP 135

In this career-related short course, students will manipulate digital photographs and images using a variety of introductory to intermediate techniques on either the Macintosh or PC computer platform. Students will apply techniques to edit masks and channels, process and enhance multiple image file formats, group and apply adjustments to layers, automate common tasks, create composite images, learn and apply intermediate scanning techniques, and apply multiple creative and adjustment filters on a variety of digital photographs and images. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CDTP 160

Desktop Publishing II: InDesign (1 CR)

Prerequisite: CDTP 140

In this career-related course, students will create intermediate-level page layout documents using a variety of techniques on either the Macintosh or PC computer platform. Students will learn how to work with type styles, threads, columns, special characters, hanging indents, vertical spacing and tables as well as exploring PDF files. Students will also be able to master several aspects of working with graphic images: placing images, linking, clipping paths, libraries, grids, Bezier drawing, compound paths and reflections. Finally, students will work with advanced framing techniques to nest frames within shapes. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $15 to $90.

CDTP 165
Desktop Illustration II: Illustrator (1 CR)

Prerequisite: CDTP 145

In this career-related course, students will create intermediate-level computer-generated illustrations using a variety of techniques on either the Macintosh or PC computer platform. Students will trace an object, create complex gradients with custom blends, create complex objects receding toward a vanishing point, and create an orthogonal projection to simulate depth. 1 hr. lecture /wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $15 to $90.

CDTP 168
Desktop Publishing III: InDesign (1 CR)

Prerequisite: CDTP 160

In this career-related course, students will create advanced-level page layout documents using a variety of techniques on either the Macintosh or PC computer platform. Students will learn how to work with advanced color specifications, transparency blending modes, long document organization, and brochure layout production art. 1 hr. lecture/wk.

CDTP 171
Desktop Publishing III: QuarkXpress (1 CR)

Prerequisite: CDTP 151

In this career-related course, students will create several brochure layouts on either the Macintosh or PC computer platform that incorporate a variety of drawing techniques, including layering, blends, distribution, EPS files, Bozier shapes, merge shapes and multi-ink colors. Pre-press production for final art will also be covered. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $15 to $90.

CDTP 175
Desktop Photo Manipulation III: Photoshop (1 CR)

Prerequisite: CDTP 155

In this career-related short course, students will manipulate digital photographs and images using a variety of beginning, intermediate and advanced techniques on either the Macintosh or PC computer platform. Students will apply techniques to create and design typographic elements, use vector drawing techniques, prepare images for print, optimize images for web output, and use a digital photo preparation workflow on a variety of digital photographs and images, including scanned images. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks.

$10 to $20.

CDTP 180
Photoshop for the Web: Photoshop (1 CR)
Prerequisite: CDTP 155

This course is designed to explore the preparation of digital photographs and images for the Web using a variety of techniques and tools. Optimizing images for the Web, creating Web graphics using slices and rollovers, and creating animated images for the Web will be covered. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $15 to $90.

CDTP 185
Desktop Illustration III: Illustrator (1 CR)
Prerequisite: CDTP 165

In this career-related course, students will create advanced computer-generated illustrations using a variety of techniques on either the Macintosh or PC computer platform. Students will create charts, autotrace scanned images, fill objects with various pen-and-ink filter effects and create an image map for the Web. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $15 to $90.

Computer Digital Image Editing (CDIE)

CDIE 145
Digital Image Editing I (3 CR)
Prerequisites: CPCA 105 or CPCA 106 or CIS 124 or CPCA 128 or an appropriate score on an assessment test

This course is designed to present the skills and provide the hands-on experience required for digital image production and manipulation using the industry-standard Adobe Photoshop for both Macintosh and Windows OS users. Topics covered include: image correction, repair and adjustment; composite images; raster and vector graphics and type; print and screen graphical file formats; basic color management; layer, channel and mask manipulation; Web graphic preparation; editing 3D and motion-based content; image analysis; actions and other presets; and filters. In this course, students will complete several complex original Photoshop documents that demonstrate skills to effectively scan images, restore and repair photographs; correct image tone and color, optimize the quality of onscreen and printed materials and study the topics covered on the Adobe Photoshop certified expert exam in Adobe Photoshop (ACE). 3 credit hours lecture, discussion, demonstration per week.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

Computer Forensics (CFOR)

CFOR 150
Introduction to Computer Forensics (3 CR)
Prerequisites: CIS 134 and CPCA 139 and asisstant dean's approval

In this course, students are introduced to computer forensics and incident response essentials. This course shows the student how to collect and analyze the digital evidence left behind in a digital crime scene. Computer forensics, the newest branch of computer security, focuses on the aftermath of a computer security incident. The goal of computer forensics is to conduct a structured investigation to determine exactly what happened and who was responsible and

to perform the investigation in such a way that the results are useful in a criminal proceeding and to lay the foundation for further study of computer forensics. Prior to attending the course, students will be required to complete a background check through Clarence M. Kelly and Associates at their own expense. To receive information on "how to apply for a background check," please send an email to Ginger Henderson ghenderson@jccc.edu with "Background Check" as the subject. 3 hrs. lecture/wk.

CFOR 180
File Structure & Residual Artifacts (3 CR)

Prerequisite: CFOR 150

This course provides the basic understanding of how computers 'see' data and manage its storage. While covering physical device concepts, students will learn the boot process of a computer. The FAT file system will then be described in terms of system areas created during the format process, the File Allocation Table and its function and detailed information regarding saving files and directories - to include a full breakdown of directory entries. In addition, concepts of clusters and file slack space will be covered and led into how to identify the affects of deleting files and forensic issues surrounding their recovery. The students will learn how to use hardware and software write protection tools to create duplicate images of hard disk drives, USB thumb drives and other alternate media. Mastery of technical knowledge will be combined with problem-solving skills to aid students in developing creative and adaptive responses to future changes in technology. This course meets for two hours of lecture and two hours of laboratory each week. 2 hrs. lecture 2 hrs. lab/wk.

Computer Information Systems (CIS)

CIS 124
Introduction to Computer Concepts and Applications (3 CR)

In this introductory, nontechnical computer course, students study computing concepts, terminology, issues and uses. Extensive hands-on experience with the microcomputer is provided using business applications and the operating system to reinforce the concepts. 3 hrs. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $15.

CIS 134
Programming Fundamentals (4 CR)

At the completion of this course, the student should be able to use the elementary concepts of computers, including several number systems. In addition, students will design, develop and write modular programs on a microcomputer in a structured programming language using standard structured concepts. 3 hrs. lecture, 2 hrs. lab by arrangement/wk.

CIS 138
Visual Basic .Net (4 CR)

Prerequisite: CIS 134

Upon successful completion of this course, students should be able to describe the Visual Basic programming environment, identifying the controls and objects available for creating .NET applications. Students should be able to define the basic terminology used by Visual Basic. They will create forms, draw the controls for each form, design menu bars, set form and control properties, write event and general procedures, and test and debug their applications. 3 hrs. lecture, 2 hrs. lab by arrangement/wk.

CIS 162
Database Programming (4 CR)

Prerequisite: CIS 134 or the equivalent

This course covers the use of an interactive environment and programming language to create, maintain and manipulate databases using Access as the RDBMS. The use of a command-level database programming language to customize business systems and selectively retrieve information using single or multiple database tables also will be studied. 3 hrs. lecture, 2 hrs. lab by arrangement/wk.

CIS 201
Introduction to Information Systems (3 CR)

Prerequisite: ACCT 121

This course is an introduction to the use of computers in management, concepts of computer software, hardware, and systems analysis. Applications will include electronic spreadsheets, database management software, graphics and presentation tools, and other special purpose tools. Word processing tools will be used for most graded assignments. Programming will be studied in the context of spreadsheet macros. 3 hrs. lecture/wk.

CIS 204
UNIX Operating System (3 CR)

Prerequisites: CS 200 or CS 205 or CS 201 and CPCA 139

This course will cover the concepts and principles of the multi-user, multi-tasking UNIX operating system. Students will complete projects in UNIX ranging from using simple commands to writing shell scripts automating repetitive tasks. 3 hrs. lecture/wk.

CIS 206
Programming in PERL (4 CR)

Prerequisites: CS 200 or CS 205 or CS 201 and CPCA 139

This course is an in-depth introduction to the Perl scripting language. Students successfully finishing the course should be familiar with the most common operations and language idioms used in Perl programs and should be able to produce useful Perl scripts. In addition, students will have been introduced to the more powerful and rich elements of the language. Lectures and lab projects will cover the many features of the Perl language. 3 hrs. lecture, 1.5 hrs. lab/wk.

CIS 223
Law Office Computing (3 CR)

Prerequisites: Paralegal program students - admission to the paralegal program and either CIS 124 or CPCA 128 or three hours of CPCA 108 and CPCA 110 and CPCA 114

Upon successful completion of this course, the student should be able to evaluate and use legal software to perform customary law office procedures including computer litigation support, drafting and editing of specific legal documents, document and file management, time-keeping and billing, docket control, and forms generation. This course is only open to LAW students. 3 hrs. lecture/wk. CIS 223 and LAW 223 are the same course.

CIS 235
Object-Oriented Programming Using C++ (4 CR)

Prerequisite: CS 200 using C++

This course is intended to prepare students to apply the object-oriented programming paradigm to solve typical business problems. The student should work with container classes such as Linked Lists, Trees, Stacks and Queues as tools in their program solutions. Students will be building application-oriented objects using the concepts of inheritance, function overloading and polymorphism. Students will also apply techniques of dynamic memory to build arrays and objects that can adjust memory requirements at run time. Students will be exploring the object-oriented and I/O capabilities as well as the string processing capabilities of the object-oriented language. 3 hrs. lecture, 2 hrs. lab by arrangement/wk.

CIS 238
Visual Basic Intermediate Topics (4 CR)
Prerequisite: CIS 138

Upon successful completion of this course, students should be able to write and test a Visual Basic program that uses the ADO.NET to access a local database. They will identify the commands necessary to open, display and maintain the database. They will correctly use Visual Basic keystroke events to edit and control input to the database. Students will use the Try Catch Error trapping structures to create robust projects. Students will generalize code for reuse. They will create a .Net component to coordinate a TextBox and ListBox that can be deployed from the ToolBox. 3 hrs. lecture, 2 hrs. lab by arrangement/wk.

CIS 240
Advanced Topics in JAVA I (4 CR)
Prerequisite: CS 250 or CIS 235 or CS 255

At the completion of this course, the student should be able to create Java applications and applets appropriate for implementation on the Internet and World Wide Web. The student will complete projects using Java's built-in features. The course will include graphics, graphical user interfaces, exception handling, multi-threading and interactive media. 3 hrs. lecture, 2 hrs. lab/wk.

CIS 242
Introduction to System Design and Analysis (3 CR)
Prerequisite: CIS 138 or CS 200 or CS 201 or CS205

Students will study the basic philosophy and techniques of developing and using business information systems. The emphasis will be on the human involvement necessary in systems design and implementation. The course will address the use of specific technical approaches available in information processing. 3 hrs. lecture/wk.

CIS 243
Object-Oriented Analysis and Design (4 CR)
Prerequisite: One programming course using an object-oriented programming language or equivalent experience

This course includes information and materials that will introduce the student to an object-oriented analysis and design methodology suitable for designing systems that can be implemented in any object-oriented programming language. Experience in using specific techniques and tools will be gained through the completion of real-world projects. 3 hrs. lecture, 2 hrs. lab by arrangement/wk.

CIS 244
Advanced Topics in C# I (4 CR)
Prerequisite: CS 250 or CIS 235 or CS 255

At the completion of this course, the student should be able to create C# applications appropriate for implementation on the .NET platform. The student will complete projects using C#'s built-in features. The course will include graphics, graphical user interfaces, exception handling, multi-threading and database access. 3 hrs. lecture and 1.5 hrs lab/wk.

CIS 254
UNIX System Administration (4 CR)

Prerequisite: CIS 204

This course is designed to present the skills and provide the hands-on experience required to be a Unix system and Web administrator. Typical system administration duties to be covered include installation, backup, restoration and routine maintenance, including adding/removing users, managing system resources, monitoring and optimizing system activity, and automating activities. Typical Web administration duties to be covered include installation and management of a relational database management system, installation and management of a Web server and an FTP server, kernel recompiling relevant to Web technology, and audio/video streaming. 3 hrs. lecture, 2 hrs. lab/wk.

CIS 258
Operating Systems (3 CR)

Prerequisite: CIS 138 or CIS 162 or CS 200 or CS 201 or CS 205

The basic concepts and principles of a digital computer operating system will be explained. Also explored through a study of a typical digital computer operating system will be the relationships between hardware and software. 3 hrs. lecture/wk.

CIS 260
Database Management (4 CR)

Prerequisite: CS 250 or CS 255 or CIS 235 or CIS 238 or CIS 248

Characteristics and objectives of database management systems (DBMS) versus traditional file management systems are discussed. Topics include relational, hierarchical and network models; data modeling using entity-relational model: normalization to avoid modification anomalies; and operational considerations of a relational database. Students will create and use a relational DBMS (currently Oracle) and a Standard Structured Query Language (SQL). SQL*Plus and embedded SQL will be used in programs. 3 hrs. lecture, 2 hrs. lab/wk.

CIS 262
Project Management (3 CR)

Prerequisite: CIS 242

This course will prepare students to effectively manage projects, with a focus on information systems (IS) projects. Topics include project management terminology, project manager roles, project success factors, integration, scope, time, cost, quality, human resources, communications, risk, professional responsibility and procurement management. Using case studies, students will plan, schedule, execute and control projects, modifying their timelines and resource allocations as required. 3 hrs. lecture/wk.

CIS 264
Application Development and Programming (4 CR)

Prerequisites: CIS 242 and either CIS 260 or CIS 162 Prerequisites or Corequisites: CIS 238 or CIS 253 or CIS 269 or CIS 240 and CIS 262

This course is designed for students to apply the foundations of systems analysis

and design, database design and programming to a significant information system. Students should work within a team to analyze a problem, develop and present a proposed information system solution, build a demonstrable prototype of the system and develop a significant portion of the system. Students should also develop a project schedule and present progress information to the class. Students should also develop job search skills and both written and oral communication skills. 3 hrs. lecture, 2 hrs. lab by arrangement/wk.

CIS 269
GUI Programming (4 CR)

Prerequisites: CIS 235 or CS 250

Upon completion of this course, students should be able to demonstrate applications in the graphical user interface (GUI) programming language and use the appropriate GUI library. Techniques of object-oriented programming developed in CIS 235 will be applied to problems involving user interaction. The common user access (CUA) standards of GUI programming will be used throughout the course. The message queue and ordered linked lists objects used in CIS 235 will be applied to problems involving user selection and updating information in a database. Students will make extensive use of the application framework for the GUI environment provided by the GUI language compiler. It is strongly recommended that students be familiar with common user programs that run under the chosen operating system (Windows, OS/2, X-Windows) before taking this course. 3 hrs. lecture, 2 hrs. lab by arrangement/wk.

CIS 270
Information Systems Internship (3 CR)

Prerequisites: CS 250 or CS 255 or CIS 235 or CIS 238 or CIS 248 and program facilitator approval

Students will work in an approved training situation under instructional supervision. The internship is designed to give the student the opportunity to use the skills learned in information systems courses. Fifteen hours on-the-job training per week will be the usual workload for the student.

CIS 275
Web-Enabled Database Programming (4 CR)

Prerequisites: CS 200 or CS 201 or CS 205 or CIS 162 and either CPCA 139 or CIS 204 and either CPCA 161 or CPCA 158

At the completion of this course, the student should be able to create dynamic Web pages containing information accessed from a database for implementation on the Internet and World Wide Web. The student will complete projects using Dynamic HTML and a scripting language that can interface with a database. The course will include graphics, graphical user interfaces, exception handling, database and interactive media. 3 hrs. lecture, 2 hrs. lab/wk.

CIS 277
Active Server Pages.Net (4 CR)

Prerequisites: CS 200 or CS 201 or CS 205 or CIS 162 and either CPCA 139 or CIS 204 and either CPCA 161 or CPCA 158

At the completion of this course, the student should be able to create dynamic Web pages containing information accessed from a database for implementation on the Internet and World Wide Web. The student will complete projects using ASP.Net objects, dynamic HTML and a scripting language that can interface with a database. The course will include graphics, graphical user interfaces, exception handling, database and interactive media. 3 hrs. lecture, 2 hrs. lab/wk.

CIS 279
Enterprise GUI Programming in C++ (4 CR)

Prerequisite: CIS 243 and CIS 269 and CIS 260

Students will learn advanced programming techniques for Windows, including enterprise software tools, advanced user-interface techniques, multimedia, ActiveX and Internet programming. The course project provides students with real-world development experience covering analysis, design and implementation of a large-scale development project using an object-oriented software development methodology, version control technique, advanced testing techniques, defect-tracking and technical documentation. 3 hrs. lecture, 2 hrs. lab/wk.

CIS 280
Advanced Topics in JAVA II (4 CR)

Prerequisite: CIS 240

At the completion of this course, the student should be able to create Java applications and applets that link to databases and provide the security and advanced GUI features appropriate for implementation on the Internet and World Wide Web. The student will complete projects using Java's built-in features. The course will include techniques for graphics optimization, building components for graphical user interfaces, client-server database connections in Java, handling security managers, building JAR files, using Java's remote objects and linking to other applications. 3 hrs. lecture, 2 hrs. lab/wk.

Computer Personal Computer App (CPCA)

CPCA 105
Introduction to Personal Computers: Windows (1 CR)

This introductory course is designed to give the beginning computer user an overview of the personal computer. The student will gain confidence in basic computer skills and concepts through a hands-on approach while becoming familiar with a microcomputer and its primary uses. Topics include computer software, hardware and terminology; an introduction to microcomputer operating systems; and the graphical user interface. 1 hr. lecture /wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CPCA 106
Introduction to Personal Computers: Macintosh (1 CR)

This introductory course is designed to give the beginning computer user an overview of the Macintosh personal computer. The student will gain confidence in basic computer skills and concepts through a hands-on approach while becoming familiar with a Macintosh computer and its primary uses. Topics include computer software, hardware and terminology; as well as an introduction to the Macintosh operating system, word processing, drawing, spreadsheets and database management. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CPCA 108
Word Processing I: MS Word (1 CR)

Prerequisites: CPCA 105 or CPCA 106 or CIS 124 or CPCA 128 or appropriate score on a waiver test

Students will learn concepts and use of word processing software on the personal computer. Concepts covered will include creating, saving, printing and editing word processing files; searching and replacing text; creating headers and footers;

inserting and resizing graphic images; setting up tables; creating and applying styles; and creating mail merge letters. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CPCA 110
Spreadsheets I: MS Excel (1 CR)
Prerequisite: CPCA 105 or CPCA 106 or CIS 124 or CPCA 128 or an appropriate score on a waiver test

Students will learn concepts and uses of spreadsheet software on the personal computer. Business decision-making worksheet models will be created and modified by entering labels, functions and formulas. Various formatting techniques will be applied to enhance the appearance of printed worksheets. Students will also learn to display the worksheet data graphically with the charting capabilities of the software. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CPCA 111
Spreadsheets II: MS Excel (1 CR)
Prerequisite: CPCA 110 or CPCA 128

This course is a continuation of CPCA 110, Spreadsheets on the Microcomputer I, and will provide the student with intermediate level of spreadsheet concepts. Using typical business scenarios, the student will perform manual and automated "what-if" analyses, manage data in worksheets with tables and database functions, and use multiple worksheets to build consolidated statements. Basic macros will be introduced. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CPCA 114
Databases I: MS Access (1 CR)
Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124 or an appropriate score on a waiver test

This course provides an introduction to the concepts and real-world applications of microcomputer relational database software. Foundational database competencies, including building tables, defining fields, relating tables, entering and editing data, filtering, and sorting will be covered. Students will query the database to select, calculate and summarize information. Students will build and customize forms and reports. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CPCA 115
Databases II: MS Access (2 CR)
Prerequisite: CPCA 114

Upon completion of this course, the student should be able to design and define a relational database; create custom forms and reports for data entry, updating and presentation; and build the necessary queries to support these objects. The student should be able to transfer data into and out of the database from various file formats; use database software to develop Web pages and hyperlinks; and manipulate the data and database with introductory macro, query language and programming skills. The course contains a capstone project in which the student uses all the skills learned to create a working database for a client based on a real-world situation. 2 hrs. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks.

$10 to $20.

CPCA 117
Databases III: MS Access (1 CR)

Prerequisite: CPCA 115

Upon successful completion of this course, the student should be able to analyze an existing database solution that is not working properly, import the data into Access and use action queries and SQL to normalize the database into an effective rational database. A case study emphasis will cover different database design and documentation issues. Students will also build complex forms and reports using Visual Basic for Applications programming code. 1 hr. lecture /wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CPCA 118
Groupware: Outlook (1 CR)

Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124 or an appropriate score on a waiver test

This course provides an introduction to the concepts and applications of today's robust email systems. Students will use tha application to compose, send and receive e-mail; post and organize discussion messages; manage calendars, appointments, tasks, to-do lists; use contact management features; and work with instant messaging. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CPCA 121
Introduction to Project Management (1 CR)

Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124 or an appropriate score on a waiver test

Upon completion of this course, the student should be able to effectively manage projects using project management software. Students will learn about project management goals and terminology, create a project schedule and use project management methodologies and tools such as the Gantt chart, critical path method (CPM) and program evaluation review technique (PERT) chart to update a project and communicate project progress to others. Students will use other project management techniques such as applying resources, leveling overallocations, evaluating constraints and analyzing planned versus projected schedule and budget variables. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CPCA 122
Assistive Technology (1 CR)

This introductory course is designed to give the student with or without disabilities an overview of the personal and the adaptive hardware and software available. The student will gain confidence in basic computer skills and concepts through a hands-on approach while becoming familiar with the adaptive software and hardware available on the campus. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CPCA 123
E-Presentation: MS PowerPoint (1 CR)

Prerequisite: CPCA 105 or CPCA 106 or CIS 124 or CPCA 128 or an appropriate score on a waiver test

Upon completion of this course, students should be able to organize and produce an effective on-computer or slide-generated presentation, complete with printed speaker notes and handouts plus overhead transparencies, using the basic features of a presentation graphics program. Students will use master pages, template files, text formatting, color schemes, various drawing tools, the automated outline feature and animation dissolve sequence and incorporate photographs. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CPCA 125
Word Processing II: MS Word (1 CR)
Prerequisite: CPCA 108

This is a continuation of CPCA 108, Word Processing on Micros I. After completing this course, students should be able to use advanced concepts and applications of word processing software. The applications will include importing graphics, creating reports, newsletters, footnotes and endnotes, styles, columns, templates, macros, creating a Web page, on-screen forms, and linking and embedding an object. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CPCA 128
PC Applications: MS Office (3 CR)

Upon successful completion of this course, the student should be able to use Windows to create and organize files and folders and perform essential file management procedures such as copying, moving, deleting and renaming files and folders. An in-depth proficiency will also be attained with the use of word processing, spreadsheet, presentation graphics and Internet browser applications. Hands-on, practical projects will be performed to reinforce the concepts taught. 3 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CPCA 134
Managing Your Macintosh (1 CR)
Prerequisite: CPCA 106 or an appropriate score on an assessment test

In this career-related course, students will be introduced through lecture material and hands-on practical projects to the essential concepts of file organization, utility software installation and use, font management and backup techniques. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CPCA 138
Windows for Microcomputers (1 CR)
Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124 or an appropriate score on an assessment test

At the completion of this course, the student will be able to discuss the components of the Windows desktop, use the Windows Help system, create and organize a folder system on a disk, perform file management commands, customize the Windows desktop environment, use the Search tool to locate files and folders, and perform file backup and disk maintenance procedures. The student will also be able to use performance monitoring tools, add hardware and software to the system, and use basic MS DOS directory and file management commands.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks.

$10 to $20.

CPCA 139
UNIX (1 CR)

Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124 or assessment test

This course will introduce students to the major commands of the Unix operating system. E-mail, the VI editor and Telnet will be covered. Basic file and disk management projects will be completed in this course. 1 hr. lecture/wk.

CPCA 141
Internet I (1 CR)

Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124 or an appropriate score on an assessment test

This course will introduce the student to the commands and techniques required to effectively access the resources of the Internet. Windows applications to browse the Internet, locate and retrieve information and send and receive electronic mail will be covered. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CPCA 151
Internet II (1 CR)

Prerequisite: CPCA 141 or an appropriate score on an assessment test

This course will cover the commands and techniques required to effectively use various Internet application tools. The student will also use Windows and non-Windows applications to locate information, download and upload files, and create a Web page. Additionally the course will cover basic LINUX commands and publish a Web page to a Web server. 1 hr. lecture/wk.

CPCA 158
Internet Application and Utilities (3 CR)

Prerequisite: CPCA 141 or an appropriate score on an assessment test

This course will introduce the student to the commands and techniques required to effectively access the resources of the Internet. Windows and non-Windows applications will be used to locate, retrieve and disseminate essential information. This course will cover the techniques required to create and publish World Wide Web pages using HTML. 3 hrs. lecture- demonstration/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CPCA 161
Introduction to Web Pages using HTML (1 CR)

Prerequisite: CPCA 151 or an appropriate score on an assessment test

This course will cover the commands and techniques required to create and publish World Wide Web pages using HyperText Markup Language. Topics covered will include basic text layout, background colors, formatting, ordered and unordered lists, tables, frames that include graphic images in a page and linking to other Web pages. 1 hr./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

Computer Science (CS)

CS 180
Introduction to Artificial Intelligence (3 CR)

Prerequisite: CIS 145 or CIS 148 or CIS 150 or CS 200

Upon successful completion of this course, students should be able to understand simple computer programs illustrating introductory concepts in artificial intelligence, define terms and application areas in the field and describe knowledge representation and problem-resolution techniques used in artificial intelligence. 3 hrs. lecture/wk.

CS 200
Concepts of Programming Algorithms Using C++ (4 CR)

Prerequisite: CIS 134 or ENGR 171 or equivalent experience

This course emphasizes programming methodology and problem solving. Algorithm design and development, data abstraction, good programming style, testing and debugging will be presented. An appropriate block-structured high-level programming language will be studied and used to implement algorithms. 3 hrs. lecture, 2 hrs. lab by arrangement/wk. Four-credit-hour CS courses have two hours of open lab per week.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $20 to $50.

CS 201
Concepts of Programming Algorithms using C# (4 CR)

Prerequisite: CIS 134 or ENGR 171 or equivalent experience

This course emphasizes programming methodology and problem-solving using C#. Algorithm design and development, data abstraction, good programming style, testing and debugging will be presented. 3 hrs. lecture, 1.5 hrs. lab/wk. Four credit hours CS courses have two hours of open lab per week.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $20 to $50.

CS 205
Concepts of Programming Algorithms using JAVA (4 CR)

Prerequisite: CIS 134 or ENGR 171 or equivalent experience

This course emphasizes programming methodology and problem-solving using Java. Algorithm design and development, data abstraction, good programming style, testing and debugging will be presented. 3 hrs. lecture, 1.5 hrs. lab/wk. Four-credit-hour CS courses have two hours of open lab per week.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $20 to $50.

CS 210
Discrete Structures I (3 CR)

Prerequisites: MATH 171 or both MATH 116 and CIS 134 or appropriate math assessment scores

Upon successful completion of this course, the student should be able to use fundamental discrete mathematics as it relates to computers and computer applications. The student will be exposed to a variety of discrete mathematical topics. The course will include fundamental mathematical principles, combinatorial analysis, mathematical reasoning, graphs and trees, and Boolean logic circuits. 3 hrs. lecture/wk.

CS 211
Discrete Structures II (3 CR)

Prerequisite: CS 210

Upon successful completion of this course, the student should be able to use fundamental discrete mathematics as it relates to computers and computer applications. The student will experiment with a variety of discrete mathematical topics. The course will include fundamental mathematical principles, combinatorial analysis, mathematical reasoning, graphs and trees, and Boolean logic circuits. 3 hrs. lecture/wk.

CS 250
Basic Data Structures using C++ (4 CR)

Prerequisite:CS 200 Prerequisite or corequisite: CS 210 for students transferring to most four-year computer science programs

This course will cover advanced programming topics using C++. Files, recursion, data structures and large program organization will be implemented in projects using object-oriented methodology. Students will write programs using the concepts covered in the lecture. 3 hrs. lecture, 2 hrs. lab/wk. Four-credit-hour CS courses have two hours of open lab per week.

CS 255
Basic Data Structures using JAVA (4 CR)

Prerequisite: CS 205

This course will cover advanced programming topics using Java. Files, recursion, data structures and large program organization will be implemented in projects using object-oriented methodology. Students will write programs using queues, stacks, lists and other concepts covered in the lecture. 3 hrs. lecture, 1.5 hrs. lab/wk. Four-credit-hour CS courses have two hours of open lab per week.

Computer Web (CWEB)

CWEB 101
Introduction to the Web using Internet Explorer (1 CR)

Prerequisites: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124 or an appropriate score on an assessment test

This course will introduce the student to commands and techniques required to effectively use the resources of the World Wide Web. Topics to be covered will include how to browse, search and retrieve information on the Internet using Internet Explorer, how to create and manage "favorites", how to protect computers from viruses, how to send and receive electronic mail, and how to create a basic home page. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CWEB 105
Introduction to Web Pages: Dreamweaver (1 CR)

Prerequisite: CWEB 101

This course will cover the commands and techniques required to create and revise Web pages using Dreamweaver. Topics to be covered will include basic text layout, viewing and identifying basic HTML tags, creating a site map, formatting a Web page, applying background color, inserting images and sounds, creating ordered and unordered lists, inserting files, and creating links on Web pages. 1 hr. lecture/wk. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CWEB 106
Introduction to Microsoft FrontPage (1 CR)

Prerequisite: CWEB 101

This course will cover the commands and techniques required to create and revise World Wide Web pages using Microsoft FrontPage. Topics to be covered will include basic text layout, viewing and identifying basic HTML tags, formatting a Web page, inserting background color, adding pictures and sounds, creating ordered and unordered lists, inserting files and creating links to other Web pages. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CWEB 107
Web Tools: Microsoft Office (1 CR)

Prerequisites: CWEB 101 and CPCA 110 or CPCA 114

Upon successful completion of this course, the student should be able to create static and dynamic Web-based documents, Excel spreadsheets, PowerPoint presentations and Access databases. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CWEB 111
Intermed Web Concepts/Techniques using Explorer (1 CR)

Prerequisite: CWEB 101

This course is a continuation of CWEB 101, Introduction to the Web using IE, and will cover intermediate commands and techniques required to use various Web-based tools and programs. Topics to be covered will include using complex search strategies; finding people, businesses and e-mail addresses on the Web; accessing and using Newsgroups; joining and leaving mailing lists; using a Web-based chat facility; locating and downloading freeware and shareware programs; and identifying online backup and storage options. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CWEB 115
Intermediate Web Pages: Dreamweaver (1 CR)

Prerequisite: CWEB 105

This course will cover intermediate-level commands and techniques required to create and enhance a Web page using Dreamweaver. Topics to be covered will include tracing images, layers, converting layers to tables, custom tables, cascading style sheets, templates and libraries, and publishing a Web site. 1 hr. lecture/wk. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CWEB 116
Intermediate Microsoft FrontPage (1 CR)

Prerequisite: CWEB 106

This course is a continuation of CWEB 106, Introduction Web Pages: FrontPage, and will cover intermediate-level commands and techniques required to create and enhance a FrontPage Web site. Topics to be covered will include shared borders and themes, publishing a Web site, new Web site creation on a Web server, database integration and using office components and styles. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations

that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CWEB 120
Internet Applications: Fireworks I (1 CR)
Prerequisite: CPCA 105 or CPCA 106 or waiver test scores

This course is an introduction to the fundamentals, tools and techniques of Web imaging using Macromedia Fireworks. Students will gain an understanding how to import, manipulate, optimize and animate Web graphics. Students will combine graphics with HTML and JavaScript creating image slices, navigation menus and hotspots. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CWEB 125
Introduction to Dynamic Web Pages: Dreamweaver (1 CR)
Prerequisites: CWEB 115 and CPCA 114

This course explores the Dreamweaver database environment and dynamic site concepts. Students will learn how to create, sort and display recordset content in a Web page. Students will create search applications, allowing movement between master and detail record pages, and to display the results of database searches. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CWEB 130
Introduction to Flash (1 CR)
Prerequisite: CPCA 161 or CWEB 105 or CWEB 106

This course will cover the commands and techniques available to add Flash content to Web pages and CD-ROMs. Topics covered will include using drawing tools, manipulating text with text tools, adding and modifying sound, creating animation and publishing work. This class will be taught in a classroom with both Macintosh and Windows computers. 1 hr. lecture/wk. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CWEB 135
Web-Enabled Databases I using Access (1 CR)
Prerequisite: CPCA 114

Upon completion of this course, the student should be able to create dynamic Web pages used to publish database information or create user entry forms. Using a browser, students will be able to open the Web pages to find, sort, enter and update data in the underlying database. Students will be introduced to underlying Internet technologies, such as Web servers, ODBC, HTML and HTTP, and how they relate to a data-driven Web site. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CWEB 136
Introduction to PHP (1 CR)
Prerequisites: CWEB 101 and CPCA 114

This course covers the commands and techniques available to add functionality to Web pages using PHP (Hypertext Preprocessor). Students will build client-side

PHP scripts with variables, functions, expressions, methods, and events to validate forms and enhance Web page functionality. The basics of server-side scripting are introduced. 1 hr. integrated lecture/lab wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CWEB 140
Intermediate Flash (1 CR)

Prerequisite: CWEB 130

This course will build on the fundamental skills learned in CWEB 130, Introduction to Flash. Topics will include complex animation techniques; interactivity with simple frame actions; and interactivity using objects such as buttons, hot spots and movie clips. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CWEB 145
Web-Enabled Databases II using Access (1 CR)

Prerequisite: CWEB 135

Upon completion of this course, the student should be able to create advanced dynamic Web pages used to publish database information, create complex user entry forms and analyze data interactively with advanced controls such as charts. Using a browser, students will be able to open the Web pages to manipulate and analyze data in the underlying database. Students will implement Internet technologies, such as Web servers, ODBC, HTML and HTTP, to build an intranet-based Web-enabled database. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CWEB 146
PHP with MySQL (1 CR)

Prerequisite: CWEB 136

This course covers the commands and techniques required to connect a Web page to a relational database using PHP (Hypertext Preprocessor) and MySQL (database management system). Students define and build a relational database using MySQL, then use PHP scripts as well as SQL in a Web page to connect to the database to edit, delete, and enter records. 1 hr. integrated lecture lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CWEB 150
Advanced Flash (1 CR)

Prerequisite: CWEB 140

This course will build on the skills learned in CWEB 131, Intermediate Flash. Students will do projects to control movie clips, sound, external data, multiple timelines and text fields. Some ActionScripting will be introduced. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CWEB 160
Introduction to JavaScript (1 CR)

Prerequisite: CWEB 105 or CWEB 106 or CPCA 161

This course will cover the commands and techniques available to add functionality to Web pages using JavaScript. Topics to be covered include integrating

JavaScript into an HTML file, creating pop-up windows, adding scrolling messages, validating forms and enhancing the use of image and form objects. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CWEB 165
Introduction to Adobe Acrobat (1 CR)

This course will introduce students to the Adobe Acrobat software program. Students will be presented with the basics of Adobe Acrobat and will be shown how to create and edit PDF files using Acrobat and Distiller. Topics will include how to gather Web page content for off-line viewing and how to use JavaScript inside a PDF document to make it interactive. Projects will include how to add navigation, multimedia elements and data forms to PDF files. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CWEB 170
Intermediate JavaScript (1 CR)
Prerequisite: CWEB 160

This course builds on the skills learned in CWEB 160, Introduction to Web Scripting: JavaScript. Students will learn to use JavaScript in their Web pages to build menus and navigational structures. They will also learn to use intermediate techniques for cookie manipulation and storage. Complex use of operators (Bitwise, Assignment, Comparison, Arithmetic and Boolean) will be explained. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CWEB 180
E-Commerce Using JavaScript (1 CR)
Prerequisite: CWEB 170

This course builds on the skills learned in CWEB 160, Introduction to Web Scripting: JavaScript, and CWEB 161, Intermediate JavaScript. The student will build a complete e-commerce site that will support online ordering and payment with JavaScript. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CWEB 190
ActionScript for Flash (1 CR)
Prerequisite: CWEB 150

This course will teach the basic skills needed to use ActionScripts in Flash movies. Students will build interactivity into their movies using ActionScript. They will also manipulate data and control Flash objects such as movie clips. ActionScript logic and functions will be explained. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CWEB 200
Podcasting I (3 CR)
Prerequisite: CWEB 101

Podcasting is a web-based broadcast medium. Audio files (most commonly in MP3 format) are made available online in a way that allows software to automatically detect the availability of new files (generally through RSS [Really

Simple Syndication]), and download the files for listening at the user's convenience. This course will cover how to create sound, use the appropriate software, develop a show, distribute a podcast, and build an audience. Students will begin by learning the basics of blogging and develop their blogs into audio and/or video podcasts. More advanced topics include audio editing, podcasting on the go, and videocasting. 3 hrs. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $35.

CWEB 205
Search Engine Optimization (1 CR)
Prerequisites: CWEB 105 or CWEB 106

This course will cover how to optimize a Website to maximize search engine ranking. Upon completion of the course students will be able to identify and implement effective Web site designs and strategies for search engine optimization. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CWEB 230
Introductory E-Commerce Applications (1 CR)
Prerequisite: CWEB 101 or CPCA 141

This course will introduce students to e-commerce in a software-driven, hands-on way. It will use software tools to discuss and explore a variety of e-commerce activities. Students will examine an extensive list of e-commerce sites, such as those that support purchasing, delivery, support, auction, business-to-business, virtual community and Web-portal business goals. They will examine e-commerce stores that incorporate advertising, marketing, branding, and business efficiency goals. They will explore how to populate a store catalog, create site-wide navigation links and publish a store. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

CWEB 240
Intermediate E-Commerce Applications (1 CR)
Prerequisite: CWEB 230

This course will use software tools such as Internet Explorer and Netscape Communicator to discuss and explore a variety of intermediate e-commerce activities. For example, students will examine e-commerce security issues, such as cookies, privacy risks and property threats, including copyright issues, viruses, security policies, encryption, digital signatures and transaction integrity. Students will study electronic payment systems, including script, electronic checks, credit card purchases, electronic wallets, smart cards and electronic cash. Students will explore international and legal issues, such as language and custom barriers, laws and regulations, and tax considerations. They will also explore ethical issues, such as trust and defamation issues. Finally, they will explore careers in electronic commerce. 1 hr. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

Cosmetology (AVCO)

AVCO 102
Nail Technology (17 CR)
This course provides skill instruction in determining nail disorders and care as well as the artistic application of tips, overlays and sculptured nails. Upon successful

completion, students are prepared to take the Kansas State Board of Cosmetology onychology examination. In-state tuition and fees $700.00 total. Out-of-state tuition and fees $2,870.00 total. 350 contact hrs. For enrollment and tuition information, call 913-469-8500 ext. 2390. The credit reflected in this course is for transcript reporting, recording and transfer only.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $145 to $150.

AVCO 110
Introduction to Cosmetology (21 CR)

Prerequisite: Selective Admission Approval

This course provides skill instruction in shampooing, cutting, shaping, curling and coloring. Also included is curriculum from Nail Technology and Cosmetology Technician I and II. The first 500 contact hours are in the basic lab and the classroom without client contact. In-state tuition and fees $971 total. Out-of-state tuition and fees $4,071 total. 500 contact hrs. For enrollment and tuition information, call 913-469-8500 ext. 2390. The credit reflected in this course is for transcript reporting, recording and transfer only.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $28 to $38.

AVCO 112
Clinical Cosmetology (12 CR)

Prerequisite: Selective Admission Approval

This course provides continuing skill instruction in shampooing, cutting, shaping, curling and coloring. Included is an introduction to client relations skills and sales promotion techniques. Instruction includes classroom and salon. In-state tuition and fees $955 total. Out-of-state tuition and fees $4,055 total. 500 contact hrs. For enrollment and tuition information, call 913-469-8500, ext.2390 The credit reflected in this course is for transcript reporting, recording and transfer only.

AVCO 114
Advanced Cosmetology (12 CR)

Prerequisites: AVCO 110 with a min grade of "C" or higher and selective admission approval

This course provides advanced instruction in shampooing, cutting, shaping, curling and coloring. This course prepares the student for the Kansas State Board of Cosmetology examination. In-state tuition and fees $955 total. Out-of-state tuition and fees $4,055 total. 500 contact hrs. For enrollment and tuition information, call 913-469-8500, ext. 2390. The credit reflected in this course is for transcript reporting, recording and transfer only.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $159.

AVCO 115
Cosmetology with Nail Technology License (12 CR)

Prerequisites: AVCO 110 and current Kansas nail technology license

This course provides continuing skill instruction in shampooing, cutting, shaping, curling and coloring hair, as well as skin care and nail technology. Included is an introduction to client relations skills and sales promotion techniques. Instruction includes classroom and salon. Current Kansas Nail Technology license required. In-state tuition and fees $631. Out-of-state tuition and fees $2615. lecture hrs, 30 lab hrs, 205 clinical hrs.

AVCO 116

Cosmetology with Esthetics License (12 CR)

Prerequisites: AVCO 110 and current Kansas esthetics license

This course provides continuing skill instruction in shampooing, cutting, shaping, curling and coloring, as well as skin care and nail technology. Included is an introduction to client relations skills and sales promotion techniques. Instruction includes classroom and salon. Current Kansas Esthetics license required. In-state tuition and fees $685. Out-of-state tuition and fees $2855. 85 hrs. lecture, 30 lab, 235 clinical

AVCO 118
Esthetics (26 CR)

Prerequisite: selective admission approval

This course provides skill instruction in skin care. Topics include sanitation, skin sciences, waxing, skin treatments, makeup and business practices. This course prepares the student for the Kansas State Board of Cosmetology esthetician examination. In-state tuition and fees $1,241 total. Out-of-state tuition and fees $5,271 total. 650 contact hrs. For enrollment and tuition information, call 913-469-8500 ext. 2390. The credit reflected in this course is for transcript reporting, recording and transfer only.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $174 to $190.

AVCO 212
Cosmetology Instructor Training (9 CR)

Prerequisites: Current Kansas Cosmetology and Esthetics or Nail Technology License. Minimum of one year of practice in trained area and selective admission approval

This 300 contact hour course is design to meet the educational requirements for licensure by Kansas Board of Cosmetology for instructors in the cosmetology sciences. Students will attend 40 hours of lecture and participate in 260 hours of observation, clinic supervision, and classroom teaching. Topics covered include instructor characteristics, student motivation, methods and evaluation. In-state tuition $540 total. Out-of-state tuition $2,400 total. 300 contact hrs. For enrollment information call 913-469-8500 ext. 2390. The credit reflected in this course is for transcript reporting, recording and transfer only.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $75.

AVCO 218
Advanced Esthetics Training (6 CR)

Prerequisite: Must possess current esthetics license granted by the Kansas Board of Cosmetology, a current cosmetology license, or the minimum of 500 hours of esthetics training from another institution.

This 100-contact-hour course is designed to meet the education requirements for licensure by the Missouri Board of Cosmetology for estheticians in the cosmetology sciences and meet the needs of students who desire exposure to advanced esthetics techniques. Students will attend 44 hours of lecture/demonstration,practice 48 hours of integrated lecture/clinical, and participate in eight hours of community service. Topics covered include body treatments, theory on the day spa, airbrush makeup, microdermabrasion and manual lymphatic drainage. In-state tuition is $1,100. Out-of-state tuition is $1,720. 100 contact hrs. For enrollment information, call 913-469-8500 ext. 2390. The credit reflected in this course is for transcript reporting, recording and transfer only.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $15.

Dental Assisting (KDA)

KDA 100

Introduction to Dental Assisting (1 CR)

This course is a prerequisite for admission to the dental assisting program. Dental terminology, roles of dental assistant and scope of dentistry. 1 hr. lecture/wk. Course taught at Penn Valley Community College, 3201 Southwest Trafficway, Kansas City, MO. Students should contact the Penn Valley coordinator of dental assisting about the class meeting and beginning and ending dates of classes. Call 816- 759-4000.

KDA 101

Body Structure and Function (2 CR)

Prerequisite: Admission to dental assisting program

Admission to dental assisting program is required. Basic anatomy and physiology for the dental assistant. 2 hrs. lecture/wk. Course taught at MCC-Penn Valley Community College, 3201 Southwest Trafficway, Kansas City, MO. Students should contact the Penn Valley coordinator of dental assisting about the class meeting and beginning and ending dates of classes. Call 816-759-4000.

KDA 102

Head & Neck Anatomy (2 CR)

Prerequisite: Admission to the dental assisting program

Admission to dental assisting program is required. Utilizes a systems approach to the gross anatomy of the head and neck with emphasis on the maxilla and mandible and oral tissues, neuromuscular and circulatory function, supporting structures and the temporomandibular joint also study of oral embryology and histology. 1.5 hr lecture and 1 hr. lab/wk. Course taught at MCC-Penn Valley Community College, 3201 Southwest Trafficway, Kansas City, MO. Students should contact the Penn Valley coordinator of dental assisting about the class meeting and beginning and ending dates of classes. Call 816-759-4000.

KDA 103

Dental Anatomy (2 CR)

Admission to dental assisting program is required. Introduces to students a detailed study of crown and root morphology of both primary and permanent dentition. Eruption Schedule and Numbering System. 4 hrs. lab/wk. Course taught at Penn Valley Community College, 3201 Southwest Trafficway, Kansas City, MO. Students should contact the Penn Valley coordinator of dental assisting about the class meeting and beginning and ending dates of classes. Call 816-759-4000.

KDA 104

Dental Emergencies & Pharmacology (1 CR)

Admission to dental assisting program is required. An overview of emergencies common to the dental office setting. Students will gain knowledge in emergency drugs, allergic reactions and drug related emergencies. Also emphasized are specific medical conditions related to treatment, management of medical emergencies, pharmacology related to dental. 1 hr. lecture/wk. Course taught at Penn Valley Community College, 3201 Southwest Trafficway, Kansas City, MO. Students should contact the Penn Valley coordinator of dental assisting about the class meeting and beginning and ending dates of classes. Call 816-759-4000.

KDA 105

Dental Materials I (2 CR)

Admission to dental assisting program is required. Basic knowledge and manipulation of waxes, temporary crowns, custom trays, alginate materials, impression materials, bite registration materials, cements, varnishes, bases and liners. 2 hr. lecture, 4 hrs. lab/wk. Course taught at MCC-Penn Valley Community College, 3201 Southwest Trafficway, Kansas City, MO. Students should contact the Penn Valley coordinator of dental assisting about the class meeting times and

beginning and ending dates of classes. Call 816-759-4000.

KDA 108

Oral Microbiology & Infection Control (2 CR)

Admission to dental assisting program is required. An overview of microbiological aspects of health and disease with emphasis on sterile process and disinfection techniques. 1 hr lecture, 2 hrs. lab/wk. Course taught at Penn Valley Community College, 3201 Southwest Trafficway, Kansas City, MO. Students should contact the Penn Valley coordinator of dental assisting about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KDA 110

Chairside Assisting I (5 CR)

Admission to dental assisting program is required. Dental terminology and responsibilities of the dental assistant in the dental operatory to include patient preparation and utilization of rubber dam, matrix, anesthetics, fluoride, wedge, amalgam and composite procedure and coronal polishing techniques. 3 hrs. lecture, 4 hrs. lab/wk. Course taught at MCC-Penn Valley Community College, 3201 Southwest Trafficway, Kansas City, MO. Students should contact the Penn Valley coordinator of dental assisting about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KDA 115

Dental Radiology I (4 CR)

Prerequisite: KDA 102

Admission to dental assisting program is required. Radiography history, characteristics of radiation production, film composition, x-radiation terminology, effects of radiation exposure, and protection. Exposing, processing, and mounting of radiographs taken on a radiographic manikin. 3 hr. lecture, 2 hrs. lab/wk. Course taught at MCC-Penn Valley Community College, 3201 Southwest Trafficway, Kansas City, MO. Students should contact the Penn Valley coordinator of dental assisting about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KDA 125

Clinical Experience I (2 CR)

Prerequisite: Admission to the Dental Assisting Program and completion of CPR for healthcare workers.

Admission to dental assisting program is required. Clinical experience in operative and preventive dental procedures utilizing four-handed dentistry in the clinic at the University of Missouri-Kansas City School of Dentistry. 6 hrs. clinic/wk. Course taught at MCC-Penn Valley Community College, 3201 Southwest Trafficway, Kansas City, MO. Students should contact the Penn Valley coordinator of dental assisting about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KDA 205

Dental Materials II (3 CR)

Prerequisite: KDA 105

Advanced manipulation of dental cements, amalgam, esthetic restoratives (composites), alginate and gypsum products, sealants and various impressions materials. 6 hrs. lab/wk. Course taught at MCC-Penn Valley Community College, 3201 Southwest Trafficway, Kansas City, MO. Students should contact the Penn Valley coordinator of dental assisting about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KDA 210

Chairside Assisting II (5 CR)

Prerequisite: KDA 110

Specialty area of dentistry to include orthodontics, periodontics, prosthodontics, oral surgery, endodontics, pediatric dentistry and geriatric dentistry. Includes procedures, instruments and current concepts of assisting in these areas. 1 hr. lecture, 8 hrs. lab/wk. Course taught at MCC-Penn Valley Community College, 3201 Southwest Trafficway, Kansas City, MO. Students should contact the Penn Valley coordinator of dental assisting about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KDA 215

Dental Radiology II (2 CR)

Prerequisite: KDA 115

Radiographic techniques, procedures and infection control emphasized. Practical experience in exposing, processing, and mounting radiographs taken on patients at the University of Missouri-Kansas City School of Dentistry and in private practice offices (general and specialty). 4 hrs. lab/wk. Course taught at MCC-Penn Valley Community College, 3201 Southwest Trafficway, Kansas City, MO. Students should contact the Penn Valley coordinator of dental assisting about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KDA 225

Dental Office Management (2 CR)

Prerequisite: Enrollment in the Dental Assisting Program

Admission to the dental assisting program is required. Principles of business management in the dental office. Control of the appointment book, filing, financial management, insurance forms, supply inventory and recall systems by conventional and computerized methods. Dental computer applications and use. Hands-on experience in private practice offices and/or clinic KDA 250. 1 hr. lecture, 2 hrs. lab/ wk. Course taught at MCC-Penn Valley Community College, 3201 Southwest Trafficway, Kansas City, MO. Students should contact the Penn Valley coordinator of dental assisting about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KDA 230

Oral Pathology (1 CR)

Prerequisites: KDA 108 and KDA 110

An overview of diseases of the human body, including basic cell tissues, with specific emphasis on diseases of the face and mouth. 2 hrs. lab/wk. Course taught at Penn Valley Community College, 3201 Southwest Trafficway, Kansas City, MO. Students should contact the Penn Valley coordinator of dental assisting about the class meeting times and beginning and ending dates of classes.

KDA 250

Clinical Experience II (4 CR)

Prerequisite: KDA 125

Advanced clinical experience in the front office, at chairside, in radiographic and laboratory assisting techniques in general and in specialty dental offices and clinics. 16 hrs. clinic/wk. Course taught at MCC-Penn Valley Community College, 3201 Southwest Trafficway, Kansas City, MO. Students should contact the Penn Valley coordinator of dental assisting about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KDA 260

Dental Assisting Seminar (2 CR)

Prerequisite: KDA 125

Preparation for the Dental Assisting National Board Examination (DANB) and for successful employment. Clarification of prior material by discussion and dialogue between students and instructors. Preparation of personal resume and job applications. Demonstrate interview techniques. 2 hr. lecture/wk. Course taught at MCC-Penn Valley Community College, 3201 Southwest Trafficway, Kansas City, MO. Students should contact the Penn Valley coordinator of dental assisting about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KDA 270

Expanded Functions in Restorative Dentistry (1 CR)

Prequisite: Student must meet one of the following: 1) Certified dental or orthodontic assistant through the Dental Assisting National Board, Inc. 2) Graduate of an ADA-accredited dental assisting or dental hygiene program 3) Completion of KDA 106 Basic Dental Techniques and successful completion of Basic Skills Mastery Exam given by the Missouri Dental Assistants Association

Dental restorative materials with emphasis on placing and carving amalgam and composite restorations and palliative care of dental emergencies. 2 hrs. lab/wk. Course taught at MCC-Penn Valley Community College, 3201 Southwest Trafficway, Kansas City, MO. Students should contact the Penn Valley coordinator of dental assisting about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KDA 271

Expanded Functions in Orthodontics

Prerequisite: Student must meet one of the following: 1) Certified dental or orthodontic assistant through the Dental Assisting National Board, Inc. 2) Graduate of an ADA-accredited dental assisting or dental hygiene program 3) Completion of KDA 106 Basic Dental Techniques and successful completion of Basic Skills Mastery Exam given by the Missouri Dental Assistants Association

Orthodontic procedures with emphasis on impressions, bending archwires, placement and removal of orthodontic bands and brackets, and palliative care of orthodontic emergencies. .5 credit hour, 1 hr. lab/wk. Course taught at MCC-Penn Valley Community College, 3201 Southwest Trafficway, Kansas City, MO. Students should contact the Penn Valley coordinator of dental assisting about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KDA 272

Expanded Functions in Periodontics

Prerequisite: Student must meet one of the following: 1) Certified dental or orthodontic assistant through the Dental Assisting National Board, Inc. 2) Graduate of an ADA-accredited dental assisting or dental hygiene program 3) Completion of KDA 106 Basic Dental Techniques and successful completion of Basic Skills Mastery Exam given by the Missorui Dental Assistants Association

Periodontal procedures with emphasis on air-brasive coronal polishing and placement of periodontal dressings. Credit hours .5. 1hr. lab/wk. Course taught at MCC-Penn Valley Community College, 3201 Southwest Trafficway, Kansas City, MO. Students should contact the Penn Valley coordinator of dental assisting about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KDA 273

Expanded Functions in Prosthetic Dentistry (1 CR)

Prequisite: Student must meet one of the following: 1) Certified dental or orthodontic assistant through the Dental Assisting National Board, Inc. 2) Graduate of an ADA-accredited dental assisting or dental hygiene program 3) Completion of KDA 106 Basic Dental Techniques and successful completion of Basic Skills Mastery Exam given by the Missouri Dental Assistants Association

Prosthodontic procedures with emphasis on prosthodontic impression techniques,

cementation of dental appliances, extra-oral adjustment of fixed and removable prostheses, placement of soft-tissue liners. 2 hrs. lab/wk. Course taught at Penn Valley Community College, 3201 Southwest Trafficway, Kansas City, MO. Students should contact the Penn Valley coordinator of dental assisting about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

Dental Hygiene (DHYG)

DHYG 121
Clinical Dental Hygiene I: Pre-Clinic (5 CR)

Prerequisites: Admission to the Dental Hygiene Program, a minimum 2.0 GPA in curriculum courses and CHEM 122 and ENGL 121 and BIOL 140 and PSYC 130 and BIOL 230 Corequisites: DHYG 125 and DHYG 138 Prerequisite or corequisite: DHYG 135 and SOC 122

This course will includes information and techniques relating to the history, development, current status and future of the profession of dental hygiene. Students will be introduced to fundamental dental hygiene services, instrumentation, patient assessment, preventive treatment, transmissible diseases, exposure barriers and infection control. 2 hrs. lecture, 13 hrs. lab/wk. Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $3300 to $3350.

DHYG 125
Developmental Dentistry (2 CR)

Prerequisites: Admission to Dental Hygiene Program and CHEM 122 and ENGL 121 and BIOL 140 and PSYC 130 and BIOL 230 and Corequisites: DHYG 121 and DHYG 138 and Prerequisites or corequisites: SOC 122 and DHYG 135

This course will include a study of embryology; oral histology; developmental disturbances of the face, oral cavity and related structures; and dental morphology and occlusion. 1 hr. lecture, 3 hrs. lab/wk.

DHYG 135
Dental Materials (2 CR)

Prerequisites: CHEM 122 and ENGL 121 and PSYC 130 and BIOL 140 and BIOL 230 and Prerequisite or corequisite: SOC 122 Corequisites: DHYG 121 and DHYG 125 and DHYG 138

This course is designed to provide students with a knowledge base of the science and physical properties of dental materials. Through laboratory exercises, students will have hands-on experience with dental materials used in dental hygiene and dentistry while applying their knowledge of dental material sciences. 1 hr. lecture, 2 hrs. lab/wk.

DHYG 138
Head and Neck Anatomy (2 CR)

Prerequisites: BIOL 230 and CHEM 122 and ENGL 121 and PSYC 130 and BIOL 140 and admission to the Dental Hygiene Program and Prerequisites or corequisites: SOC 122 and DHYG 135 Corequisites: DHYG 121 and DHYG 125

This course is designed to provide dental hygiene students with the basic anatomical foundations to support clinical course work. Topics to be covered include embryonic development of the head and neck, along with identification of the bones in the skull. Muscles of the head and neck will be identified along with their functions, insertion and origins. The vascular, lymphatic and nervous systems of the head and neck will be discussed along with the anatomical basis of the spread of infection. 3 hrs. lecture and lab/wk.

DHYG 140
Clinical Dental Hygiene II (4 CR)

Prerequisite: DHYG 121 Corequisites: DHYG 142 and DHYG 146 and DHYG 148 and prerequisites or corequisites: BIOL 225 and DHYG 135

The course will include clinical application of dental hygiene techniques and instrumentation, oral health products, patient motivation and educational techniques, preventive strategies including use of an intraoral clinic camera and an introduction to selected dental specialties. Students will be prepared for medical and dental emergencies, which may be encountered in various practice settings. An introduction to the dental hygiene process (ADPIE) and working with special-needs patient populations will be provided. 2 hrs. lecture & 8 hrs. clinic/wk. Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $25 to $35.

DHYG 142
Dental Radiology (2 CR)

Prerequisites: DHYG 121 Corequisites: DHYG 140 and DHYG 146 and DHYG 148 and Prerequisites or corequisites: BIOL 225 and DHYG 135

This class will concentrate on the theory and clinical practice of exposing, processing, mounting and evaluating oral radiographs with emphasis on radiation protection and infection control for the patient and operator. 1 hr. lecture, 3 hrs. lab/wk.

DHYG 146
Periodontics (3 CR)

Prerequisite: DHYG 121 Corequisites: DHYG 140 and DHYG 142 and DHYG 148 Prerequisites or Corequisites: BIOL 225 and DHYG 135

This course will include recognition of the etiology and clinical signs and symptoms of periodontal diseases. The inflammatory process, treatment planning and nonsurgical therapy are discussed. 3 hrs. lecture/wk.

DHYG 148
Dental Health Education (2 CR)

Prerequisite: DHYG 121 Corequisites: DHYG 140 and DHYG 142 and DHYG 146 Prerequisites or Corequisites: BIOL 225 and DHYG 135

Students will study health and apply educational methods for individuals and groups, with special emphasis on behavior modification, compliance, communication and motivation. Exercises in the research process and evaluation research articles are included. 1 hr. lecture, 2 hrs. lab/wk

DHYG 221
Clinical Dental Hygiene III (6 CR)

Prerequisites: DHYG 140 and BIOL 235 Corequisites: DHYG 225 and DHYG 230 and DHYG 240

Students will continue development in the areas of patient management, preventive dental hygiene treatment and proficiency in clinical techniques through practical application. Current advances in dental hygiene services will also be introduced. 2 hrs. lecture, 16 hrs. clinic/wk. Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $250 to $275.

DHYG 225
Pathology (3 CR)

Prerequisites: DHYG 140 and BIOL 235 Corequisites: DHYG 221 and DHYG 230 and DHYG 240

This course will introduce the students to concepts related to general systemic and oral pathology. General principles of pathology include inflammation, immunity, neoplasia and wound healing. Basic pathological processes of oral conditions, their etiologies and treatments will be discussed. 3 hrs. lecture/wk.

DHYG 230
Dental Therapeutics (3 CR)

Prerequisites: DHYG 140 and BIOL 235 Corequisites: DHYG 221 and DHYG 225 and DHYG 240

This course will introduce the basic principles of drug actions, emphasizing dental-related therapeutics and drugs associated with common systemic disorders, information on the selection of professional products, and principles necessary in administering local anesthesia. 2 hrs. lecture, 2 hrs. lab/wk.

DHYG 240
Community Dental Health (2 CR)

Prerequisites: DHYG 140 and BIOL 235 Corequisites: DHYG 221 and DHYG 225 and DHYG 230

Topics will include public health agencies, statistical procedures for critiquing scientific literature, identifying dental needs of different groups and planning dental health education programs. Preventive techniques, health promotion, consumer advocacy and the role of the dental hygienist in public health will be emphasized. Field experience will be included. 1 hr. lecture, 3 hrs. lab/wk.

DHYG 245
Nitrous Oxide Analgesia (1 CR)

Prerequisite: DHYG 221 Corequisite: DHYG 250

This course will concentrate on the principles of administering and monitoring nitrous oxide analgesia. Upon completion of the course, didactic and clinical proficiency in nitrous oxide analgesia will meet certification standards set by state dental boards. 1 hr. lecture, lab/wk.

DHYG 250
Clinical Dental Hygiene IV (6 CR)

Prerequisite: DHYG 221 Corequisite: DHYG 245

This course will offer continued development of proficiency in clinical techniques and current procedural practices of the dental hygienist with emphasis on self-evaluation. Topics will include ethics, jurisprudence, office management, current dental hygiene issues and preparation for board exams. 2 hrs. lecture, 16 hrs. clinic/wk., 1 hr. board review for first 8 wks.
<u>Associated Costs</u>: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100 to $125.

Drafting/CAD/AutoCAD (DRAF)

DRAF 120
Introduction to Drafting (2 CR)

This course should be taken by students without prior drafting experience. Upon successful completion of this course, the student should be able to identify and apply the essential, basic skills necessary to proceed through the drafting program, including lettering, measuring, geometric construction, sketching,

isometrics, orthographic views, dimensioning and auxiliary view. 1 hr. lecture, 3 hrs. lab/wk. Drafting classes that have additional lab have either the time and room listed or TBA (to be announced) with the room number listed.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $45 to $60.

DRAF 123
Interpreting Machine Drawings (2 CR)

Prerequisite or corequisite: DRAF 120 or approval of the program assistant dean

This course is a required course in the computer-aided drafting and design technology program. Upon successful completion of this course, students should be able to interpret graphics used to fabricate, assemble, maintain and operate the equipment and products of industry. General detail and assembly prints will be evaluated for title block information, general notes, dimensioning, tolerance specification and symbology. Specialized drawings will include cams, gears, numerical control, plastics, sheet metal and instrumentation. 2 hrs. lecture/wk.

DRAF 129
Interpreting Architectural Drawings (2 CR)

This beginning course will explain the fundamentals of interpreting (reading) architectural drawings. Upon successful completion of this course, students should be able to understand plan and elevation views, sections, details, schedules, specifications, symbols and abbreviations found on most residential and commercial construction drawings. 2 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $5 to $10.

DRAF 130
Introduction to CAD Concepts - AutoCAD: 2008 (3 CR)

Prerequisite: DRAF 120 or approval of the program assistant dean

This course provides a basic knowledge of AutoCAD. Students will learn to use CAD equipment, including input/output devices and microcomputers as drafting tools. Emphasis will be on a basic understanding of CAD terms and concepts as they are applied in industry. Students will be provided an overview of many of the key features of a major microcomputer CAD package with hands-on experience at a workstation. Basic instruction will be provided on drawing setup, drawing commands, editing commands and screen control. The important concepts of layering, standard symbols and dimensioning will be introduced. 2 hrs. lecture, 3 hrs. lab/wk. Drafting classes that have additional lab have either the time and room listed or TBA (to be announced) with the room number listed.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $15.

DRAF 132
Introduction to AutoCAD LT (3 CR)

This course provides a basic knowledge of computer-aided drafting (CAD). Students will learn basic AutoCAD LT commands and the use of CAD equipment, including input/output devices as drafting tools. The latest version of AutoCAD LT, student version, will be used to cover topics including creating and setting up a drawing, using blocks and wblocks, editing a drawing, saving completed drawings, developing template drawings, printing from paper space, dimensioning, layering, drawing defaults and hatching. This course is for beginning AutoCAD users. 2 hrs. lecture, 3 hrs. lab/wk.

DRAF 135
Graphic Analysis (3 CR)

Prerequisites: DRAF 120 and DRAF 130 or approval of the program assistant dean

This course expands on introductory knowledge in drafting and CAD. Upon successful completion of this course, the student should be able to solve descriptive geometry problems, locate intersections of geometric shapes and produce developments of geometric shapes. Most assignments in this course will be completed using AutoCAD software. 2 hrs. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $15.

DRAF 140
Topics in CAD I (2 CR)

This course provides training for a specific design application software. Students will learn software commands and terminology. Students will be provided with in-depth coverage of the selected software and be given hands-on experience. Emphasis will be placed on the application of software to industry projects. 2 hrs. lecture, lab/wk.

DRAF 164
Architectural Drafting/Residential Interior Design (3 CR)

Upon completion of this course the student should be able to interpret residential drawings, draft architectural drawings and use industry references. Drawings studied include floor plans, elevations, sections, details and schedules. In addition to lab assignments, students will draft on coldpress board, vellum and plastic film. This course is required in the Interior Design, Interior Entrepreneurship and Interior Merchandising AAS programs. 2 hrs. lecture, 3 hrs. lab/wk
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $140 to $160.

DRAF 222
Mechanical Drafting (3 CR)

Prerequisites: DRAF 123 and DRAF 230 Prerequisite and/or corequisite: MATH 134

Students successfully completing this course should be able to draw details and assembly views of mechanical parts. The types of parts discussed in this class include castings, sheet metal pieces, jigs and fixtures, and gauges. Important concepts include dimensioning, form and position tolerancing, coordinate tolerancing, and calculations related to material allowances and manufacturing. Project assignments will be completed using computer-aided drafting software. This course is typically taught in the fall semester. 2 hrs lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $40.

DRAF 225
Civil Drafting (3 CR)

Prerequisite: DRAF 230 or ENGR 131 Corequisite: MATH 134

Upon successful completion of this course, the student should be able to apply drafting techniques used in civil engineering offices. The student will learn to draw civil engineering plans from surveying and engineering data. The student will be able to produce plan and profile drawings, roadway cross sections, earthwork calculations, topographic maps and property maps. The student will use CAD in drawing projects. This course is typically taught in the spring semester. 2 hrs. lecture, 3 hrs. lab/wk.

DRAF 228

Industrial Design Applications (3 CR)

Prerequisites: CET 211 and DRAF 222 and DRAF 250 and DRAF 252

This course examines industrial systems. Topics include interdisciplinary considerations of manufacturing processes, machine elements, electrical controls and structural design. Systems will include pumping systems or material handling systems. Team project/protocol will be used to develop graphic, ISO and ANSI-approved solutions. Job books and journals for a project are required from all students. This course is typically taught in the spring semester. 2 hrs. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $50 to $75.

DRAF 230
Intermediate CAD: AutoCAD (3 CR)

Prerequisite: DRAF 130 or approval of the program assistant dean

This course provides an increased knowledge of autoCAD as it is used in today's industries. Students will build on their CAD experience by learning new commands and techniques that increase system productivity. Special emphasis will be on developing construction techniques and command usage to increase CAD proficiency. Additional study of standard symbols, layers and editing functions will occur. Concepts covered will include dimensioning variables and styles, attributes and external referencing, as well as paper space and model space, as used in multiple-view drawings. 2 hrs. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $5 to $10.

DRAF 231
CAD 3-D (3 CR)

Prerequisite: DRAF 230

In this course students will explore the use of computer-aided drafting and design software for the construction of three-dimensional computer models. Emphasis will be on using 3-D software to produce multiple-view drawings. Visualization commands and techniques will be discussed and developed. Topics will include view commands and wire-frame and surface construction, as well as solid modeling. 2 hrs. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $5 to $10.

DRAF 232
CAD Applications Workstation Environment (2 CR)

Prerequisite: DRAF 230 or approval of the program assistant dean

This course provides instruction for customizing the CAD workstation and handling files in a network environment. Students will receive instruction in software commands and terminology and be provided with in-depth coverage of customizing the CAD environment and managing CAD data files in a production environment. Emphasis will be on hands-on application of the covered topics. 2 hrs. lecture, lab/wk.

DRAF 233
CAD Administration (2 CR)

This course covers topics necessary for an individual to manage a CAD department in a production environment. Topics include managing CAD data, selecting types of equipment/software and establishing drafting policies and procedures. Also discussed are personnel issues for CAD employees/employers. 2 hrs. lecture/wk.

DRAF 238
Architectural Drafting (3 CR)

Prerequisites: DRAF 129 and DRAF 230

This course is an introduction to the production of architectural drawings for residential and commercial construction. Upon successful completion of this course, the student will be able to draw floor plans, sections, elevations, dimensions and schedules and use industry standards. Projects will be completed using CAD software. This course is typically taught in the spring semester. 2 hrs. lecture, 3 hrs. lab/wk.

DRAF 240
Introduction to AutoLISP (2 CR)

Prerequisite: DRAF 230

This course covers techniques for automation of AutoCAD drafting procedures through the use of the AutoLISP programming language. The scope of this course will include basic AutoLISP functions, creation of AutoLISP expressions and program files. It covers basic techniques and concepts needed to begin using AutoLISP effectively. 1 1/2 hrs. lecture, 1 hr. lab/wk.

DRAF 242
Topics in CAD II (2 CR)

Prerequisite: DRAF 230 or approval of the program assistant dean

This course provides training for a specific CAD-related software. Students will learn software commands and terminology. Students will be provided with in-depth coverage of the selected software and be given hands-on experience. Emphasis will be on the application of the selected software to industry projects. 2 hrs. lecture, lab/wk. Drafting classes that have additional lab have either the time and room listed or TBA (to be announced) with the room number listed.

DRAF 243
Architectural Desktop: Revit (2 CR)

Prerequisite: DRAF 230 or ENGR 131 or approval of the program assistant dean

This course introduces the student to the Architectural Desktop software used by many architectural and engineering design firms. Topics include software commands, project setup and the design process. Emphasis will be placed on the hands-on application of software to industrial projects. It is recommended that students have previous architectural design knowledge or have taken DRAF 238, Architectural Drafting. 2 hrs. lecture and lab/wk.

DRAF 244
Land Development Desktop/CIVIL 3D (2 CR)

Prerequisite: DRAF 230 or ENGR 131 or approval of the program assistant dean

This course introduces the student to the Land Development Desktop software used by many land planning, civil engineering and surveying firms. Topics include software commands, project setup and the design process. Emphasis will be placed on the hands-on application of the software to industrial projects. It is recommended that students have previous civil engineering design knowledge or have taken DRAF 225, Civil Drafting. 2 hrs. lecture and lab/wk.

DRAF 245
Mechanical Desktop: Inventor (2 CR)

Prerequisite: DRAF 230 or ENGR 131 or approval of the program assistant dean

This course introduced the student to the Mechanical Desktop software used by

many industrial and mechanical design firms. Topics include software commands, project setup and the design process. Emphasis will be placed on the hands-on application of the software to industrial projects. It is recommended that students have previous mechanical engineering design knowledge or have taken DRAF 222, Mechanical Drafting. 2 hrs. lecture and lab/wk.

DRAF 250
Electrical Drafting (3 CR)

Prerequisites: MATH 133 and DRAF 230 or ENGR 131

Upon successful completion of this course, the student should be able to identify drafting techniques applicable to industrial lighting, motor controls, power distribution and generation. Emphasis will be on the use of tables, catalogs and applications software as aids to decision making required on electrical drawings. Project assignments will be completed primarily using CAD. This course is typically taught in the fall semester. 2 hrs. lecture, 3 hrs. lab/wk.

DRAF 252
Structural Drafting (3 CR)

Prerequisite: DRAF 230 or ENGR 131 Corequisite: MATH 134

Upon successful completion of this course, the student should be able to produce structural drawings and details of steel, concrete and wood structures for manufacturing, construction, engineering and architectural firms. Project work will be done using CAD. This course is typically taught in the spring semester. 2 hrs. lecture, 3 hrs. lab./wk.

DRAF 264
CAD:Interior Design (3 CR)

Prerequisites: ITMD 122 or ITMD 123 and ITMD 129 both with a grade of C or higher, or approval of the program assistant dean

This course is an introduction to the use of computer-aided drafting (CAD) as used in the interior design field. Upon successful completion of this course, the student should be able to draw floor plans and elevations of interiors using a computer-aided drafting system. AutoCAD LT software will be used. 2 hrs. lecture, 3 hrs. lab/wk. Drafting classes that have additional lab have either the time and room listed or TBA (to be announced) with the room number listed. Note: Prerequisites ITMD 123 and ITMD 129 require a grade of "C" or higher. Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $15.

DRAF 266
Graphic Communications II for Interior Design (3 CR)

Prerequisite: DRAF 261

Upon successful completion of this course, the student should be able to draft three-dimensional representations of interior spaces, furniture, window treatments and decorative accessories. One-point and two-point perspective drawing, isometric drawing and perspective grids are covered. Student will draft in pencil on vellum and ink on mylar. 2. hrs. lecture, 3 hrs. lab/wk.

DRAF 271
Drafting Internship I (3 CR)

Prerequisite: assistant dean's approval

Upon successful completion of this course, the student should be able to apply classroom knowledge to an actual work situation. The internship will provide advanced students the opportunity to develop job- and career-related skills while

in a work setting. The work will be developed cooperatively with area employers, college staff and each student to provide a variety of actual job experiences directly related to the student's career goals. 15 hrs. min./wk. Drafting classes that have additional lab have either the time and room listed or TBA (to be announced) with the room number listed.

DRAF 272
Drafting Internship II (3 CR)

Prerequisites: DRAF 271 and assistant dean's approval

Upon successful completion of this course, the student should be able to apply classroom knowledge to an actual work situation. The internship will provide advanced students the opportunity to develop job- and career-related skills while in a work setting. The work will be developed cooperatively with area employers, college staff and each student to provide a variety of actual job experiences directly related to the student's career goals.15 hrs. min./wk. Drafting classes that have additional lab have either the time and room listed or TBA (to be announced) with the room number listed.

Economics (ECON)

ECON 132
Survey of Economics (3 CR)

Upon successful completion of this course, the student should be able to explain basic macroeconomic and microeconomic theory, fiscal and monetary policies, the role and significance of international economics and government trade and regulatory policies. In addition, the student should be able to describe the characteristics and consequences of the differing business units in the economy, as well as the functioning of the labor market and how national income is distributed. The course is primarily for students who desire a one-semester, nontechnical overview of the basic components of macroeconomic and microeconomic theory and the functioning of the United States economy. 3 hrs. lecture/wk.

ECON 230
Economics I (3 CR)

Upon successful completion of this course, the student should be able to use economic terminology and principles to explain and discuss basic macroeconomic concepts, including supply of and demand for products, national income determination, money and banking, and monetary and fiscal policy. The student enrolling in this course should have successfully completed one year of high school algebra or the equivalent. (Macro) 3 hrs./wk.

ECON 231
Economics II (3 CR)

Upon successful completion of this course, the student should be able to use economic terminology and principles to explain and discuss basic microeconomic concepts, including extended analysis of product supply and demand and theory of the firm and product and resource market structures. Students enrolling in this course should have successfully completed one year of high school algebra or the equivalent. (Micro) 3 hrs./wk.

Education and Early Childhood (EDUC)

EDUC 121
Introduction to Teaching (3 CR)

Note: For possible future elementary/secondary educators

Teaching concepts and practices as they apply to today's elementary and secondary schools will be introduced. Topics will include the roles and responsibilities of the teacher, various modes of instruction, specialized areas in teaching, and professional requirements and concerns. Twenty hours of observation in a school setting are required. 3 hrs./wk.

EDUC 130
Foundations of Early Childhood Education (3 CR)

This introductory survey course is designed to provide students with current information on topics relevant to employment in early childhood programs. The course explores the historical and philosophical roots of early childhood education, general principles in child development, the teacher's role, values and ethics in early childhood education, curriculum design, and classroom management. Twenty hours of observation in a group childcare setting are required. 3 hrs. lecture/wk.

EDUC 131
Early Childhood Curriculum I (3 CR)

Prerequisite or corequisite: EDUC 130

This methods course is designed for students who are, or will be, working in an early childhood education setting and parents or others who desire to develop an intellectually challenging environment for young children. The focus of the course is curriculum areas that deal with language and physical development. 3 hrs. lecture/wk.

EDUC 205
Concepts in Early Childhood Education (3 CR)

Prerequisite or corequisite: EDUC 130 for certificate only

This course will provide early childhood care and education professionals, and those aspiring to the profession, with the opportunity to apply early childhood education experience and continuing professional education to college credit. Students will gain and apply knowledge in many aspects of teaching young children in child-care and educational settings. The student will spend seven hours a week (105 clock hours total) in a supervised practical experience at the Hiersteiner Child Developments Center at JCCC and will complete 1.5 CEUs in early childhood education. Credit for prior experience may be substituted for completing this course. The program facilitator must assess the documents (i.e., CDA) provided by the student and/or arrange and evaluate the practical experience before offering credit for this course. Completion of an application for this credit is required and may be obtained from the program facilitator. For certificate only. 3 hrs. lecture/wk.

EDUC 210
Creative Experiences for Young Children (3 CR)

Prerequisites: EDUC 130 and one of the following: PSYC 215 or PSYC 218 or EDUC 270

This course is a study of constructing and maintaining an environment for young children that fosters aesthetic sensitivity and creativity. The course includes the young child's developmental stages in art, music, movement, language, and creative and dramatic play; methods and materials that nourish developmentally appropriate creative experiences and support an inclusive, anti-bias curriculum; integration of creative experiences in the whole curriculum; the use of technology; and helping families understand the creative experience. 3 hrs. lecture/wk.

EDUC 215
Young Children with Special Needs (3 CR)

This course is a study of creating and maintaining a developmentally appropriate inclusive environment for young children with special needs. The course includes the history of education and care for young children with special needs, federal and state legislation, types of differing abilities, developmental stages and capabilities of all young children, an inclusive approach to early education, and curriculum development for young children with special needs. Health, safety and nutrition; screening and assessment; interaction techniques; the role of the educator specific to the child's special needs; partnering with the family, other disciplines and community; and advocating for children are presented. The laboratory will include demonstration of the subject matter. 2 hrs. lecture, 3 hrs. lab/wk.

EDUC 220
Survey of the Exceptional Child (3 CR)

This course is an overview of the field of special education geared to those who are preparing to work with students with special needs. The course provides fundamental information on the identification and exceptionality, laws and legal cases affecting the delivery of services to individuals with exceptionalities and the principles of effective educational approaches for each exceptionality. Categories of exceptionality presented include learning disabilities, mental retardation, behavior disorders, gifted and talented, communication disorders, autism, traumatic brain injury, physical disabilities, sensory impairments, other health impairments and multiple and severe disabilities. 3 hrs./ wk.

EDUC 225
Infant and Toddler Education and Care (3 CR)

Prerequisite: EDUC 130

This course is a study of creating and maintaining a developmentally appropriate environment for infants and toddlers. The course will include the history of education and care, theories of child development, developmental stages and capabilities of the very young child, and curriculum development for infants and toddlers. Health, safety and nutrition; assessment; interaction techniques; the role of the educator specific to the needs of the infant and toddler; partnering with family and community; and advocating for the very young are presented. The laboratory will include demonstration of the subject matter. 2 hrs. lecture, 3 hrs. lab/wk.

EDUC 231
Early Childhood Curriculum II (3 CR)

Prerequisite: EDUC 131

This methods course is designed for students who are, or will be, working in an early childhood education setting and parents or others who desire to develop an intellectually challenging environment for young children. The focus of the course is on curriculum areas that deal with the physical and social aspects of the world. Included in this inquiry curriculum are mathematics, science, social studies and nutrition. 3 hrs. lecture/wk.

EDUC 235
Parenting (2 CR)

Prerequisite or corequisite: PSYC 215 or PSYC 218 or EDUC 270

This course is a study of effective parenting. The course is designed for teachers of young children and parents and guardians who desire to provide an environment that reflects sensitivity to the unique needs of the individual child and family. Topics covered during the course are the history of child-rearing methods, an overview of child development, types of families, parent/guardian fears and

concerns, purposes of child behavior, and effective communication techniques. Problem prevention and resolution, nurturing self-esteem in children and building effective, collaborative relationships between teachers and families are also covered. 2 hrs. lecture/wk.

EDUC 240
School-Age Programs and Curriculum I (3 CR)
Prerequisite: EDUC 130

This methods course is designed for students who are, or will be, working in an early childhood education setting and parents and caregivers who desire to develop an intellectually challenging environment for school age children. The focus of the course is on curriculum areas for the school-aged child and extended day and summer programs. 3 hrs. lecture/wk.

EDUC 243
Issues and Skills for Paraeducators (3 CR)

Students will explore the issues, skills and challenges specific to working as a paraeducator. In particular, students will be introduced to the issues relating to the inclusion of students with special needs into the mainstream educational environment. Students will review and practice those skills necessary to being an effective member of an instructional team, including collaboration, problem solving, decision making, team building and parent outreach. 3 hrs./wk.

EDUC 245
School-Age Programs and Curriculum II (3 CR)
Prerequisite: EDUC 240

The student will study the creation and maintenance of a developmentally appropriate environment for school-age children in extended school day and summer programs. The student will acquire the skills and characteristics of effective educators. The student will explore types of programs and how to plan, implement and evaluate these programs. Also, staff supervision and development, record keeping, relevant state regulations and laws will be discussed. Collaboration with family and community, public relations and contributing to the profession will be studied. The lab will include demonstration of the subject matter. 2 hrs. lecture, 1 hrs. lab/wk.

EDUC 246
Multicultural Issues in Education (2 CR)

In this course students will explore the changing demographics of students in public schools. The course will also explore the ways in which a student's culture can affect the student's learning style, communication skill and behavior. The course will also describe strategies that take into account cultural differences, values and child-rearing practices when educators seek to create a safe and accepting environment for all students. 2 hrs. lecture/wk.

EDUC 250
Child Health, Safety and Nutrition (3 CR)

This course is a study of the basic health, nutrition and safety management practices for young children. Information on establishing and maintaining a physically and psychologically safe and healthy learning environment appropriate for the needs of young children will be included. The interrelation of health, safety and nutrition is stressed, with emphasis on appraisal procedures, prevention and protection, services and educational experiences for young children and their families. 3 hrs. lecture/wk.

EDUC 260
Observing and Interacting with Young Children (3 CR)

Prerequisite: EDUC 130 and Prerequisite or corequisite: PSYC 215 or PSYC 218 or EDUC 270

This course is a study of the role of observation to assess and monitor the development and learning of children, birth through age 8, and the appropriate techniques for interacting with young children, considering their individual differences. Included will be the purposes and types of observation procedures, interpretation and use of findings, reporting techniques, and legal and ethical responsibilities. Expected age-related child behavior, fundamental principles of and theoretical approaches to child guidance, guidance techniques, working with families, and issues of diversity are presented. The laboratory will include demonstration of the subject matter. 2 hrs. lecture, 3 hrs. lab/wk.

EDUC 270
Early Childhood Development (3 CR)

This course is a comprehensive account of human development from conception though age 8. The course integrates genetic, biological, physical and social influences with psychological processes affecting the development of young children. 3 hrs. lecture/wk.

EDUC 280
Administration of Early Childhood Program (3 CR)

This course is a study of the organization and administration of early childhood programs. The topics include the skills and characteristics of effective administrators; types of programs; planning, implementing and evaluating programs; policy development; staff supervision and development; finances and budget; record keeping; relevant state regulations and laws; developing, equipping and maintaining a facility; organizing a developmentally appropriate environment; collaboration with family and community; public relations; and contributing to the profession. The lab will include demonstration of the subject matter. 2 hrs. lecture, 3 hrs. lab/wk.

EDUC 283
Prof. Competencies: Early Childhood Education (1 CR)

Prerequisite: Program Facilitator Approval

This course focuses on the conduct and responsibilities of the early childhood professional. Topics include early childhood education codes, laws and regulations; child development; experience planning and curriculum development; observation and guidance of young children; authentic assessment; responsibilities to the young child's family, to the community, and to the teaching profession; employability skills; self-assessment; and job seeking skills. Completion of this course is required to obtain the One Year Post-Secondary Certificate in Early Childhood Education. 1hr. lecture/wk.

EDUC 284
Seminar: Early Childhood Education (3 CR)

Prerequisite: Program Facilitator Approval Corequisite: EDUC 285

The course will focus on conduct and responsibilities of the intern; early childhood codes, laws and regulations; child development; activity planning and curriculum development; observation and guidance of young children; authentic assessment; responsibilities to the young child's family and community and to the teaching profession; employability skills; self- assessment; and job-seeking skills. The student's practical application of information in the internship will be discussed, and a portfolio will be developed. 3 hrs. lecture/wk.

EDUC 285
Student Teaching: Early Childhood Education (3 CR)

Prerequisite: Program Facilitator Approval Corequisite: EDUC 284

This supervised field experience in early childhood education is designed for students to apply their knowledge of teaching young children. The student will be participating in curriculum design and presentation; observing and interacting with young children; providing for the health, safety and nutrition of young children; managing the program setting; and working with families and the community. A self-assessment and a professional development plan are completed. The student will spend 20 hours a week (320 clock hours total) in at least two different early childhood settings, serving children of two different ages.

EDUC 290
Leadership in Early Childhood Education (3 CR)

Prerequisite: Program Facilitator Approval

The student will study how early childhood education program directors lead programs and create quality environments for children, families and staff. The leadership topics include: leadership styles; developing mission statements, program philosophies, procedures, manuals and handbooks; assessing and planning for program improvements; recruiting and retaining qualified early childhood teachers; creating professional growth opportunities; developing effective staff meetings; implementing a shared decision making process; utilizing conflict resolution strategies; and developing partnerships with families and community agencies. 3 hrs. lecture/wk.

Electrical Technology (ELTE)

ELTE 122
National Electrical Code I (4 CR)

This is an introductory course on the use and interpretation of the current National Electrical Code. Students should develop a working knowledge of the code that will permit them to apply it to everyday applications. Upon successful completion of this course, the student should be able to use the code to design service entrances, feeders and branch circuits and discern between wiring methods used in difference occupancies. 4 hrs. lecture /wk.

ELTE 123
Electromechanical Systems (4 CR)

Upon successful completion of this course, the student should be able to identify electrical components and their relationships to the various repair and troubleshooting techniques. The materials in this course will prove useful to service technicians whose background in electricity is limited. The course includes material from basic electrical theory to troubleshooting complex electrical circuits. This course will provide practice in the application of electrical theory as well as in the interconnection of components of heating and cooling systems. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. This is a beginning course in electrical theory that is required for HVAC, electrical and power plant technology but is appropriate for all interested students. Common components found in the HVAC industry are used to develop these skills. 3 hrs. lecture, 3 hrs. lab/wk.

ELTE 125
Residential Wiring Methods (4 CR)

Prerequisite or corequisite: HVAC 123 or ELTE 123

This is an introductory course on residential wiring methods that includes practical application and hands-on experience in implementing the code requirements.

Upon successful completion of this course, the student should acquire the necessary skills to wire a residence to meet the minimum requirements as set forth in the current National Electrical Code for residential occupancies. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 3 hrs. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $125 to $300.

ELTE 200
Commercial Wiring Methods (4 CR)

Prerequisite or corequisite: HVAC 123 or ELTE 123

This course covers commercial wiring methods. Upon successful completion of this course, the student should be able to read commercial blueprints and apply the current National Electrical Code to commercial wiring systems. The student will gain working knowledge and hands-on experience with commercial wiring techniques. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 3 hrs. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $125 to $300.

ELTE 202
Electrical Estimating (3 CR)

Prerequisites: ELTE 122 and ELTE 125 or ELTE 200 or permission from program facilitator

Upon successful completion of this course, the student should be able to manually and electronically (using industry standard computer software) develop an electrical estimate for a residential and commercial design. Emphasis will be placed on compiling a take-off list of materials from blueprints, completing a bill of material and completing the final bid process. This includes a bid accuracy analysis to determine the job's selling price. The student will be able to determine material cost, labor cost, the proper application of direct cost, overhead and profit. Also, to conclude the estimate, the student will be able to write bid proposals and change orders. 2 hrs. lecture, 3 hrs lab/wk.

ELTE 205
Industrial Electrical Wiring (4 CR)

Prerequisite: ELTE 122 or ELTE 125 or ELTE 200

This advanced course covers industrial wiring methods. Upon successful completion of this course, the student should be able to read industrial blueprints and apply the current National Electrical Code to industrial wiring systems. The student will gain working knowledge and hands-on experience with industrial wiring techniques. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 3 hrs. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $125 to $300.

ELTE 210
Code Certification Review (3 CR)

Prerequisite: ELTE 122

Upon successful completion of this course, the student should be able to use the current National Electrical Code to do calculations involving loads, lighting and circuit sizing. The course will cover typical load calculations used in both residential and commercial settings. The student should also be able to interpret and apply the National Electrical Code rules to special wiring systems including Hazardous Locations, Elevators, Remote-control circuits and Fire Alarm systems. 3 hrs. lecture/wk.

ELTE 215
Generators, Transformers and Motors (4 CR)

Prerequisites: ELTE 123 and one of the following: ELTE 122 or ELTE 125 or ELTE 200 or equivalent experience and division administrator's approval

This is an advanced course on the use of generators, transformers and motors. Upon successful completion of this course, the student should be able to interpret and apply the rules of the current National Electrical Code to wiring systems composed of these electrical components. Also, the student will gain a working knowledge of the theory of these single-phase and 3-phase electrical components and their practical applications in everyday use in the electrical industry. 4 hrs. lecture/wk.

ELTE 271
Electrical Internship I (3 CR)

Prerequisite: program facilitator approval

Upon successful completion of this course, the student should be able to apply classroom knowledge to an actual work situation. The internship will provide advanced students with on-the-job experience under the supervision of professionals in the industry. The work will be developed cooperatively with area employers, college staff and each student to provide a variety of actual job experiences directly related to the student's career goals. 1 hr. lecture, minimum 15 hrs. on-the-job training/wk.

Electronics (ELEC)

ELEC 120
Introduction to Electronics (3 CR)

This is a beginning course in electronics technology that is appropriate for both electronic majors and other interested students. An overview of basic electronic theory, principles and components is presented. In addition, the laboratory exercises will emphasize the operation and use of the primary pieces of electronic test equipment and the fabrication of selected circuits. 2 hrs. lecture, 2 hrs. lab-lecture, 2 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

ELEC 122
Circuit Analysis I (3 CR)

Prerequisites: ELEC 120 and MATH 133 or MATH 172

This course covers resistive circuits having DC sources. Analysis topics include Ohm's law, Kirchoff's law, the superposition theorem, Thevenin's theorem and Norton's theorem. The current, voltage and resistance relationships in series, parallel and combination circuits will be studied. 3 hrs. lecture/wk.

ELEC 123
Smart House Technology (3 CR)

This course is a general introduction to the rapidly growing field of home technology and its integration and use. Lectures, demonstrations and lab work will be used to teach the types of home technology being sold and installed. This course is designed to assist new users to implement this technology in their own homes and as an introduction for students wanting to proceed further into the field as contractors or installers. 3 hrs. lecture/wk.

ELEC 125
Digital Electronics I (4 CR)

This is a beginning course in which students will study and practice the basic concepts of digital electronics. Topics will include digital number systems, logic gates, logic circuits, flip-flops, digital arithmetic, counters and registers. 3 hrs. lecture, 3 hrs. lab/wk.

ELEC 126
Microcomputer A+ Preparation (4 CR)

This course is designed to be a general introduction to personal computer hardware and operating system software. The course teaches the operation, installation and upgrade of all the major components of a typical PC. The course also provides the basic knowledge to prepare the student for passing the A+ test, which is the industry standard certification for personal computer technicians. Since A+ Certification is based upon the Windows Operating System and Intel/AMD-type microprocessors, these will be the basis of the course. The course will cover both of the A+ Certification testing areas: PC Hardware (Core Test) and Operating Systems (OS Test). 3 hrs. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $5 to $10.

ELEC 127
Robots for Humans (4 CR)

This course is a general introduction to the rapidly growing field of robotics. The class will use lectures, demonstrations and lab work to teach the basics of robotics. This course is designed to assist new users in making use of this technology in their own lives and as an introduction for students wanting to proceed further into the field. 3 hrs lecture, 2 hrs open lab/wk.

ELEC 130
Electronic Devices I (4 CR)

Prerequisite or corequisite: ELEC 140

This is the first course in electronic devices. Topics include diodes and transistors, special purpose diodes and diode application circuits. Both bipolar junction transistors (BJTs) and field effect transistors (FETs) are examined and application circuits for both transistor types are constructed. 3 hrs. lecture, 3 hrs. lab/wk.

ELEC 131
Introduction to Sensors and Actuators (3 CR)

This course examines types and uses of industrial sensors and actuators. Topics include temperature, pressure, optical, position and flow sensors. Operation of AC and DC motor drives will also be covered. The course will also include wiring and troubleshooting of sensors and actuators. Lecture topics will be supported by hands-on lab projects. 2 hrs. lecture, 3 hrs. lab/wk.

ELEC 133
Programmable Controllers (3 CR)

This is an introductory course in programmable logic controllers. The course is designed for individuals without extensive electrical or controller backgrounds. Hardware aspects and programming aspects of controller operation are covered. The foundational controller logic symbols and controller logic operations necessary to interpret and write ladder logic programs are taught in this class. Students will enter, edit and test controller programs through assigned laboratory projects. 2 hrs. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations

that students should expect in addition to the course tuition, fees, and textbooks. $5 to $10.

ELEC 140
Circuit Analysis II (3 CR)

Prerequisites: ELEC 122 and MATH 134 or MATH 172 or MATH 173

The analysis techniques presented in Circuit Analysis I will be applied to complex circuits driven by AC and pulsed sources. The responses of circuits having resistance, inductance and capacitance will be analyzed. Other topics include transformers and electrical filters. 3 hrs. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $5 to $30.

ELEC 150
Introduction to Telecommunications (3 CR)

This is an introductory-level course in telecommunications principles that includes both voice and data communications. An examination of the communications industry and its regulatory environment will be provided. Topics include voiceband communications, digital transmission, switching and signaling, and emerging technologies. 3 hrs. lecture/wk.

ELEC 165
Advanced Programmable Controllers (3 CR)

Prerequisite: ELEC 133

This course is a continuation of ELEC 133. Principle topics include sequences, file and block transfers, analog control and PID functions. In addition, methods of networking of PLCs and advanced user interfaces will be covered. Lecture topics will be supported by laboratory projects. 2 hrs. lecture, 3 hrs. lab/wk.

ELEC 175
Telecommunications (3 CR)

Prerequisite or corequisite: ELEC 130

This course studies hardware and software functions of telecommunication systems. Topics include both voice and data aspects of telecommunication systems, including terminology, interfaces, protocols, transmission media, networks and networking technologies. 2 hrs. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 TO 30.

ELEC 185
LAN Cabling and Installation (3 CR)

This course is designed to provide specialized skills for installing and testing local area network cabling and wireless installation. Twisted-pair, coax and fiber cables will be introduced and contrasted based on their characteristics and applications. Laboratory exercises for terminating and testing network cables and installing wireless systems will accompany the lectures. Students will be trained how to use common wiring tools and testing instruments. Methods of documenting LAN systems will also be introduced. 2 hrs. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

ELEC 195
Introduction to Wireless LANs (3 CR)

This course will introduce the student to the subject of wireless local area networks. The course will cover the types of equipment and their uses, correct configuration of equipment, types of security methods used, how to determine the physical lay-out of the access points and other equipment and procedures that can be used to administrate the network. 3 hrs. lecture, 2 hrs lab./wk.

ELEC 225
Digital Electronics II (3 CR)

Prerequisite: ELEC 125

Students will continue their study of digital concepts and will learn how to build digital circuitry using digital integrated circuit chips and basic concepts of computer organization. In additional, emphasis will be placed on learning how to troubleshoot digital circuits and digital systems. Each student will build a digital computer through a series of laboratory projects. 2 hrs. lecture, 3 hrs. lab/wk.

ELEC 230
Electronic Devices II (3 CR)

Prerequisite: ELEC 130

This class is a continuation of the electronic devices sequence. Topics include operational amplifiers, thyristors and voltage regulators. Operational amplifier applications include comparators, summing amplifiers, integrators, differentiators and active filters. 2 hrs. lecture, 3 hrs. lab/wk.

ELEC 240
Electronic Communication Systems (4 CR)

Prerequisite or corequisite: ELEC 230

This course provides a study of electronic communication systems. Topics include the electromagnetic spectrum, decibels, noise, amplitude modulation, antennas, transmission lines and the global positioning satellite system. 3 hrs. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $30.

ELEC 245
Microprocessors (3 CR)

Prerequisite: ELEC 225

This course provides students with a basic knowledge of microprocessors and how microprocessors interface with other devices to create microcomputer systems. Students will learn how to write assembly language and machine language programs for a microprocessor as well as how to interface memory, input devices and output devices to a microprocessor. Additionally, emphasis will be placed on learning how to troubleshoot microprocessor-based systems. 2 hrs. lecture, 3 hrs. lab/wk.

ELEC 250
Microcomputer Maintenance (3 CR)

Prerequisite: ELEC 126

This course is a continuation of the study of personal computers and will further the student's ability to maintain and repair them. In addition, this course will assist the student in preparing for computer-maintenance certification. Topics will include interaction of hardware and operating systems, resource conflicts, networking capabilities, common hardware and software problems, hardware differences of portable computers, and upgrading computers. The course topics will be supported by laboratory projects. 2 hrs. lecture, 3 hrs. lab/wk.

Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $5 to $10.

ELEC 271
Electronics Internship I (1 CR)

Prerequisite: assistant dean's approval

This course affords the student the opportunity to apply classroom knowledge to an actual work environment. It will provide selected advanced electronics technology students with appropriate on-the-job experience with area employers, under instructional oversight, that will promote the student's career goals. 18 hrs. approved and appropriate work activity/wk.

ELEC 272
Electronics Internship II (1 CR)

Prerequisites: ELEC 271 and approval of the program assistant dean

This course is a continuation of ELEC 271. It affords the student the opportunity to apply classroom knowledge to an actual work environment. It will provide selected advanced electronics technology students with appropriate on-the-job experience with area employers, under instructional oversight, that will promote the student's career goals. 18 hrs. of approved and appropriate work activity/wk.

Emergency Medical Science/MICT (EMS)

EMS 121
CPR I - Basic Life Support for Healthcare Provider (1 CR)

This course provides an overview of the cardiovascular and respiratory systems, a discussion of medical and environmental emergencies leading to the need for CPR, and an introduction to diagnostic signs and triage, as well as insight into the structure and function of the emergency medical services system. The most current practical CPR skills will be taught, including CPR, AED, and airway obstruction techniques for adults, children and infants. Upon successful completion of all American Heart Association standards, the student will receive affirmation at the Healthcare Provider level. 4 hrs. lecture, lab/wk. for 5 wks.

EMS 125
CPR II-Basic CPR Instructor (1 CR)

Prerequisite: Successful completion of EMS 121 and/or current certification by AHA as Basic Rescuer

This class will include a review and affirmation of Basic Rescuer techniques, practice in the design and implementation of CPR courses, demonstration of manikin maintenance and decontamination procedures, and mini-lectures. Upon successful completion of this class, students will be eligible for affirmation by the American Heart Association as a BLS instructor. Each participant must teach or co-teach a CPR class while being monitored by an AHA faculty member before the instructor affirmation card will be issued. 2.5 hrs. lecture, lab/wk. for 8 wks. (average).

EMS 128
EMS First Responder (5 CR)

This course is designed to provide training in emergency medical care for those who are apt to be the first persons responding to an emergency incident. Fire, police, civil defense personnel, school bus drivers, day-care providers, utility workers and industrial workers are a few examples of those persons who would benefit from this training. The student will receive both didactic and psychomotor

skills training in CPR, patient assessment, fracture management, airway management and trauma management. Successful completion of this course with a minimum grade of "C" will enable the student to sit for the First Responder certification exam administered by the Kansas Board of Emergency Medical Services. 6 hrs. lecture, 6.5 hrs. lab/wk. for 8 wks. (average).

EMS 130
Emergency Medical Technician (9 CR)

Prerequisite: EMS 128 or equivalent, or be an active member in a health-related occupation (firefighter, rescue, ambulance, law enforcement, industrial first-aid personnel or other health-related field), or attained the minimum of an associate's degree

This program is designed for individuals interested in providing medical care to patients in the pre-hospital setting. It will provide the participants with opportunities to gain information, skills and attitudes necessary for certification and practice as an emergency medical technician (EMT) in the state of Kansas. This program has been approved by the Kansas Board of Emergency Medical Services (BEMS). It addresses information and techniques currently considered the responsibility of the EMT according to the United States Department of Transportation, National Standard Curriculum. The program consists of didactic instruction, practical skill training and clinical experience. Students are also required to attend Saturday session(s) as necessary. Saturday dates and times will be announced during the first class session. Classroom instruction includes anatomy, physiology, recognition and care of medical emergencies, and trauma-related injuries. CPR, bandaging, splinting, childbirth techniques and airway management are among the skills taught. An extrication session will give students hands-on experience with automobile accident situations. Upon instructor recommendation, students will participate in clinical and field observation. All transportation to and from off-campus sites is the responsibility of the student. Students completing this course with a minimum grade of "C" will be allowed to sit for the Kansas EMT State Certification Examination administered by the BEMS. 7 hrs. lecture, 5 hrs. lab/wk. (average)

EMS 133
Emergency Medical Technician Practicum (3 CR)

Prerequisites: EMS 130 or equivalent and a copy of current EMT-B card

EMT Practicum is designed to give the newly certified EMT-B the additional skills and confidence needed to successfully compete for a position as an EMT-B with an EMS service. Skills will include ambulance operation, driving, map reading, insurance billing and unit maintenance. This course will also provide high-fidelity scenario training in all aspects of the EMS call as well as extensive field lab time with a local EMS service. Students will participate in realistic medical emergency scenarios with "actors" playing life-like patients and bystanders as well as numerous field internship shifts on a licensed ambulance. Students will work through all phases of an ambulance call. They will be presented with complex patient care situations that require the development of critical thinking and decision-making skills. Students will be tested on their ability to lead a team of pre-hospital caregivers in the diagnosis, proper treatment and evacuation of a patient. Scenario simulations will be set up to be as life-like as possible. 2 hrs. lecture, 10 hrs. lab/wk.

EMS 140
Basic Cardiology and EKG Recognition (3 CR)

Prerequisites: Prospective students should be certified in a health profession, i.e., EMT, RN, LPN, EMT-P. Permission of the assistant dean is required.

The health care worker with an understanding of ECG tracing will function more effectively when providing care for the cardiac patient. Increasing numbers of professionals are being called upon to utilize ECG tracing in their work settings, but without adequate knowledge of its use. This course will serve as both continuing education and the preparation for the job entry and/or job advancement. During the course, students will learn to apply monitoring and

12-lead electrodes, diagnose ECG dysrhythmias and infarct locations, treat ECG dysrhythmias, and defibrillate ventricular fibrillation. 3 hrs. lecture/wk.

EMS 203
KS EMT - Intermediate/Defibrillator (11 CR)

Prerequisites: EMT-B and additional prerequisite and/or documentation requirements. See assistant dean for details.

This course will cover selected advanced emergency medical care concepts and practices. This intermediate-level course advances the basic emergency medical technician's knowledge and skills in patient assessment, airway management, intravenous cannulation and manual defibrillation. The KS EMT-I/D's knowledge and skills are intermediate between the EMT-Basic and the EMT-Paramedic. Upon successful completion of this course, the student will be able to utilize the assessment findings to formulate a field impression and implement the treatment plan for the patient suffering a medical or trauma emergency. As the KS-EMT-I/D demonstrates cognitive and motor skill competency in the classroom and skills laboratory, his or her training will proceed to the clinical and field environments, where the knowledge, skills and attitudes necessary for professional practice will be practiced, synthesized and perfected. 7 hrs. lecture, 5 hrs. lab, 10 hrs. clinical/field experience/wk.

EMS 206
Training Officer I (1 CR)

Prerequisites: Kansas Board of EMS certification at the Emergency Medical Technician - Basic (EMT-B) level or above and approval of the course instructor

This course is a requirement for the Kansas Board of Emergency Medical Services (KSBEMS) certification as a Training Officer (TO). The course is intended to prepare the student to plan, implement, coordinate, teach and evaluate continuing education programs. The course is a prerequisite for Training Officer II. 15 hrs. lecture, 5 hrs. lab total

EMS 207
Training Officer II (2 CR)

Prerequisites: Kansas Board of Emergency Medical Services certification at the provider level the student wishes to teach, completion of EMS 206 Training Officer I and approval of the course instructor

This course is a requirement for the Kansas Board of Emergency Medical Services (KSBEMS) certification as a Training Officer (TP). The course is intended to prepare the student to plan, implement, coordinate, teach and evaluate continuing education programs. As a TOII a student will also be qualified to plan, implement, coordinate, teach and evaluate Initial Instruction Programs for the First Responder level of certification in Kansas. 33 hrs. lecture, 7 hrs. lab total

EMS 210
Emergency Medical Services Instructor Coordinator (5 CR)

Prerequisites: Prospective students must meet all the requirements for selection as set forth by the Kansas Board of Emergency Medical Services, which includes certification as a care provider, documentation of pre-hospital experience and successful completion of the BEMS pre-selection process

This course covers the basic tenets of adult education as they apply to teaching emergency medical services provider courses. Students are oriented to all Kansas requirements for conducting initial courses of instruction for ambulance attendants. Successful completion will be the first step toward certification as a Kansas EMS instructor coordinator. This program has been approved by the Kansas Board of Emergency Medical Services (BEMS). It addresses information and techniques currently considered the responsibility of the EMT-IC according to the United States Department of Transportation, National Standard Curriculum. 5 hrs. lecture-demonstration/wk. for 8 wks.

EMS 220
MICT I (10 CR)

Prerequisite: Admission to the MICT program

MICT I is the first of four courses in advanced out-of-hospital emergency medical care leading to the opportunity to sit for the National Registry Examination for Paramedics. In this narrowly focused but intense foundational course, the paramedic student will gain a significant knowledge of patient assessment, pharmacology and medication administration techniques, electrocardiography, advanced airway management, and paramedic scope of practice. Much material will be covered rapidly, and emphasis is on organization, internalization and synthesis of the basic knowledge of the discipline in this 9-week course. Additionally, during the initial psychomotor teaching labs, students will gain the ability to assess patients, administer medications, treat dysrhythmias and manage the airway through manikin practice. 24 hrs. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $700 to $1,000.

EMS 225
MICT II (10 CR)

Prerequisite: EMS 220 with a grade of "C" or higher

MICT II is the second of four courses in advanced out-of-hospital emergency medical care leading to the opportunity to sit for the National Registry Examination for Paramedics. This course builds on the foundational knowledge developed in MICT I and covers advanced management of medical and trauma emergencies in the out-of-hospital environment. Much material will be covered rapidly, and emphasis is on organization, internalization, synthesis and application of the basic knowledge of the discipline in this 9-week course. Students demonstrate competency at motor skill performance, and extensive simulation practice is afforded. Students begin field observation with a paramedic ambulance crew and complete an Advanced Cardiac Life Support Course. 24 hrs. avg. lecture/wk., 12 hrs. lab/field observation avg./wk.

EMS 230
MICT III Clinicals (12 CR)

Prerequisite: EMS 225 with a grade of "C" or higher

MICT III is the third of four courses in advanced out-of-hospital emergency medical care leading to the opportunity to sit for the National Registry Examination for Paramedics. During MICT III, paramedic students have the opportunity to take the knowledge and skills gained in MICT I and II and apply them in actual supervised clinical practice. MICT III represents a brief, intense 14-week course in which knowledge and skills are synthesized and applied to patients under supervision of physicians and nurses in clinical practice in the emergency department, critical care unit, surgery/ recovery room, labor/delivery room, pediatric emergency department and burn center. Field observation lab and classroom and laboratory review are included as well. 4 hrs. lecture avg./wk., 44 hrs. clinical/lab/field avg./wk.

EMS 271
MICT IV Field Internship (15 CR)

Prerequisite: EMS 230 with a grade of "C" or higher

MICT IV is the final of four courses in advanced out-of-hospital emergency medical care leading to the opportunity to sit for the National Registry Examination for Paramedics. During MICT IV, paramedic students have the opportunity to take the knowledge and skills gained in MICT I, II and III and apply them in an actual practice environment. MICT IV represents an intense 4-month course in which knowledge, skills and professional behaviors are synthesized and applied to victims of sudden trauma or medical emergencies under supervision of paramedic preceptors at the emergency scene and in the ambulance. Entry-level competence into the profession is demonstrated as the student demonstrates the ability to assess the scene and the patient, develop a plan for therapeutic

intervention as well as scene management, and effectively lead the out-of-hospital resuscitation team's effort. Classroom and laboratory review are included. 4 hrs. lecture avg./ wk., 56 hrs. clinical/lab/field avg./wk.

Engineering (ENGR)

ENGR 121
Engineering Orientation (2 CR)

Upon successful completion of this course, the student should be able to describe careers in engineering and use fundamental concepts in engineering problem solving. Topics include engineering disciplines, aptitude and academic requirements, professional responsibilities, problem definition and solution, engineering design, and terminology. Students will meet professional engineers during field trips to engineering companies and work sites. The primary intent of this course is to introduce students to the engineering problem-solving process and to help each student make the best career decision. 2 hrs. lecture/wk.

ENGR 131
Engineering Graphics I (4 CR)
Corequisite: MATH 133 or MATH 171 or MATH 172 or MATH 173 or MATH 241

Upon successful completion of this course, the student will be able to apply graphic principles used in the engineering design process. The student will master graphics concepts using computer-aided drafting (CAD) software. Topics include 2-D and 3-D CAD commands; geometric construction; multi-view, orthographic projection; sectional views; isometrics; dimensioning; and descriptive geometry. 3 hrs. lecture, 4 hrs. lab/wk.

ENGR 171
Programming for Engineering and Science (3 CR)
Prerequisite: MATH 171

At the completion of this course, the student should be able to design algorithms for the solution of engineering and science problems using pseudocoding and flowcharting techniques; code the solution in the FORTRAN programming language; and compile, test and debug the program. Programming concepts covered will include data input from the keyboard and data files, formatted output, sequence, selection and iteration structures, function and subroutine subprograms and array processing. Proficiency with conversions and math in the decimal, binary and hexadecimal numbering systems will also be attained. This is a beginning course that will prepare students for more advanced studies in engineering and science computer applications. 2 hrs. lecture, 2 hrs. lab/wk.

ENGR 180
Engineering Land Surveying I (3 CR)
Corequisite: MATH 134 or MATH 172

Upon successful completion of this course, the student should be able to identify the basic applications of plane surveying procedures; measurement of horizontal distances, directions, angles, leveling, traversing, curves and stadia coordinates; computations with the aid of a computer; and topographical property and construction surveying. Students will take part in field operations using equipment such as auto levels, theodolites, EDM, GPS, and total station. 2 hrs. lecture, 3 hrs. lab/wk.

ENGR 251
Statics (3 CR)

Prerequisite: MATH 242 and Prerequisite or Corequisite: PHYS 220

Upon successful completion of this course, the student should be able to describe and predict the conditions of rest and motion of bodies under the action of forces. The principles used will include vectors, force systems, equilibrium, free body diagram, centroids, moments of inertia, trusses, frame, and shear and moment diagrams. This course is typically offered in the summer and fall semesters. 3 hrs. lecture/wk.

ENGR 254
Dynamics (3 CR)

Prerequisite: ENGR 251

Upon successful completion of this course, the student should be able to apply the principles of dynamics, the branch of engineering mechanics that studies objects in motion. Topics covered will include unbalanced force systems (Newton's second law), displacement, velocity and acceleration, work and energy, and impulse and momentum. Computer applications will be included. This course is typically offered in the spring semester. 3 hrs. lecture/wk.

English (ENGL)

ENGL 102
Writing Strategies (3 CR)

Prerequisite: Appropriate placement test score

This course assists the student in developing strategies for sentence writing. The course is designed to meet a variety of learning styles, levels and needs. Students will develop strategies for self-monitoring errors in written products. Students are taught strategies for writing a variety of sentence formats and have extensive practice in writing sentences as a means of implementing new information. 3hrs./wk. This course does not fulfill degree requirements. Students must take the JCCC writing assessment test before enrolling. For more information, see a JCCC counselor.

ENGL 103
Practical Writing Skills (1 CR)

At the completion of this course, the student should be able to recognize and write complete sentences. The student will write a variety of sentences using strategies for building sentences with phrases and clauses as well as editing sentences through coordination and subordination. The student will then practice developing paragraphs in various organizational modes. Along with writing the student will read selected prose and write responses to these readings. The course is designed specifically to aid non-native speaking students in acquiring writing skills through individualized instruction. The aim of this course is to enhance/supplement the English as a Second Language program already offered at JCCC. Also, because hearing-impaired students have similar difficulties with the English language as ESL students, this course addresses the challenges often faced by this student population. This course meets by arrangement in the Writing Center. This course does not fulfill degree requirements. After registering for this course, the student should contact the Writing Center.

ENGL 105
Basic English Grammar (3 CR)

The aim of English 105 is to introduce the student to the basic structures in English grammar: parts of speech, sentence types, phrases and clauses. Students learn to use correct punctuation. Moving from joining short phrases to the basic sentence, students learn to combine ideas to form a variety of sentence structures. Students practice skills, working in class (often in pairs or groups) and

making use of computer programs in the Writing Center. Grammar games are used to help prepare students for a test. 3 hrs./wk. This course does not fulfill degree requirements.

ENGL 106
Introduction to Writing (3 CR)

Prerequisite: ENGL 102 or appropriate score on assessment test

Beginning with a review of basic sentence skills, this course focuses on paragraph development, including subject selection, topic sentences, methods of development, transitional devices and effective introductions and conclusions. The last part of the course will focus on developing multi-paragraph essays. 3 hrs./wk. This course does not fulfill degree requirements. Students must take the JCCC writing assessment test. For more information, see a JCCC counselor.

ENGL 107
Sentence Pattern Skills (1 CR)

At the completion of this course, the student should be able to identify the parts of speech, elements of a sentence and basic sentence patterns. Emphasis is on sentence combining and sentence composing. Students are told that grammar in isolation will not improve writing skills, and they are encouraged to practice writing. This course meets by arrangement in the Writing Center. This course does not fulfill degree requirements. After registering for this course, the student should contact the Writing Center.

ENGL 108
Composing Skills (1 CR)

After completing Composing Skills, students will be able to choose a topic, narrow the topic, and organize and develop with supporting evidence a variety of paragraph modes. The student will be able to achieve paragraph unity, coherence and emphasis. Also, the student will learn revision and editing strategies. Course meets by arrangement in the Writing Center. This course does not fulfill degree requirements. After registering for this course, the student should contact the Writing Center.

ENGL 109
Proofreading Skills (1 CR)

This 1-credit module is designed to provide students with strategies and rules that will help them recognize and repair common grammar, usage and mechanical errors in their writing. This course focuses on the major and minor errors as set forth in the English program objectives (available in the Writing Center). Students will learn to recognize and correct these errors, not only on exercise sheets, but also in their own writing. This class meets by arrangement in the Writing Center. This course does not fulfill degree requirements. After registering for this course, the student should contact the Writing Center.

ENGL 110
English Grammar Review (1 CR)

English Grammar Review helps students to review the parts of speech, elements of a sentence, basic sentence patterns, major sentence level errors, agreement errors and punctuation. Students are encouraged to practice writing. Course meets by arrangement in the Writing Center. This course does not fulfill degree requirements. After registering for this course, the student should contact the Writing Center.

ENGL 112
Research Skills (1 CR)

Research Skills is a review of the various aspects of the research process, beginning with limiting the subject and moving to revising the finished product. Emphasis is on the gathering of resource materials, synthesizing the information and developing an essay in which the resource information is used to support a thesis and is documented in an approved academic form. This course meets by arrangement in the Writing Center. This course does not fulfill degree requirements. After registering for this course, the student should contact the Writing Center.

ENGL 115
Revision Skills (1 CR)

Revision Skills is designed to instruct the practicing writer in skills needed to revise all writing, including business, college and personal writing. Students will use computer programs and self-paced materials. Revision Skills is intended to complement courses in which writing is assigned. Students will be encouraged to bring in business communication or college assignments to apply the learned skills. Course meets by arrangement in the Writing Center. This course does not fulfill degree requirements. After registering for this course, the student should contact the Writing Center.

ENGL 120
Writing in the Disciplines (1 CR)

This course is designed to complement and/or support classes in which writing is intrinsic to the curriculum and provide students with a process that can be applied to the variety of written assignments typically assigned in classes other than composition. Students will practice writing a variety of short papers using a prescribed process for each assignment. The course is individualized. Students enrolled in this class must come to the Writing Center, LIB 308, to make arrangements for their class schedule, to pick up a syllabus and other materials, and to be assigned an instructor. The course is a combination of written material and software. All completed work will be kept in a folder in the Writing Center. Students should anticipate approximately 20 hours of work to complete the course. This course does not fulfill degree requirements.

ENGL 121
Composition I (3 CR)

Prerequisite: ENGL 106 or appropriate placement test score or EAP 113 and EAP 117

Composition I focuses on writing nonfiction prose suitable in its expression and content to both its occasion and its audience. Students will have an opportunity to improve in all phases of the writing process: discovering ideas, gathering information, planning and organizing, drafting, revising and editing. Each essay written in the course should clearly communicate a central idea or thesis, contain sufficient detail to be lively and convincing, reflect the voice of the writer and use carefully edited standard written English. 3 hrs./wk. Students must take the JCCC writing assessment test or submit an ACT score of 19 or higher before enrolling. For more information, see a JCCC counselor. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.

ENGL 122
Composition II (3 CR)

Prerequisite: ENGL 121

Because so much writing is required in college and in the workplace demands the ability to synthesize information gathered from various sources, Composition II will focus on skills essential to gathering, comprehending, analyzing, evaluating and

synthesizing information. Composition II also emphasizes organizing and polishing steps important in composing expository, evaluative and persuasive prose. 3 hrs./wk. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.

ENGL 123
Technical Writing I (3 CR)

Prerequisite: ENGL 121

This course provides a basic knowledge of technical writing. Students will learn the writing process (prewriting, writing and rewriting) to follow when constructing correspondence, including memos, letters, e-mail, reports, instructional manuals and Web pages. Students also will learn seven key traits of effective technical writing: clarity, conciseness, document design, organization, audience recognition, audience involvement and accuracy. Accuracy specifically entails the need for students to adhere to rules of grammar and mechanics. Students will learn how to create computer- generated graphics and learn word processing skills. Finally, the students will learn how to work in teams, modeling Total Quality Management skills. 3 hrs./wk.

ENGL 130
Introduction to Literature (3 CR)

Prerequisite: ENGL 121

Students will read, discuss and analyze works from three literary genres: the short story, the poem and the play. Students will learn and apply the technical vocabulary used in the criticism of these literary forms. Students will be introduced to representative works from various literary traditions and cultures, including numerous works from contemporary writers. 3 hrs./wk. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.

ENGL 140
Writing for Interactive Media (3 CR)

Prerequisite: ENGL 121

This course teaches students to apply the writing process as well as fundamental rhetorical and composition skills to various interactive media including Web pages, CD-ROMs/DVD, e-mail, kiosks, computer program packages and other electronic media. The instruction will focus on skills essential to selecting, evaluating and synthesizing information from primary and secondary sources; in addition, it will emphasize the different approaches to organization that these media require as well as the variety of discourse styles used in informative, instructional, persuasive and entertainment media texts. 3 hrs. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

ENGL 150
Digital Narratives (3 CR)

Prerequisite: ENGL 121

Games, particularly Role-Playing Games (RPGs) and other participatory narratives, share many properties with traditional narratives, yet differ significantly from their linear counterparts. This course focuses on the elements of narrative as well as the principles that drive virtual or alternative possible worlds (both fictive and reality-based), and it will provide students with practice writing and designing artifacts that demonstrate an understanding of plot, character, setting and the impact of structure and purpose in game development. This course is taught in the fall semester only. 3 hrs. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks.

$20 to $30.

ENGL 210
Technical Writing II (3 CR)
Prerequisite: ENGL 123

This course provides an advanced knowledge of technical writing. Students will learn the writing process (prewriting, writing and rewriting) to follow when constructing correspondence. Types of technical writing covered in this course include memos, letters, e-mail, short reports, long reports, instructional manuals, Web pages, PowerPoint presentations, brochures, newsletters, journal articles, resumes and online resumes. Students also will learn seven key traits of effective technical writing; clarity, conciseness, document design, organization, audience recognition, audience involvement and accuracy. Accuracy specifically entails the need for students to adhere to rules of grammar and mechanics. Students will learn how to create computer-generated graphics and learn word-processing skills. Finally, the students will learn how to work in teams, modeling Total Quality Management skills. 3 hrs./wk.

ENGL 215
U.S. Latino and Latina Literature (3 CR)
Prerequisite or corequisite: ENGL 122

This course introduces students to texts by U.S. writers of Hispanic descent or origin. Written primarily in English, the texts may include fiction, non-fiction, poetry, drama, and/or film. The readings, discussions, and related writing projects will emphasize the relationship between mainstream America and borderland writers; explore the cultural and artistic context of the writers and their works; recognize and assess the use of major narrative and rhetorical strategies; and stimulate consideration of issues surrounding assimilation, identity formation, code-switching, and cultural hybridity. 3 hrs. lecture/wk.

ENGL 222
Advanced Composition (3 CR)
Prerequisite: ENGL 122

This course offers challenging insights into the act of writing. We will move beyond Composition I and Composition II, focusing on writing persuasively to a select audience; working together to anticipate and defuse objections; supply convincing evidence; synthesize the ideas of others to support our ends; look critically at all sources; and perfect a mature, polished style that is suitable to audience and occasion. 3 hrs./wk.

ENGL 223
Creative Writing (3 CR)
Prerequisite: ENGL 122

Students will study and practice writing in two or three of the major literary modes of writing: poetry, fiction, and possibly drama. The reading assignments are based on the premise that, to be a good writer, students must have knowledge of literary techniques and be perceptive readers and critics. Students will examine techniques of two or possibly three of the literary genres and then apply their knowledge to write in each genre. In addition, they will read other students' work and provide useful feedback on that work. 3 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

ENGL 224
Creative Writing Workshop (3 CR)
Prerequisite: ENGL 223

In this class, students will build upon the knowledge and skills learned in ENGL 223. In addition to studying writing techniques, they will produce a body of written work in one or more literary genres of their choice: poetry, fiction, and/or drama. They will also read other students' work and provide useful feedback on that work. 3 hrs./wk.

Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $15 to $25.

ENGL 227
Introduction to Poetry (3 CR)

Prerequisite: ENGL 122

This course emphasizes close reading and analysis of poetry by writers from different time periods, countries, and ethnic backgrounds. Students will study terms, patterns, and forms that are useful for an understanding and appreciation of poetic verse. The course will cover major literary, historical, and cultural movements as they relate to poetry. Students will be introduced to major classical and contemporary American and English poets, along with contemporary foreign-language poetry in translation. 3 hrs. lecture/wk.

ENGL 230
Introduction to Fiction (3 CR)

Prerequisite: ENGL 122

This course features significant opportunities to write about the literature and the reader's response to it. Students will learn the historical fictional precedents of the short story; the similarities and differences between the short story and other narrative forms, such as the novel; the differences between the short story and its historical precedents, between short stories and film adaptations of them, and between commercial and literary short stories. Students will discover the place of short stories in major literary movements, the key elements of short stories and interpretive approaches to short stories. 3 hrs./wk.

ENGL 231
American Prose (3 CR)

Prerequisite: ENGL 122

American Prose presents a series of literary works by American writers that reflects the attitudes and identity of our national literature and culture. By grappling with the ideas and characterizations presented in each literary work, the student develops meaningful insights into the attitudes and human conditions that influence America's national literary identity. 3 hrs./wk.

ENGL 232
Children's Literature (3 CR)

Prerequisite: ENGL 122

Children's Literature is meant for all students interested in bringing children and books together but is especially suited for those who are students with English or education majors; teachers already in the elementary school classroom; parents; those working with children in preschools, day-care centers and libraries; and grandparents and prospective parents. The course would also benefit those exploring the field of writing and illustrating for children. Students will identify children's needs and interests, list the criteria for choosing books for children, and demonstrate the means by which we can bring children and books together. Students will read, examine and critique a variety of children's literature selected by author, genre and historical time period. 3 hrs./wk.

Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $20 to $50.

ENGL 235
Drama as Literature (3 CR)

Prerequisite: ENGL 122

This course introduces students to the analysis of plays as literature. Beginning with the Greek dramatists and ending with the contemporary scene, students will read full-length plays and the comments of playwrights, directors, actors and critics. They will analyze drama from psychological, historical, philosophical, structural and dramatic perspectives. Students will write essays demonstrating their understanding of the works studied. This course is taught in the fall semester only. 3 hrs./wk.

ENGL 236
British Literature I (3 CR)

Prerequisite: ENGL 122

In this survey course, the student will study British literature written up to 1800, ranging from the Anglo-Saxon to the Augustan eras, including works by major authors, such as Chaucer, Shakespeare, Milton, and Swift. The course will emphasize the relationships among influential writers, their lives and times. Additionally, the student will explore the literary differences between the British culture and one other culture that was governed by the British Empire. Such non-British literary works may be from Australia, India, Asia, and various regions of Africa, or the Middle East. 3 hrs. lecture/wk.

ENGL 237
British Literature II (3 CR)

Prerequisite: ENGL 122

In this survey course, the student will study British literature written from 1800 to the present. Major authors from the Romantic, Victorian and Modern eras, such as Austen, Blake, Wordsworth, the Shelleys, Dickens, Tennyson, the Brownings, Eliot, and Woolf, will be included. The course will emphasize the relationships among influential writers, their lives and times. Additionally, the student will explore the literary differences between the British culture and one other culture that was governed by the British Empire. Such non-British literary works may be chosen from the traditions of Australia, India, Asia, various regions of Africa, or the Middle East. British Literature I is NOT a prerequisite for this course. 3 hrs. lecture/wk.

ENGL 243
Literature of Science Fiction (3 CR)

Prerequisite or corequisite: ENGL 122

This course examines the literature of science fiction, especially from 1960 through the present. Students explore the unifying concepts of science and technology, depicted through imaginative narratives of the past, present and future. Students read short stories and/or novels, view science fiction films and discuss key science fiction concepts. 3 hrs. lecture/wk. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.

ENGL 245
Writing Literature for Children (3 CR)

Prerequisite: ENGL 232

Writing Literature for Children is a continuation of Introduction to Children's Literature aimed primarily at those students interested in writing and publishing literature for children. The students will review children's needs and interests, research topics and collect data for possible books. Then students will write and assemble a variety of children's literature. Students will critique their own work

and that of their peers and revise their work accordingly. Finally, students will compose all correspondence typically required by publishers. 3 hrs./wk.

ENGL 250
World Masterpieces (3 CR)
Prerequisite: ENGL 122

World Masterpieces introduces students to literary study using major literary works composed from the times of Homer to Shakespeare that have been influential in shaping and expressing values of Western culture. Students will read selections representative of the epic, tragic, comic and lyric traditions primarily to gain knowledge of the works assigned. In addition, students will analyze the assigned texts as literary works and as cultural artifacts and influences. Finally, students will compare and contrast contemporary understandings of the individual and society with those expressed in the works studied. In completing the course objectives, students will learn the conventions of writing about literature and become familiar with general reference materials useful in studying literature. 3 hrs./wk.

ENGL 254
Masterpieces of the Cinema (3 CR)
Prerequisite: ENGL 122

This course examines the development of cinema from the early experiments in the late 1800s up to the present day, presenting the history and art of both American and international cinema. Students read the textbook, view short and full-length films, and discuss important cinematic techniques and concepts. Students verify their judgments by summarizing and analyzing these important concepts, using discussions, and writing effective, well-organized essays in response to cinematic presentations and explanations. 3 hrs./wk.

ENGL 256
American Poetry (3 CR)
Prerequisite: ENGL 122

American Poetry presents a planned reading schedule and directed discussion of poems that reflect the attitudes of American poets and American culture. By grappling with the ideas and characterizations presented in these poems, students can develop meaningful insights into the attitudes and human conditions that have influenced America's national literary identity. 3 hrs./wk.

English for Academic Purposes (EAP)

EAP 091
Reading/Vocabulary I and Writing/Grammar I (6 CR)
Prerequisite: Appropriate assessment test score

This course, which pairs three credit hours of reading/vocabulary with three credit hours of writing/grammar, provides students who are English Language Learners (ELL) with an integrated communicative experience on the high beginning college level. Students who successfully complete EAP 091 will be awarded three hours of credit for EAP 101 Writing and Grammar I and three hours of credit for EAP 120 Reading and Vocabulary I. The teaching of this course will be shared by two instructors. This course does not fulfill degree requirements.

EAP 092
Reading/Vocabulary II and Writing/Grammar II (6 CR)

Prerequisites: Appropriate assessment test score or EAP 091 (EAP 101 and EAP 120) and EAP 105

This course, which pairs three credit hours of reading/vocabulary with three credit hours of writing/grammar, provides students who are English Language Learners (ELL) with an integrated communicative experience on the low intermediate college level. Students who successfully complete EAP 092 will be awarded three hours of credit for EAP 103 Writing and Grammar II and three hours of credit for EAP 121 Reading and Vocabulary II. The teaching of this course will be shared by two instructors. This course does not fulfill degree requirements.

EAP 093
Reading/Vocabulary III and Writing/Grammar III (6 CR)

Prerequisites: Appropriate assessment test score or EAP 092 (EAP 103 and EAP 121) and EAP 107

This course, which pairs three credit hours of reading/vocabulary study with three credit hours of writing/grammar, provides students who are English Language Learners (ELL) with an integrated communicative experience on the intermediate level. Students will further develop their skills in reading, writing, vocabulary and grammar. Writing activities will focus on paragraph and multi-paragraph writing. Students who successfully complete EAP 093 will be awarded three hours of credit for EAP 111 Writing and Grammar III and EAP 122 Reading and Vocabulary III. The teaching of this course will be shared by two instructors. This course does not fulfill degree requirements.

EAP 101
Writing and Grammar I (3 CR)

Prerequisite: Appropriate assessment test score Corequisite:EAP 120

This course, which is paired with EAP Reading and Vocabulary I, provides English as a Second Language students an integrated communicative experience at the beginning college level. As part of a Learning Community, students will learn effective writing techniques for using American English at the sentence and basic paragraph level. The course will also focus on basic study and learning strategies to aid writing. This course is the first writing and grammar course in the sequence of courses for English for Academic Purposes. 3 hrs lecture/wk. This course does not fulfill degree requirements.

EAP 103
Writing and Grammar II (3 CR)

Prerequisites: Appropriate assessment test score or EAP 091 (EAP 101 and EAP 120) and EAP 105 Corequisite: EAP 121

This course, which is paired with EAP Reading and Vocabulary II, provides English as a Second Language students an integrated communicative experience. As part of a Learning Community, students will focus on using American English in writing at the paragraph level. The course will also focus on learning and study strategies to enhance writing. This course is the second writing and grammar course in the sequence of courses for English for Academic Purposes. 3 hrs. lecture/wk. This course does not fulfill degree requirements.

EAP 105
Speaking and Pronunciation I (3 CR)

Prerequisite: Appropriate assessment test score

This course provides English as Second Language students the opportunity to develop their speaking and pronunciation skills. Focus will be on effective techniques for using American English in academic, career and personal settings. 3 hrs. lecture/wk. This course does not fulfill degree requirements.

EAP 107
Speaking and Pronunciation II (3 CR)

Prerequisites: Appropriate assessment test score or EAP 091 (EAP 101 and EAP 120) and EAP 105

This course provides English as Second Language students the opportunity to expand fluency in speaking and pronunciation. The course covers techniques for listening with accuracy and speaking with the stress, rhythm and intonation of American English. Personal communications and group interactions in academic, career and community settings are included. The course concludes with applications to individual life goals. 3 hrs lecture/wk. This course does not fulfill degree requirements.

EAP 111
Writing and Grammar III (3 CR)

Prerequisites: Appropriate assessment test score or EAP 092 (EAP 103 and EAP 121) and EAP 107 or appropriate COMPASS ESL score Corequisite: EAP 122

This course, which is paired with EAP Reading and Vocabulary III, provides English as a Second Language students an integrated communicative experience at the intermediate level. As part of a Learning Community, students will focus on developing fluency in writing using American English at the paragraph and multi-paragraph level. The course includes study strategies and writing assignments related to the reading Learning Community component. This course is the third writing and grammar course in the sequence of courses for English for Academic Purposes. This course does not fulfill degree requirements. 3 hrs. lecture/wk.

EAP 113
Writing and Grammar IV (3 CR)

Prerequisites: Appropriate assessment test score or EAP 093 (EAP 111 and EAP 122) and EAP 115

This course provides English as a Second Language students the opportunity to improve fluency in American English in writing at the high intermediate to advanced level. Students will engage in writing tasks that relate to the academic disciplines. The course includes reading activities from the academic disciplines and study strategies appropriate for academic tasks. This course is the fourth writing and grammar course in the sequence of courses for English for Academic Purposes. This course does not fulfill degree requirements. 3 hrs. lecture/wk.

EAP 115
Speaking and Pronunciation III (3 CR)

Prerequisites: Appropriate assessment test score or EAP 092 (EAP 111 and EAP 122) and EAP 107

This course provides English as a Second Language students the opportunity to enhance fluency in speaking, pronunciation, and listening at the upper intermediate level. Students apply standard American communication patterns to understand lectures, speak in academic settings, and communicate in group interactions. Informal and formal projects include oral reports in specific fields of study and academic debates. The course concludes with analysis of individual goals and assessments to enhance academic success. This course does not fulfill degree requirements. 3 hrs. lecture/wk.

EAP 117
Speaking and Pronunciation IV (3 CR)

Prerequisites: Either (EAP 111 and EAP 122 and EAP 115) or (EAP 093 and EAP 115) or appropriate COMPASS ESL score

This course offers English as a Second Language students the opportunity to

master speaking, pronunciation, and listening at an advanced level. Pronunciation performance will be enhanced for accent reduction and communication of precise meanings of standard American English. Students apply advanced strategies to process knowledge from specific fields of study and give presentations with idiomatic vocabulary from classical literature, media, and other research sources. The course concludes with expansion of sociolinguistic and cultural competencies for group interactions and large audiences. Pre- and post-assessments measure progress in exit competencies. This course does not fulfill degree requirements. 3 hrs. lecture/wk.

EAP 120
Reading/Vocabulary I (3 CR)

Prerequisite: Appropriate assessment test score Corequisite: EAP 101

This course, which is paired with EAP 101 Writing and Grammar I, provides English Language Learner students an integrated communication experience on the high beginning college level. As part of a Learning Community, students will learn effective techniques for reading, studying and using American English in an academic setting. This is the first reading course in the English for Academic Purposes series. This course does not fulfill degree requirements.

EAP 121
Reading/Vocabulary II (3 CR)

Prerequisites: Appropriate assessment test score or EAP 091 (EAP 101 and EAP 120) and EAP 105 Corequisite: EAP 103

This course, which is paired with EAP Writing and Grammar II, provides English Language Learner (ELL) the opportunity to develop reading fluency, comprehension and vocabulary on the low intermediate college level in a Learning Community setting. Reading, writing, speaking and listening will be integrated, and students will learn effective techniques for studying and using American English in an academic setting. This is the second reading course in the English for Academic Purposes series. 3 hrs. lecture/wk. This course does not fulfill degree requirements.

EAP 122
Reading and Vocabulary III (3 CR)

Prerequisites: Appropriate assessment test score or EAP 092 (EAP 103 and EAP 121) and EAP 107 Corequisite: EAP 111

This course, which is paired with EAP Writing and Grammar III, provides English Language Learner (ELL) an integrated communicative experience at the intermediate college level. Students will develop reading fluency, comprehension, and vocabulary in a Learning Community setting. Reading, writing, speaking, and listening will be integrated, and students will learn effective techniques for using American English to read and study in an academic setting. This course is the third reading course in the English for Academic Purposes series. This course does not fulfill degree requirements.

Entrepreneurship (ENTR)

ENTR 120
Introduction to Entrepreneurship (2 CR)
The student will understand the role of entrepreneurial businesses in the United States and the impact on our national and global economy. The student will evaluate the skills and commitment necessary to successfully operate an entrepreneurial venture. Additionally, the student will review the challenges and rewards of entrepreneurship as a career choice as well as entrance strategies to accomplish such a choice. 2 hrs. lecture/wk.

ENTR 131
Financial Management for Small Business (2 CR)
Prerequisite: ACCT 111 or ACCT 121

Upon successful completion of this course, the student should be able to identify and evaluate the various sources available for funding a small business; demonstrate an understanding of financial terminology; read, prepare and analyze a financial statement; and write a loan proposal. In addition, the student should be able to explain the importance of working capital and cash management. The student should also be able to identify financing needs, establish credit policies, and prepare sales forecasts. This course is required for a vocational certificate and associate of applied science degree in business entrepreneurship. 2 hrs./wk.

ENTR 142
Fast Trac Business Plan (3 CR)

Upon successful completion of this course, the student will be able to evaluate a business concept and write a sound business plan. In the process of doing so, students will be able to assess the strengths and weaknesses of a business concept; collect and organize market research data into a marketing plan; and prepare the financial projects for their business concept. In addition, students will be able to identify and evaluate various resources available for funding small businesses. The course is required for the business plan certificate, the vocational certificate in business entrepreneurship and the associate of applied science degree in business entrepreneurship. 3 hrs. lecture/wk.

ENTR 160
Legal Issues for Small Business (2 CR)

Upon successful completion of this course, the student should be able to identify the forms of business ownership and the legal and tax implications for each. In addition, the student should be able to explain laws covering issues such as personnel, contracts and protection of intellectual property. The student should also be able to explain the reporting requirements for local, state and federal agencies. This course is required for the associate of applied science degree and the vocational certificate in business. 2 hrs./wk.

ENTR 180
Opportunity Analysis (2 CR)

Upon successful completion of this course, the student should be able to assess the current economic, social and political climate for small businesses. In addition, the student should be able to explain how demographic, technological and social changes create opportunities for small business ventures. This course is required for the associate of applied science degree in business entrepreneurship. 2 hrs./wk.

ENTR 190
Small Business Analysis (2 CR)
Prerequisites: BUSE 131 or ENTR 131 and BUSE 160 or ENTR 160 and BUS 230 or permission of division administrator

Upon successful completion of this capstone course, the student should be able to identify problems that frequently arise in small business and use problem-solving skills to formulate solutions. In addition, the student should be able to apply the knowledge of business concepts and techniques in the analysis of cases and actual business situations. This course is required for an associate of applied science degree and a vocational certificate in business entrepreneurship. 2 hrs./wk.

ENTR 195
Franchising (3 CR)
Prerequisite: BUS 230

In this course, the student should be able to research the franchising method of doing business from the perspective of both the franchisor and the franchisee. The student will analyze independent management efforts necessary for a successful franchise business venture as well as understand the interdependent contractual obligations that are legally binding between the franchisor-franchisee. 3 hrs. lecture/wk.

ENTR 210
Entrepreneurship Internship I (1 CR)
Prerequisite: Career program facilitator or assistant dean approval

Upon the successful completion of this course, the student should be able to apply classroom knowledge to an actual work situation. This course consists of supervised work experience in an approved training situation. A minimum of 240 hours of on-the-job training is required. This course is required for an associate of science degree in business entrepreneurship. Either ENTR 210 or BUSE 210, Entrepreneurship Internship I, or ENTR 215 or BUSE 215, Entrepreneurship Internship II, is required for a vocational certificate in business entrepreneurship.

ENTR 215
Entrepreneurship Internship II (1 CR)
Prerequisites: ENTR 210 and Assistant Dean's Approval

Upon the successful completion of this course, the student should be able to apply classroom knowledge to an actual work situation. A minimum of 240 hours of on-the-job training is required. This course is required for an associate of applied science degree in business entrepreneurship. Either BUSE 210 or ENTR 210, Entrepreneurship Internship I, or BUSE 215 or ENTR 215, Entrepreneurship Internship II is required for a vocational certificate in business entrepreneurship.

ENTR 220
Entrepreneurial Marketing (2 CR)
Prerequisite: BUS 230

In this course, the student will gain insights essential for marketing an entrepreneurial venture utilizing innovative and financially responsible marketing strategies. The student will analyze marketing philosophies implemented by key successful entrepreneurs. Additionally, the student will prepare a marketing plan to launch the entrepreneurial venture and a marketing plan to implement during the first two years of business operation. 2 hrs. lecture/wk.

ENTR 225
Family Business (3 CR)

Upon successful completion of this course, the student will gain the knowledge and skills needed for the successful management and leadership of a family enterprise by exploring a diverse set of family firms, examining the interrelationships among the owners, the family, and the management team. The student will analyze the management and family practices that ensure success while recognizing the advantages and challenges facing family enterprises. Emphasis is placed on positioning the family enterprise for sustained growth and continuity through generations. 3 hrs. lecture/wk.

ENTR 240
Funding Acquisition for Entrepreneurs (2 CR)

Prerequisite: ENTR 142

Upon successful completion of this course, the student will understand the importance and impact of funding sources for their entrepreneurial venture. This will be accomplished by reviewing the impact of venture capital in every phase of the business venture from idea to exit including planning, teambuilding, protecting intellectual capital, identifying funding sources, raising money, writing funding agreements, and managing through to an IPO or merger and acquisition. Additionally, the student will develop and present a funding proposal. 2 hrs. lecture/wk.

Fashion Merchandising/Design (FASH)

FASH 121
Fashion Fundamentals (3 CR)

Upon successful completion of this course, the student should be able to define appropriate fashion terminology and explain the structure of the industry, including the design process and marketing of the fashion product. 3 hrs./wk.

FASH 123
Apparel Construction I (4 CR)

Upon successful completion of this course, the student should be able to apply clothing construction principles, techniques and skills in apparel construction. The class will use lecture, demonstration and hands-on experience to teach the skills needed to plan and construct four garments during this class. 2 hrs. lecture, 4 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100 to $300.

FASH 124
Apparel Construction II (4 CR)

Prerequisite: FASH 123 or two years of high school apparel construction training or division administrator approval

Upon successful completion of this course, the student should be able to apply intermediate apparel construction principles, techniques and skills in the production of various garments. This continuation of FASH 123 will focus on the planning and construction of an ensemble of intermediate complexity made from muslin fitting samples, with emphasis on precise fitting alteration. This course is a suggested elective for the Fashion Merchandising program. 2 hrs. lecture, 4 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100 to $300.

FASH 125
Visual Merchandising (3 CR)

Upon successful completion of this course, the student should be able to explain and apply the principles of design in visual merchandising. In addition, the student should be able to identify and explain the use of mannequins and other forms, display fixtures and lighting systems; apply color theory; and present merchandise effectively in visual displays. The student should also be able to demonstrate the use of appropriate types of displays for in-store promotions. This course is required for the Fashion Merchandising program. 3 hrs./wk.

FASH 127
CAD: Pattern Design I (4 CR)

Prerequisite: FASH 123

Upon successful completion of this course, the student should be able to apply the use of flat pattern methods in developing patterns for original apparel designs. Basic slopers and the CAD (computer-assisted design) Pattern Design System will be used to develop and manipulate patterns. The class will use lecture, demonstration and hands-on experience to teach skills needed in manual and computer-assisted pattern design. The student will plan and create patterns in this class. 2 hrs. lecture, 4 hrs. lab/wk.
<u>Associated Costs</u>: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $80.

FASH 128
CAD: Pattern Design II (4 CR)

Prerequisite: FASH 127

Upon successful completion of this course, the student should be able to apply advanced methods of flat pattern design in developing patterns. This class is a continuation of FASH 127, CAD: Pattern Design I. Lecture, demonstration and hands-on experience will be used to teach techniques needed in computer-assisted and manual advanced pattern design. Industry standards will be used for sloper manipulation. Each student will create advanced flat patterns in this class. This is a suggested elective for the Fashion Merchandising program. 2 hrs. lecture, 4 hrs. lab/wk.

FASH 130
Fashion Illustration I (3 CR)

Upon completion of this course, students should be able to create fashion illustrations for their portfolios. In addition, the student should be able to apply color, mood, detail and form using various media. 3 hrs./wk.
<u>Associated Costs</u>: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $50.

FASH 132
Marketing Communications (3 CR)

Upon successful completion of this course, the student should be able to explain advertising and promotion from an integrated marketing communications perspective that combines theory with planning, management and strategy. In addition, the student will be able to explain advertising, sales promotion, direct marketing and publicity/public relations and the need for integration of these promotional mix elements in an overall marketing communications program. 3 hrs./wk. This course is typically taught in the fall semester.

FASH 135
Image Management (1 CR)

Upon successful completion of this course, the student should be able to conduct an extensive wardrobe inventory. In addition, the student should be able to apply principles of personal grooming, elements of design and fabric, and accessory knowledge to the development of an individual professional wardrobe plan based on individual budget constraints. 1 hr./wk.

FASH 140
Garment Design I (3 CR)

Prerequisite: FASH 123

Upon successful completion of this course, students should be able to produce a first pattern and prepare it for production. This includes translating garment ideas from color sketches (croquis); continuing the design process through fabric

selection and pattern drafting; figuring yardage, notions and wholesale cost; and constructing a finished garment. 6 hrs. lecture, lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100 to $300.

FASH 141
Garment Alterations I (3 CR)

Prerequisites: FASH 123 and Prerequisite or Corequisite: FASH 124

Upon successful completion of this course, the student should be able to apply garment construction principles, techniques and skills in apparel construction and tailoring to garments in need or resizing or repair. The class will use lecture, demonstration and hands-on experience to teach the skills needed to plan and execute the adjustments necessary to resize the garment to a particular body. 4 hrs. integrated lecture/lab per week
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100 to $200.

FASH 142
Garment Alterations II (3 CR)

Prerequisite: FASH 141 and Prerequisite or Corequisite: FASH 143

Upon successful completion of this course, the student should be able to apply garment construction principles, techniques and skills in apparel construction and tailoring to formalwear and evening garments in need or resizing or repair. The class will use lecture, demonstration and hands-on experience to teach the skills needed to plan and execute the adjustments necessary to resize the garment to a particular body. 4 hrs. integrated lecture/lab per week.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100 to $200.

FASH 143
Tailoring (4 CR)

Prerequisite: FASH 124

Upon successful completion of this course, the student should be able to apply advanced construction principles, techniques and skills in the production of tailored garments. This course is a continuation of FASH 124, Apparel Construction II. The class will use lecture, demonstration and hands-on experience as the student completes a trial muslin for a jacket or coat plus a finished three-piece ensemble of advanced complexity during this class. 2 hrs. lecture, 4 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100 to $300.

FASH 150
Textiles (3 CR)

Upon successful completion of this course, the student should be able to differentiate fibers and fabrics according to their specific characteristics and to select fibers and fabrics for specific applications. In addition, the student should be able to identify properties and characteristics of natural and man-made fibers, the properties and characteristics of yarns, fabric construction methods including weaving and knitting and various finishing processes including printing and dyeing. 3 hrs./wk.

FASH 220
CAD Apparel Design (3 CR)

Upon successful completion of this course, the student should be able to apply

the elements and principles of design in evaluating and designing women's, men's and children's apparel. A project of designing a line will apply the student's aesthetic knowledge, the relationship of apparel design to the current socioeconomic conditions and apparel production knowledge. Projects use computer-aided design software. 3 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $25 to $30.

FASH 224
History of Costume (3 CR)

Upon successful completion of this course, the student should be able to identify the political, economic, technological and sociological factors that have influenced Western costume worn by women, men and children from ancient Egyptian times to the present. 3 hrs./wk.

FASH 225
Store Planning (3 CR)

Prerequisite: FASH 125

Upon successful completion of this course, the student should be able to demonstrate the skills needed to plan and execute the display methods and store planning concepts for promoting merchandise within a large or small store interior. These plans will use the student's understanding of design, fixtures, traffic patterns, floor sets, graphics/signage and materials. This course is a requirement for the visual merchandising certificate. 3 hrs. lecture/wk. This course is typically taught in the spring semester.

FASH 230
Fashion Illustration II (3 CR)

Prerequisite: FASH 130

Upon successful completion of this course, the student should be able to produce refined fashion illustrations to enhance the portfolio. Fashion Illustration II is a continuation of Fashion Illustration I. Greater emphasis is placed on development of a personal illustration style and presentation of a professionally executed portfolio. 3 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $50.

FASH 231
Merchandising Planning and Control (3 CR)

Prerequisite: MATH 120

Upon successful completion of this course, the student should be able to describe the management structure of retail merchandising operations, contrast merchandising functions among various types of retail operations, explain the buying process, explain the financial operations of retail merchandising and apply these principles in computer-simulated case situations. 3 hrs./wk. This course is typically taught in the spring semester.

FASH 242
Consumer Product Evaluation (3 CR)

Upon successful completion of this course, the student should be able to evaluate a wide range of textile and nontextile products, from lingerie to china, on the basis of specialized product knowledge. In addition, the student should be able to prepare research projects on selected products. 3 hrs./wk. This course is typically taught in the spring semester.

FASH 268
Field Study: The Market Center (3 CR)

Prerequisite: FASH 121

Upon successful completion of this course, the student should be able to identify and distinguish between national, regional and local retail market centers. In addition, the student should be able to explain the importance of market centers, analyze the marketing mix of selected retailers and describe uses of fashion auxiliary services. This is a suggested course for the Fashion Merchandising program. 3 hrs./wk. This course is typically taught in the spring semester. Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $900.

FASH 277
Fashion Seminar: Career Options (2 CR)

Upon successful completion of this course, the student should be able to define individual career goals after a thorough examination of five career areas within the fashion industry. In addition, the student should be able to explain strategies for success in the workplace. 2 hrs./wk.

FASH 279
Fashion Portfolio Development (2 CR)

Prerequisites: FASH 121 and FASH 124 and FASH 127 and FASH 130 and FASH 150 and FASH 220 Prerequisites or corequisites: FASH 280 and FASH 140

Students will compile, select and create new material for their portfolio as well as evaluate their own competencies and strengths. In addition, students will create a resume and perform a mock interview to be reviewed by faculty and peers. 2 hrs. lecture/wk. This course is typically taught in the spring semester. Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $25 to $80.

FASH 280
Capstone: Industry Topics (3 CR)

Prerequisites: FASH 283 and FASH 284 Corequisite: FASH 231

Upon successful completion of this course, the student should be able to exhibit knowledge and work-based skill inherent to fashion retailing, wholesaling and manufacturing. The student will have opportunities to apply knowledge gained in prior courses analyzing industry topics. This capstone course will review and evaluate competencies that are essential for employment in the fashion industry. This course is required for the Fashion Merchandising program. 3 hrs. lecture/wk. This course is typically taught in the spring semester.

FASH 283
Fashion Internship I (1 CR)

Upon successful completion of this course, the student should be able to apply classroom knowledge to an actual work situation. This course offers work experience under instructional supervision in an approved training situation designed to provide practical experience in the fashion industry. A minimum of 15 hours on-the-job training/wk.

FASH 284
Fashion Internship II (1 CR)

Upon successful completion of this course, the student should be able to apply classroom knowledge to an actual work situation. The student will receive 225 hours of work experience in an approved training situation designed to provide

practical experience in the fashion industry. An average of 15 hours on-the-job training/wk.

FASH 285
Fashion Internship III (1 CR)
Upon successful completion of this course, the student should be able to demonstrate the skills required to advance to an entry-level management position. The student will receive 225 hours of work experience in an approved training situation designed to provide practical experience in the fashion industry. An average of 15 hours on-the-job training is required/wk.

FASH 286
Fashion Internship IV (1 CR)
Prerequisites: FASH 283 and FASH 284 and FASH 285 and 45 hours toward degree in Fashion Merchandising

Upon successful completion of this course, the student will have received 225 hours of work experience in an approved training environment. The student should be able to demonstrate the skills required in an entry level management position. An average of 15 hours on the job training/wk. is required.

FASH 298
European Fashion Emphasis (3 CR)
Upon successful completion of this course, the student will be able to compare American and European retail merchandising, advertising and visual presentation. This travel-for-credit course includes visits to selected European cities.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $3000.

Fire Services Administration (FIRE)

FIRE 110
Essentials of Fire Fighting (9 CR)
Prerequisite or corequisite: HPER 240

This course provides cognitive, psychomotor and affective instruction for those students seeking certification as a fire fighter in the state of Kansas. The class covers hazardous materials (first responder; operations level), fire department communications, fire ground operations, rescue operations and prevention, preparedness and maintenance. Upon successful completion of the cognitive examinations and all psychomotor skills evaluations, students will be allowed to sit for the Kansas Fire Fighter II state certification examination, which is administrated by the University of Kansas, Fire and Rescue Training Institute. 5 hrs. lecture 7 hrs. lab/wk. This course is typically taught in the fall and spring semesters only.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $200.

FIRE 130
Fire Investigation (1 CR)
Prerequisite: FIRE 110

This course provides instruction in basic fire investigation. Students will learn basic cause and origin determination, scene and evidence security techniques, and report-writing skills. This course meets the job performance requirements pertaining to fire investigation identified in NFPA 1021, Fire Office Professional Qualifications. 1 hr./wk. This course is typically taught in the spring semester

only.

FIRE 135
Building and Fire Codes (3 CR)

Prerequisite: FIRE 110

This course entails application and interpretation of codes and ordinances, especially the Life Safety Codes used extensively in fire prevention. 3 hrs./wk. This course is typically taught in the spring semester only.

FIRE 162
Fire Tactics and Strategy (3 CR)

Prerequisite: FIRE 110

Fire control through manpower, equipment and extinguishing agents will be explored, including theoretical models and practical applications. 3 hrs./wk. This course is typically taught in the fall semester only.

FIRE 220
Fire Administration (3 CR)

Prerequisite: FIRE 110

Techniques and methods used in managing fire departments are explored, including budgeting processes, administrative functions and types of political systems that affect a fire department. 3 hrs./wk. This course is typically taught in the fall semester only

FIRE 222
Fire Science Law (3 CR)

Prerequisite: FIRE 110

The law as it pertains to the fire service will be explained, along with tort law and business law. 3 hrs. /wk. This course is typically taught in the fall semester only.

FIRE 224
Incident Command Systems (3 CR)

Prerequisite: FIRE 110

This is a course in basic incident command. Disaster control, disaster management, communications for disaster management and types of disasters are presented. 3 hrs. /wk. This course is typically taught in the spring semester only.

FIRE 250
Fire Service Science Instructional Methodology (3 CR)

Prerequisite: FIRE 110

This course is designed to provide the instructional skills and knowledge necessary to develop, conduct and evaluate formal training programs in in-service and classroom formats. This course meets NFPA 1041 standards for fire service instruction. This course is typically taught in the spring semester only.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100.

Floriculture (FLR)

FLR 130
Principles of Traditional Design (3 CR)
This course teaches the guidelines and basics of floral design. These principles are known as balance, composition, harmony, focal point, proportion, line, rhythm, texture, form, space, and color. The course will help the students develop an eye for color combinations, flow of lines, perspectives and the post-harvest care of floral materials. Recommendations are made that pertain to receiving, unpacking and processing the flowers. Methods of conditioning, hardening, and forcing flowers and use of preservatives are illustrated. 2 hrs. lecture 3 hrs. instructional lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100.

FLR 150
Contemporary Design Styles (3 CR)
This course will focus on contemporary, Asian, and current trends in floral design. The course will help students develop their skills in asymmetrical balance, negative space, focal point, dramatic lines. Also included is the history of oriental design, cutting edge design, twigs, branches, pods to be used for textures, bold color schemes, and further discussion of the "less is more" concept. 2 hrs lecture, 3 instructional lab hrs/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100.

FLR 200
Plants for Interior Design (3 CR)
This course discusses the basic aspects of healthy plant growth, including the functions of the root system and the leaf. Photosynthesis, respiration, and transpiration are explained, and the factors that affect these processes are discussed. Students will also learn Plant Nomenclature (common names and scientific names) for many plants. Students will be able to diagnose an unhealthy plant and determine the necessary steps needed to take to bring it back to health. The course will help students obtain a greater appreciation of foliage and blooming plants and understand their role in improving the interior environment. 2 hrs.lecture and 3 hrs instructional lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100.

FLR 220
Wedding Design (3 CR)
Prerequisities: FLR 130 and FLR 150
This course will focus on traditional and contemporary wedding designs. Because weddings often constitute a large portion of a florist?s business, it is imperative that students become proficient in various wedding designs, and be trained in many specialized arranging techniques. The course covers steps in creating the bridal bouquet, including round, crescent, cascade, triangle, and hand tied. Corsage construction, hair pieces, and other accessories will be discussed. Marketing and promotional efforts to build the wedding business will also be discussed. 2 hrs. lecture 3 hrs instructional lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100.

FLR 250
Sympathy Flowers (3 CR)
Prerequisites: FLR 130 and FLR 150
This course will focus on the basic concepts of design for funeral bouquets, wreaths, and casket sprays. The student will learn how to combine flowers using texture, shape and color for different effects. Interesting ways to use foliage,

twigs, mosses and other accessory materials will be presented along with different uses of ribbon. Topics of discussion will also include the best use of sympathy cards and how to develop a good working relationship with your funeral directors. 2 hrs. lecture and instructional 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100.

FLR 270
Retail Flower Shop Operations (3 CR)
Prerequisites: FLR 200 and FLR 220 and FLR 250

This course will focuses on the actual retail operation of a flower shop. Students will explore the various types of flower shops. Topics will include marketing strategies, advertising and promotion, develop selling skills, and merchandising. In addition, students will learn about employee relations, delivery services, public relations, management, florist computer software, buying and pricing. 2 hrs. lecture, 3 hrs. integrated lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100.

Foreign Language (FL)

FL 116
Elementary Latin I (3 CR)
Students will have the opportunity to learn the basic vocabulary and structural patterns, or grammar, of Latin. Emphasis will be on fundamental grammar concepts, extensive word study for English vocabulary growth and the lasting contributions Roman society made to Western civilization. 3 hrs./wk. This course is not offered in the spring semester.

FL 117
Elementary Latin II (3 CR)
Prerequisite: FL 116 or one year of high school Latin

This course will complete the presentation of basic Latin vocabulary and grammar. Fundamental grammar concepts, extensive word study for English vocabulary growth and the lasting contributions of Roman society to Western civilization will be emphasized. 3 hrs./wk. This course is taught in the spring semester.

FL 120
Elementary German I (5 CR)
This course presents the sounds, vocabulary and basic structural patterns of German, focusing on the development of listening comprehension, speaking, reading and writing skills. Cultural material will be integrated into the course. 5 hrs./wk.

FL 121
Elementary German II (5 CR)
Prerequisite: FL 120 or one year of high school German

This course will continue the presentation of the vocabulary and basic structural patterns begun in Elementary German I with continued emphasis on the development of listening comprehension, speaking, reading and writing skills. 5 hrs./wk.

FL 130
Elementary Spanish I (5 CR)

In this basic course, students will study Spanish grammar conversation, composition and the culture of Spanish- speaking countries. 5 hrs./wk.

FL 131
Elementary Spanish II (5 CR)

Prerequisite: FL 130 with a grade of C or higher or two years of high school Spanish; or the appropriate score on the placement test

This course will continue the presentation of the material introduced in Elementary Spanish I. Graded reading selections will be added as a basis for conversation and composition in discussion periods. Placement test recommended. Go to the Testing Center or to the Language Resource Center. 5 hrs./wk.

FL 133
Basic Spanish for Hospitality Management (2 CR)

In this basic course, students will be introduced to terminology related to the hospitality industry, basic Spanish grammar and phrases related to work. 2 hrs./wk.

FL 140
Elementary French I (5 CR)

Areas covered in this basic course include vocabulary building, grammar study, conversation and an introduction to French culture and civilization. The emphasis is on conversation. 5 hrs./wk.

FL 141
Elementary French II (5 CR)

Prerequisite: FL 140 or one year of high school French

This course continues the presentation of the material introduced in Elementary French I. Graded reading selections will be used as the basis for conversation. Placement test recommended. Go to the Testing Center or the Language Resource Center. 5 hrs./wk.

FL 145
Field Study in Russian Language & Culture (2 CR)

This field study course is open to students with any level of Russian language proficiency - from beginning to advanced. The course combines orientation sessions in Russian language and culture at JCCC with two weeks of study in Russia. During their stay in Russia, students will attend a Russian university, take classes in Russian language and culture and participate in excursions to sites of historical and cultural significance. Students will be placed in Russian language classes that are commensurate with their proficiency level in the Russian language. 10 hrs. lecture & 80 hrs. field study in Russia. FEES: Students are responsible for all expenses incurred during this field study, including costs for travel documents, insurance and all travel expenses. Students should contact instructor for cost estimate.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $2300 to $2500.

FL 150
Elementary Russian I (5 CR)

In this course, students will learn the basic sounds, vocabulary and structural patterns of Russian. Emphasis will be on listening comprehension, speaking, reading and writing skills. Cultural material will be included. 5 hrs./wk.

FL 151
Elementary Russian II (5 CR)

Prerequisite: FL 150 or one year of high school Russian

This course completes the presentation begun in Elementary Russian I. Students will gain listening comprehension, speaking, reading and writing skills appropriate to a second-level course. This course is taught in the spring semester. 5 hrs./wk.

FL 155
Elementary Arabic I (5 CR)

In this basic course, teacher and student activities are geared toward developing functional abilities to use Arabic accurately and fluently in listening, speaking, reading, and writing. This course requires intensive classroom interaction and out-of-class assignments. 5 hrs. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10.

FL 156
Elementary Arabic II (5 CR)

Prerequisite: FL 155

This course will continue the presentation of vocabulary and basic structural patterns begun in Elementary Arabic I. There will be a continuation of comprehension, listening, reading, writing from an everyday use emphasis. This course is taught in the spring semester. 5 hrs. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10.

FL 160
Elementary Italian I (5 CR)

Students will be introduced to the sounds, vocabulary and basic structural patterns of Italian, with primary focus on the development of listening comprehension, speaking, reading and writing skills. Integrated throughout the course will be an introduction to the culture of Italy. 5 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $8 to $20.

FL 161
Elementary Italian II (5 CR)

Prerequisite: FL 160 or one year of high school Italian

A continuation of the presentation of the vocabulary and basic structural patterns of Italian, this course will emphasize the development of listening comprehension, speaking, reading and writing skills. Cultural material also will be integrated into the course. This course is taught in the spring semester. 5hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $8 to $20.

FL 165
Elementary Chinese I (5 CR)

This course will introduce students to the basic sounds, vocabulary, grammar and

usage, characters and reading of the Chinese language. The emphasis will be on developing basic conversational skills. Students will develop an understanding and appreciation of Chinese culture. 5 hrs./wk.

FL 166
Elementary Chinese II (5 CR)

Prerequisite: FL 165 or equivalent college-level course with a grade of "D" or higher or one year of high school Chinese with a grade of "D" or higher

This course offers a continuation of Elementary Chinese I, emphasizing the sounds, vocabulary, grammar, usage, characters and reading of the Chinese language. Students will develop more advanced conversational skills and cultural understanding. 5 hrs./wk.

FL 170
Elementary Japanese I (5 CR)

This course is an introduction to the sounds, vocabulary, grammar, usage and readings of the Japanese language. The emphasis will be on developing basic conversational skills. Cultural materials will be included. This course is typically taught in the fall semester. 5 hrs./wk.

FL 171
Elementary Japanese II (5 CR)

Prerequisite: FL 170 or one year of high school Japanese

A continuation of Elementary Japanese I, this course will emphasize the sounds, vocabulary, grammar, usage and reading of the Japanese language. Focus is on developing more advanced conversational skills and cultural understanding. This course is typically taught in the spring semester. 5 hrs./wk.

FL 175
Elementary Brazilian Portuguese I (5 CR)

In this basic course, students will study Portuguese grammar, conversation, composition and the culture of Brazil. 5 hrs./wk.

FL 176
Elementary Brazilian Portuguese II (5 CR)

Prerequisite: FL 175

This course will continue the presentation of the material introduced in Elementary Brazilian Portuguese I. Graded reading selections are added as a basis for conversation and composition in discussion periods. This course is taught in the spring semester. 5 hrs. lecture/wk.

FL 178
Intermediate Russian I (3 CR)

Prerequisite: FL 151 or two years of high school Russian

This course will emphasize vocabulary development and more advanced study of Russian grammar. Students will practice reading, listening comprehension, speaking and writing at the intermediate level. 3 hrs./wk.

FL 179

Intermediate Russian II (3 CR)

Prerequisite: FL 178 or three years of high school Russian

Students will study Russian language and culture that would prepare them to travel in a Russian-speaking country and engage in simple conversation with the citizens. 3 hrs./wk.

FL 180
Elementary American Sign Language I (3 CR)

This class will focus on the development of beginning American Sign Language communication skills. Comprehension skills and linguistic features of the language taught in context will be emphasized. 6 hrs. integrated lecture-lab/wk. FL 180 and INTR 120 are the same course. Do not enroll in both.

FL 181
Elementary American Sign Language II (3 CR)

Prerequisite: FL 180 or INTR 120 with a grade of "C" or higher

This course will focus on continued development of elementary American Sign Language skills beyond those taught in Elementary ASL I. Students will work on developing communication competencies, concentrating on comprehension and production skills. Information about the linguistic and cultural features will be included in the context of language learning experiences. 6 hrs. integrated lecture-lab/wk. FL 181 and INTR 121 are the same course. Do not enroll in both.

FL 182
Intermediate Japanese I (5 CR)

Prerequisite: FL 171 or two years of high school Japanese and approval of the instructor

This course continues the study of Japanese language and culture, emphasizing the sounds, vocabulary, grammar, usage and readings of the Japanese language. The course concentrates on developing further advanced conversational skills by increasing vocabulary and variety of sentence patterns. Cultural understanding will also be stressed. This course is typically taught in the fall semester. 5 hrs. lecture/wk.

FL 183
Intermediate Japanese II (5 CR)

Prerequisite: FL182 or three years of high school Japanese and approval of the instructor

This course is a continuation of FL 182, the study of Japanese language and culture, emphasizing the sounds, vocabulary, grammar, usage and readings of the Japanese language. The course concentrates on developing further advanced conversational skills by increasing vocabulary and variety of sentence patterns. Cultural understanding will be stressed also. This course is typically taught in the spring semester. 5 hrs. lecture/wk.

FL 192
Intermediate Chinese I (3 CR)

Prerequisite: FL 166 or equivalent

This course is a continuation of study of the Chinese language and culture, emphasizing the sounds, vocabulary, grammar, usage and readings of the Chinese language. Focus will be on developing more advanced conversational skills by increasing vocabulary and variety of sentence patterns. Cultural understanding will also be stressed. 3 hrs./wk.

FL 193
Intermediate Chinese II (3 CR)

Prerequisite: FL 192 or equivalent

This course is a continuation of study of the intermediate Chinese language and culture, emphasizing the sounds, vocabulary, grammar, usage and readings of the Chinese language. Focus will be on developing more advanced conversational skills by increasing vocabulary and variety of sentence patterns. Cultural understanding will also be stressed. 3 hrs. lecture/wk.

FL 205
Conversational Japanese (2 CR)

Prerequisite: FL 171 or two years of high school Japanese

This course is designed to enhance the ability of students to express themselves orally in Japanese through vocabulary building and reiteration of essential grammatical structures. The vocabulary will stress everyday situations. 2 hrs. lecture/wk.

FL 220
Intermediate German I (3 CR)

Prerequisite: FL 121 or two years of high school German

This class will emphasize vocabulary building and grammar review primarily through extensive reading of German texts. There will be additional practice in listening comprehension, speaking and writing. Placement test recommended. Go to the Testing Center or to the Language Resource Center. 3 hrs./wk.

FL 221
Intermediate German II (3 CR)

Prerequisite: FL 220 or three years of high school German

This class will further expand the mastery of German vocabulary and structure through extensive reading of more advanced texts with additional practice in listening comprehension, speaking and writing. Placement test recommended. Go to the Testing Center or to the Language Resource Center. 3 hrs./wk.

FL 223
Conversational German (2 CR)

Prerequisite: FL 121 or two years of high school German

By applying vocabulary and structures presented in the text and handouts and by applying knowledge gained in a systematic review of German, the successful student will be able to communicate in German in situations that typically arise while traveling in a German-speaking country. Placement test recommended. Go to the Testing Center or to the Language Resource Center. 2 hrs./wk.

FL 230
Intermediate Spanish I (3 CR)

Prerequisites: FL 131 with a grade of C or higher or three years of high school Spanish or the appropriate score on the placement test

This course refines grammar, builds vocabulary, increases understanding of Hispanic culture, and provides practice designed to improve speaking fluency. It includes composition and conversation. Placement test recommended: can be taken in the Testing Center or the Language Resource Center. 3 hrs./wk.

FL 231
Intermediate Spanish II (3 CR)

Prerequisite: FL 230 with a grade of C or higher or or four years of high school Spanish or the appropriate score on the placement test

This course refines grammar, builds vocabulary, increases understanding of Hispanic culture, and provides practice designed to improve speaking fluency. It includes more advanced readings as a source for composition and conversation. Placement test recommended: can be taken in the Testing Center or the Language Resource Center. 3 hrs./wk.

FL 234
Conversational Spanish (2 CR)

Prerequisite: FL 230 with a grade of B or higher; or FL 231 with a grade of "C" or higher; or four years of high school Spanish; or the score equivalent to FL 231 on the placement test

This course enhances students' ability to express themselves orally in Spanish through vocabulary building and reiteration of essential grammatical structures. The vocabulary emphasizes everyday life situations and current events. Placement test recommended: can be taken in the Testing Center or the Language Resource Center. 2 hrs. lecture/wk.

FL 240
Intermediate French I (3 CR)

Prerequisite: FL 141 or two years of high school French

In this course, students begin a more in-depth study of French grammar and vocabulary as they improve their mastery of the four communicative skills (listening, speaking, reading and writing). Reading assignments (from literary, journalistic and Internet sources) will be more advanced and writing assignments will be more extensive at the Intermediate level. Placement test recommended. Go to the Testing Center or to the Language Resource Center. 3 hrs./wk.

FL 241
Intermediate French II (3 CR)

Prerequisite: FL 240 or three years of high school French

In this class, students continue their in-depth study of French grammar and improvement of vocabulary. All four communication skills (listening, speaking, reading, and writing) continue to be emphasized as reading assignments, compositions, listening comprehension exercises and class discussion become more complex. Placement test recommended. Go to the Testing Center or to the Language Resource Center. 3 hrs./wk.

FL 243
Conversational French (2 CR)

Prerequisite: FL 141 or two years of high school French

This course is designed to build spontaneous speaking ability. Everyday situations and current events will be discussed in class. Placement test recommended. Go to the Testing Center or to the Language Resource Center. 2 hrs./wk. Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $1 to $3.

FL 246
Conversational Russian (2 CR)

Prerequisite: FL 151 or two years of high school Russian

This course is designed to enhance students' ability to express themselves orally in Russian through vocabulary building and reiteration of essential grammatical structures. The vocabulary will stress everyday situations and current events. 2 hrs./wk. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.

FL 250
Conversational French: Cinema (2 CR)

Prerequisite: FL 141 or two years of high school French

This course is designed to build students? speaking and listening comprehension proficiencies in French through the viewing and discussion of French and francophone films. Students will study vocabulary and grammatical structures presented in the course textbook and/or handouts and will view films and discuss them. Most topics of discussion will relate to everyday life and social situations as well as basic personal information. Students will also learn to identify and discuss the main components of a film and key cinematic techniques and concepts. 4 hrs. lecture/wk.

FL 270
Intermediate American Sign Language I (3 CR)

Prerequisite: FL 181 or INTR 121

This course will focus on the development of intermediate American Sign Language communication skills. Emphasis will be on teaching in context comprehension skills and linguistic features of the language. 6 hrs. lecture-lab/wk. INTR 122, FL 270 and ASL 122 are the same courses; only enroll in one.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $40.

FL 271
Intermediate American Sign Language II (3 CR)

Prerequisite: FL 270 or INTR 122

The study of intermediate American Sign Language will continue in this course. It is designed to further intermediate communication skills in American Sign Language. Information about the linguistic and cultural features will be included in the context of language learning experiences. 6 hrs. lecture/wk. INTR 123, FL 271 and ASL 123 are the same courses; only enroll in one.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $40.

FL 298
French Culture and Civilization (3 CR)

In this travel-for-credit course, students will visit selected sites in France, where they will compare the French and U.S. languages, values, culture and institutions. Summer.

Game Development (GAME)

GAME 101
Computer Game Creation (4 CR)

This course is designed to present the skills and to provide the hands-on experience required to create computer games utilizing game development tools that require no programming. Typical game creation topics to be covered include 2D graphics, 3D modeling, music and sound effects. Typical tasks will include setting up a game development studio, manipulating graphic images, obtaining or

creating sounds and music, installing and using various game development tools and working with pictures and animation. 3 hrs. lecture, 1.5 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $20 to $50.

GAME 102
The Business of Games (3 CR)

In this course, students are introduced to the business and process of game development, from the concept document to publishing. Students will learn the stages of game development within the context of the often complex relationship between developer, publisher and retailer. The course uses a participatory format emphasizing analytical thinking and problem solving, both key skills for persons seeking a career in the game development industry. 3 hrs lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $20 to $50.

GAME 110
Flash Gaming (4 CR)

This course is designed to present the skills and to provide the hands-on experience required to create computer games utilizing Flash MX 2004. Typical topics to be covered include 2D coordinate systems, basic game physics, game trigonometry, motion techniques, collision detection, collision reaction, conservation of momentum and energy, and tile based worlds. Typical tasks include creation of angle conversion functions; projection functions; controlling speed, velocity, and acceleration; applying Newton's three laws of motion, affecting gravity and friction; and creation of grid management systems. 3 hrs. lecture and 1.5 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $20 to $50.

GAME 140
Game Programming I - 2D (4 CR)

Prerequisite: CS 200

This course is designed to present skills and provide hands-on experience required to create two-dimensional games utilizing C++. Typical game topics will include programming in a GUI (graphical user interface) environment, game libraries, sound, music and working with graphics. Typical tasks will include setting up the environment, creating several games, using music and sound in a game, and exercises that will highlight important game programming concepts. 3 hrs. lecture, 1.5 hrs. lab/wk.

GAME 180
Artificial Intelligence for Games (3 CR)

Prerequisite: CS 200

Upon successful completion of this course, students should be able to deconstruct simple computer programs illustrating introductory concepts in artificial intelligence as applied to computer games. They will define terms and application areas in the field, and describe game representation and implementation techniques used in artificial intelligence for games. 3 hrs lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $20 to $50.

GAME 200
Game Design (3 CR)

Students will refer to the history of video games to describe the progression of development up to the modern forms of games available today. Students will

critically analyze video games and identify and understand the thematic, visual, systematic, and geographical elements that contribute to making a fun user experience. Abstract systems will be introduced at the beginning of the course, and students will be invited to give their own examples. Models will be shown early as references for students when investigating specific video game structures later in the course. Students will develop a common lattice of "game design patterns" creating a common vocabulary and database. Creative habits and professional attitudes will be discussed. 3 hrs. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $20 to $50.

GAME 230
Game Programming II -3D (4 CR)
Prerequisite: GAME 140

This course will provide an opportunity for students to obtain the knowledge and skills necessary to create 3D multiplayer games. Topics include 3D models of players, vehicles, items, and structures; audio and music; graphical user interfaces and menus; UV wrapped textures and skins; environmental effects; and outdoor terrain. 3 hrs. lecture, 2 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $20 to $50.

GAME 250
Game Programming III-Capstone (4 CR)
Prerequisites: GAME 200 and GAME 230 and CIM 145 and ENGL 150 and Prerequisite or corequisite: GAME 180

This course is designed for students to apply the foundations of game design and game programming to a significant original game. Students should work within a team to analyze a problem, develop and present a proposed game design document, build a demonstrable prototype of the game and develop a significant portion of the finished product. Students should also develop a project schedule and present progress information to the class. Students should also develop job search skills and both written and oral communication skills. 3 hrs. lecture, 2 hrs. lab by arrangement/wk
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $20 to $50.

GAME 255
Mobile Game Programming (4 CR)
Prerequisites: GAME 140 and GAME 200

This course is designed for students who want to learn mobile device game programming. The students will learn the various limitations on mobile devices and the options available for programming them. They will create a 2D game for mobile devices. 3 hrs lecture, 2 hrs lab per week.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $20 to $50.

Geographic Information Systems (KEOG)

KEOG 120

Introduction to Geographic Information Systems (3 CR)
Fundamental concepts of geographic information systems (GIS), elements of GIS, analysis of spatial information, real-world applications, map creation and analysis. Primary objective is to investigate interactive GIS applications rather than develop expert users. Course taught at MCC-Longview Community College, 500 SW Longview Road, Lee's Summit, Missouri 64081, 816-672-2549, and MCC-Maple Woods Community College, 2601 NE Barry Road, Kansas City, Missouri 64156,

816-437-3355.

KEOG 220

Geographic Information Systems Database & Design (3 CR)

Prerequisite: KEOG 120

Concepts of Geo-database design and management in geographic information systems (GIS), SQL statements, geographic data types and functions, data entry, techniques of geographic information structure and indexing, querying techniques, searches, and spatial analysis, creation and use of metadata real-world applications. Course taught at MCC-Longview Community College, 500 SW Longview Road, Lee's Summit, Missouri 64081, 816-672-2549, and MCC-Maple Woods Community College, 2601 NE Barry Road, Kansas City, Missouri 64156, 816-437-3355.

KEOG 224

Applications in Geographic Information Systems (3 CR)

Prerequistes: KEOG 120 and KEOG 220

Applications in Geographic Information Systems. Data collection, incorporation of local and global data, and analysis of spatial information that can be used to investigate major application areas, national GIS policy. This course is taught at MCC-Longview Community College, 500 SW Longview Road, Lee's Summit, Missouri 64081, 816-627-2549, and MCC-Maple Wood Community College, 2601 NE Barry Road, Kansas City, Missouri 64156, 816-437-3355.

KEOG 228

Administrative Issues in Geographic Info Systems (3 CR)

Prerequisite: KEOG 120

Addresses issues unique to GIS operation such as implementation issues, decision making procedures, strategies for success, legal issues, involvement of management, NCGIA Guidelines, marking within an organization, strategic planning and industry outlook. 3 hrs. lecture/wk. 1-3 credit hour course. A three credit hour internship is required for a student with no GIS experience and 1 hour for someone already employed in the GIS field. This course is taught at MCC-Longview Community College, 500 SW Longview Road, Lee's Summit, Missouri 64081, 816-672-2549, and MCC-Maple Woods Community College, 2601 NE Barry Road, Kansas City, Missouri 64156, 816-437-3355.

KEOG 230

Geographic Information Systems Internship (1 CR)

Prerequisites: KEOG 120 and KEOG 220

Internship in a Geographic Information System facility. Experience real-workplace requirements, complete assigned tasks by hosting facility such as GIS data entry, data retrieval, GPS field work, documentation, or general GIS facility duties. Arranged meetings with instructor includes work ethics, expectations, challenges, evaluation. 225-675 hours. This course is taught at MCC-Longview Community College, 500 SW Longview Road, Lee's Summit, Missouri 64018, 816-672-2549, and MCC-Maple Woods Community College, 2601 NE Barry Road, Kansas City, Missouri 64156, 816-437-3355.

Geoscience (GEOS)

GEOS 130
General Geology (5 CR)

In this introductory course the students will survey the geologic processes that form and shape the earth over geologic time using the models of the rock cycle, the hydrologic cycle and the tectonic cycle. In the laboratory they will conduct

hands-on activities designed to enhance and reinforce the geologic concepts they have studied. 4 hrs. lecture, 3 hrs. lab/wk.

GEOS 140
Physical Geography (3 CR)

This course is a survey of the physical and environmental topics of geography, including the methods used to study them. The Earth as a system and the subsystems of the atmosphere, hydrosphere, lithosphere and biosphere constitute the major units of study. Students will acquire basic terminology that they will use to explain the earth, the atmosphere, the landscape, and the processes that occur on earth to change the landscape. Topics may include mapping with topographic maps and remote sensing; development and structure of the atmosphere; weather; water resources; climate; rock formation; mountain building; chemical and physical weathering; mass movement; soil formation; erosion, transportation and deposition by running water, wind, ice, currents, waves and tides; and the foundation that these processes build for the biosphere on earth. 3 hrs./wk.

GEOS 141
Physical Geography Lab (2 CR)

Prerequisite or Corequisite: GEOS 140 or the equivalent

Students in this course will practice their knowledge of physical geography through the collection and analysis of atmospheric data and the identification and interpretation of landforms and biological patterns as depicted on topographic maps and remotely sensed imagery. 4 hrs. lab/wk.

GEOS 145
World Regional Geography (3 CR)

In this introductory course, the student will first review the basic theories of the discipline of geography, the relationship of world population and resources and the factors affecting development. Next, the student will survey the major regions of the world to identify each region's distinguishing geographic characteristics, summarize its past development and explain the key issues affecting the region's future development. 3 hrs. lecture/wk.

Graphic Design (GDES)

GDES 120
Introduction to Graphic Design (3 CR)

This course is designed to acquaint the student with the various aspects of the graphic design field. Topics include the ways in which visual messages are used in society, the skills needed by a graphic designer and the potential areas of specialization and employment. This class will have guest speakers from the field of graphic design. Emphasis will be on assisting the student to make an informed decision about graphic design as a career. 3 hrs. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $40 to $50.

GDES 130
Drawing and Media Methods 1 (3 CR)

Prerequisites: ART 124 and GDES 120

This course will provide instruction in perceptual techniques, perspective theory and drawing process methods that relate to the visual analysis of the three-dimensional forms drawn from life. Focus will be on the application of theory, processes and techniques to attain structural accuracy and the illusion of

three-dimensional form on a two-dimensional surface. 6 hrs. lecture and studio/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $200 to $400.

GDES 131
Drawing and Media Methods 2 (3 CR)

Prerequisite: GDES 130

This course is a continuation of Drawing and Media Methods I, with emphasis on the creative application of perspective theory, perceptual skill and drawing methods. Drawing methods and rendering techniques will be applied to visual problem-solving processes and the communication of design concepts. 6 hrs. lecture studio/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $200 to $400.

GDES 132
Typography (3 CR)

Prerequisites: ART 124 and GDES 120

This course will provide instruction in the basic principles of contemporary typographic design. Information concerning typography, from traditional letterpress through digital type design and typesetting, will be included. The course content will emphasize effective methods of communicating to a mass audience through the printed letter, word, line and page. Working knowledge of QuarkXpress and Adobe InDesign required. 6 hrs. lecture and studio/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $200 to $400.

GDES 134
Layout Design (3 CR)

Prerequisite: GDES 132

This course will provide a basic study of layout elements. Students will acquire the skills necessary to produce layouts. These skills include photographic indication techniques, comp lettering, advertising and editorial grid systems and electronic page design. This course is typically offered in the spring semester only. 6 hrs. lecture and studio/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $200 to $400.

GDES 140
Technical Processes (3 CR)

Prerequisite: PHOT 121

This course covers digital prepress applications, scanning, image manipulation and color output devices. The transition from conventional to digital production will be covered. Analysis of output and file management and the understanding of proofing systems will be covered. Proper usage of peripheral equipment will be emphasized. 6 hrs. lecture and studio/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $200 to $400.

GDES 230
Drawing and Media Methods 3 (3 CR)

Prerequisites: GDES 131 and GDES 132 and GDES 134

This course will provide an understanding of the application of illustration to

graphic design. Visual problem-solving processes acquired in Drawing and Media Methods 2 will be further developed through problems in image composition emphasizing expressive communication. Techniques in traditional and digital media are explored. This course is typically taught in the fall semester only. 6 hrs. lecture and studio/wk.

Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $200 to $400.

GDES 231
Advanced Typography (3 CR)

Prerequisite: GDES 134

This course is a continuation of Layout Design. Emphasis will be on typographic solutions that explore verbal/visual messages. Projects include designs for publication, such as posters, brochures, packaging and graphic campaigns. Typography as a functional and experimental medium will be stressed. Design problem-solving for a diverse range of specifications, including audience, client needs and budget constraints, are included. Traditional and digital tools will be incorporated to produce comprehensives. This course is typically offered in the fall semester only. Working knowledge of Macromedia Dreamweaver is required. 6 hrs. lecture and studio/wk.

Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $200 to $400.

GDES 235
Production Methods (3 CR)

Prerequisites: GDES 134 and GDES 140

This course will provide the fundamentals of preparing art for reproduction. Traditional camera-ready art techniques and digital prepress production methods will be emphasized. This course is typically offered in the fall semester only. 6 hrs. lecture and studio/wk.

Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $200 to $400.

GDES 236
Electronic Production (3 CR)

Prerequisites: GDES 230 and GDES 231 and GDES 235

This course is a continuation of the Production Methods course, providing experience in digital prepress and electronic production techniques. The student will apply production skills to problems of professional scope and complexity, including specialty processes, trapping and color separation. Preparation of graphic files for screen presentation and for the Web will be explored. This course is typically offered in the spring semester only. 6 hrs. lecture and studio/wk.

Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $200 to $400.

GDES 244
Communication Systems (3 CR)

Prerequisites: GDES 230 GDES 231 and GDES 235

This course will explore the scope and potential of graphic design as a vehicle for visual communication in contemporary society. Signs and symbols, as well as communicative power of typographic, hand graphic and photographic modes, will be studied. Traditional and electronic methods will be used to develop projects. This course is typically offered in the spring semester only. 6 hrs. lecture and studio/wk.

Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $200 to $400.

GDES 245
Advanced Design Practice (3 CR)

Prerequisites: GDES 230 and GDES 231 and GDES 235

This course will focus on the use of the student's total design capability and technical knowledge in solving graphic design problems of professional scope and complexity. Students will have the opportunity to work with three art directors and produce three professional projects for potential inclusion in their portfolios. This course is typically offered in the spring semester only. 6 hrs. lecture and studio/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $200 to $400.

GDES 272
Professional Preparation (3 CR)

Prerequisites: GDES 230 and GDES 231 and GDES 235 Prerequisite: The student must have completed all required studio courses in the graphic design program prior to the semester for which he or she is enrolling in this course or be co-enrolled in all fourth-semester studio courses.

This course will provide graphic design majors instruction in the organization and presentation of his or her work in a portfolio format of professional quality. A portfolio, digital portfolio archive, self promo, resume and business ensemble will be produced. Instruction in interviewing techniques and employment searches will also be provided. 6 hrs. lecture and studio/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $200 to $400.

GDES 275
Graphic Design Internship (1 CR)

Prerequisite: Graphic design faculty review committee approval

Students will work in an approved training situation under instructional supervision. The internship is designed to give the student the opportunity to use the skills learned in the graphic design program. Student interns will complete a minimum of 180 hours on the job and will be compensated with at least the minimum hourly wage.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $50 to $100.

Health Care (HC)

HC 101
Introduction to Health Care Delivery (3 CR)

This course is an introduction to the health care delivery system with an overview of health careers and the roles and responsibilities of members of the health care team. Emphasis will be on how to work within a health care team, effective communication skills, professional safety and workplace skills, and legal and ethical rights and responsibilities of patients and health care workers. 3 hrs. lecture/wk.

HC 125
International Awareness Field Study (2 CR)

This is a service-learning course. While partnering with a not-for-profit agency, teams of students will deliver service to a community in a developing country that suffers from extreme poverty. The service provided will vary depending on the identified needs of the community. While serving in the developing country, students will gain an understanding of the culture, language and health status of the people. Students will be exposed to the social, political and economic aspects

of life that shape the community. Prior to travel, students are required to attend preparation meetings, fund raise and participate in a local service project. 16 hrs. lecture, 40 hrs. field study
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $450.

Health Care Interpreting (HCI)

HCI 110
Introduction to Interpreting (3 CR)

Prerequisites: Interview and permission of the facilitator. Potential indicators of proficiency may be required.

This course provides a practical and theoretical introduction to the field of bilingual interpreting. Students will study interpreter roles and skills, modes of interpreting and translating, ethical issues, professional standards of practices, cultural competence and applied linguistics. Upon completion, students should have a strong foundation of knowledge regarding the profession of interpreting and should be ready for specific skills training. This course is taught in English. 3 hrs. lecture/wk. This course is taught in the fall semester
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $20.

HCI 120
Interpreting Skills I (3 CR)

Prerequisite or corequisite: HCI 110 with a grade of "C" or higher

This course develops students' skills in sight translation and consecutive interpreting. Listening and memory skills, communication strategies and intervention techniques also are emphasized. Upon completion, students should be able to sight translate short written texts and consecutively interpret non-technical, interactive messages between Spanish and English. This course is taught in English with some Spanish terminology and practice. 2 hrs. lecture and 2.5 hrs lab/wk. This course is taught in the fall semester.

HCI 130
Interpreting Skills II (3 CR)

Prerequisites: HCI 110 with a grade of "C" or higher and HCI 120 with a grade of "C" or higher

This course develops students' skills in simultaneous interpreting and written translation. In addition, through classroom, lab and field experiences, students practice the three interpretation modes they have learned in the program and improve all aspects of their interpreting while forming good professional habits. Self-assessment, professional growth and development of a personal philosophy of interpreting are stressed. This course is taught in English with some Spanish terminology and practice. 2 hrs lecture and 2.5 hrs lab/wk. This course is taught in the spring semester.

HCI 140
Spanish Medical Interpreting (3 CR)

Prerequisite: HCI 120 with a grade of "C" or higher and Prerequisites or corequisites: HCI 130 with a grade of "C" or higher and AAC 130 with a grade of "C" or higher

This course develops the knowledge, techniques, and practices needed to function as a bilingual interpreter in a medical environment. Students will be introduced to basic medical conditions, procedures, courses of treatment and equipment, with vocabulary and terminology in both English and Spanish. Upon completion, students should be able to apply medical interpreting and translating

techniques in a variety of health care settings. This course is taught in English with some Spanish terminology. 3 hrs. lecture/wk. This course is taught in the spring semester.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $20.

HCI 180
Medical Interpreting Practicum (2 CR)

Prerequisites: HCI 130 with a grade of "C" or higher and HCI 140 with a grade of "C" or higher and Prerequisite or corequisite: HC 101 with a grade of "C" or higher

Students will observe and interpret at assigned medical facilities, participate in organized class discussions about their interpreting experiences and develop a personal philosophy of interpreting. Both classroom meetings and fieldwork are required for this class. 1 hr. lecture, 3 hrs. practicum/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $20.

Health Information Technology (KMRT)

KMRT 101

Introduction to the Health Information Technology Profession (2 CR)

Orientation to the health information management profession and the supporting professional organization. History and evolution of health care delivery, facilities, and practitioners. Supervisory functions of the health information management department. 2 hrs. lecture/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of health information technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KMRT 102

Health Records Systems, Analysis and Control (3.5 CR)

Content, storage, retrieval, control, and retention of medical records, especially hospital records. Forms design and control, microfilming, and computer applications for health record departments. 2.5 hrs. lecture, 2 hrs. lab/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of health information technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KMRT 103

Medical Terminology for Health Records (3 CR)

Professional language of medicine. Analysis of medical terms by roots and combining forms. Disease processes, diagnostic and operative procedures for each system of the body. Selected medical specialties. 3 hrs. lecture/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of health information technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KMRT 106

Health Care Statistics (3 CR)
Prerequisite: KMRT 102

Vital health statistics, their uses and values. Abstracting and analysis of data from medical records, collection of data from other sources, and methods of presenting the information. 2.5 hrs. lecture, 1 hr. lab/ wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of health information technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KMRT 108

Legal Aspects of the Health Information Technology Profession (2 CR)

Prerequisite: KMRT 102

Legal principles applied to the health care professions. Confidentiality of the medical record, informed consent, the medical record as a legal document, release of clinical information, response to subpoena, and testimony. 2 hrs. lecture/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KMRT 109

Directed Practice I (2.5 CR)

Prerequisites: BIOL 144 and KMRT 102

Supervised on-the-job training in a medical records department. Supervised discussion of clinical experiences. 2 hrs. lab, 3 hrs. field studies/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of health information technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KMRT 110

Pharmacology (1.5 CR)

Prerequisites: BIOL 144 and KMRT 103

Introduction to basic pharmacology with a body systems approach to disease. 1 hr. lecture, 1 hr. lab/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of health information technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KMRT 200

Introduction to Classification Systems (1 CR)

Classification systems used to organize clinical data in health care. The ICD-9-CM classification system will be introduced. 1 hr. lecture/wk. Course taught at Penn Valley Community College. Students should contact the MCC-Penn Valley coordinator of health information technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KMRT 201

Quality Management (3 CR)

Prerequisite: KMRT 108

Methods of assessing and improving quality in a health care setting. Concept of continuous quality improvement. Compliance with guidelines of regulatory and accrediting agencies. 2.5 hrs. lecture, 1 hr. lab/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of health information technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KMRT 202

Class. Systms/Nomenclatures/Indexes & Registers I (4 CR)

Prerequisite: KMRT 200

Nomenclatures and classification systems for coding and indexing diagnoses and procedures with special emphasis on ICD-9-CM. 2.5 hrs. lecture, 3 hrs. lab/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of health information technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KMRT 203

Directed Practice II (2 CR)

Prerequisites: BIOL 144 and KMRT 202 and KMRT 210 or BIOL 144 and concurrent enrollment in KMRT 202 and KMRT 210

Supervised learning experience in a medical records department under the direction of a credentialed professional involving a variety of procedures including coding and abstracting health information, medical transcription, and release of information. Supervised discussion of clinical experiences. 1 hr. lab, 3 hrs. field studies/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of health information technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KMRT 206

Specialized Health Records Systems (2 CR)

Overview of specialized health care systems with an emphasis on record maintenance, requirements of accrediting and regulating agencies and specialized health information registers. 2 hrs. lecture /wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of health information technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KMRT 207

Class. System/Nomenclature/Index & Register II (3 CR)

Prerequisites: BIOL 144 and KMRT 202

Nomenclatures and classification system for coding and indexing diagnoses and procedures with emphasis on healthcare facilities. Impact of DRGs on the coding function. 2 hrs. lecture, 2 hrs. lab/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of health information technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KMRT 208

Directed Practice III (2 CR)

Prerequisite: KMRT 203

Supervised on-the-job instruction about health record systems in specialized health care facilities. Supervised discussion of directed practice experiences. 2 hrs. lab, 2 hrs. field studies. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of health information technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KMRT 210

Classif Systems & Nomenclatures/Ambulatory Care (3 CR)

Prerequisites: KMRT 200 and BIOL 108/PVCC or concurrent enrollment in BIOL 108/PVCC

Outpatient coding, classification, and payment systems. Assignment of CPT-4 codes to procedures and services. Common outpatient procedures. Role of the health information technologist in ambulatory coding & billing. 2 hrs. lecture, 2 hrs. lab/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of health information technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KMRT 211

Organization & Administration Health Information (3 CR)

Prerequisites: KMRT 201, KMRT 202, and KMRT 203

General principles of management and organization as applied to health information settings. Budget development and control, personnel recruitment and retention, performance appraisal, and progressive discipline. Office design, productivity monitoring, work simplification, job analysis and job descriptions, and quality management. 2.5 hrs. lecture, 1 hr. lab/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of health information technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KMRT 212

Intro to Medical Insurance & Office Procedures (1.5 CR)

Prerequisites: KMRT 103, KMRT 202, KMRT 210 AND BIOL 144

An overview of medical office systems and administrative procedures, with emphasis on insurance billing, compliance with regulatory agencies, and technology tools, including medical transcription. 1 hr. lecture, 1 hr. lab/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of health information technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

Health Occupations (AVHO)

AVHO 102
Certified Nurse Aide (CNA) (5 CR)

Prerequisite: ENGL 121 with a grade of "C" or higher or Appropriate Compass reading test score. Documentation of current TB test and current CPR for Health Care Providers and a Social Security Card.

This course provides classroom and clinical instruction for the primary care of clients in long-term and acute- care facilities. Students learn skills for daily hygiene, bedside care, vital sign measurement, positioning and safe transfer of clients. The class prepares and schedules the student to take the Kansas CNA examination. In-state tuition and fees $229 total. Out-of-state tuition and fees $824 total. 96 contact hrs. For additional information go to the jccc.edu web page: click on classes; click on credit class search; click the semester; course prefix is AVHO Health Occupations. Click on CRN number for information. The credit reflected in this course is for transcript reporting, recording and transfer only. For more information, go to http://www.jccc.net/home/depts/5104/site/newstudent/types/adm_avs/CNA_Information-Requirements
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $20 to $50.

AVHO 103
Certified Nurse Aide Refresher Course (CNA) (1 CR)

Prerequisite: Kansas CNA Certification

This 21-hour CNA refresher course provides classroom and laboratory experience to update the inactive CNA. The student will discuss the nurse aide's responsibility in the current health care system and the importance of resident rights. The student will demonstrate safety measures, infection control procedures, personal care skills, measurement of vital signs and transfers, positioning and turning. 21 contact hours. In-state tuition and fees $48 total. Out-of-state tuition and fees $178 total. For additional information go to the jccc.edu web page: click on classes; click on credit class search; click the semester; course prefix is AVHO Health Occupations. Click on CRN number for information. The credit reflected in this course is for transcript reporting, recording and transfer only. For more information, go to http://www.jccc.net/home/depts/5104/site/newstudent/types/adm_avs/CMA_Update_Info-Requirements

AVHO 104
Certified Medication Aide (CMA) (4 CR)

Prerequisites: Appropriate Compass reading test score, and proof of Kansas CNA certification or having completed the state CNA examination and awaiting results. If CNA examination results are not satisfactory, the student must withdraw from the CMA course. Documentation of current TB skin test - negative results within the last year. Current CPR for Health Care Providers and Social Security card.

This course includes the development of knowledge related to many commonly prescribed medications. Students will learn the classification, side effects and techniques of administration, including preparation and accurate distribution of medications. Safe administration of oral medications is discussed and demonstrated. Students will be scheduled to take the Kansas CMA examination. In-state tuition and fees $200 total. Out-of-state tuition and fees $696 total. 80 contact hrs. For additional information go to the jccc.edu web page: click on classes; click on credit class search; click the semester; course prefix is AVHO Health Occupations. Click on CRN number for information. The credit reflected in this course is for transcript reporting, recording and transfer only. For more information, go to http://www.jccc.net/home/depts/5104/site/newstudent/types/adm_avs/CMA_Information-Requirements

Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $20 to $50.

AVHO 106
Home Health Aide (1 CR)

Prerequisites: Proof of Kansas CNA certification and appropriate Compass reading test score Requirements - copy of current TB test, current CPR for Health Care Providers card, social security card

This course provides the student with information necessary for nutritional meal planning, task modification, emotional support and personal service to clients and families needing health care assistance at home. Students will be scheduled to take the Kansas HHA certification examination. In-state tuition and fees $94 total. Out-of-state tuition and fees $224 total. 21 contact hrs. For additional information go to the jccc.net web page: click on classes; click on credit class search; click the semester; course prefix is AVHO Health Occupations. Click on CRN number for information. The credit reflected in this course is for transcript reporting, recording and transfer only. For more information, go to http://www.jccc.net/home/depts/5104/site/newstudent/types/adm_avs/HHA_Information-Requirements

AVHO 108
Certified Medication Aide Update (CMA) (1 CR)

Prerequisites: Proof of Kansas CMA certification and Proof of Kansas CNA Certification

This course meets the continuing education requirements for licensed Certified Medication Aides. The course includes review of commonly used drugs and their interactions with foods and other drugs. Also included are discussions of legal implications and regulations related to administration and record keeping, biological effects of medications on the elderly and a review of basic safety principles. 15 contact hours. In-state tuition and fees $48 total. Out-of-state tuition and fees $195 total. For additional information go to the jccc.edu web page: click on classes; click on credit class search; click the semester; course prefix is AVHO Health Occupations. Click on CRN number for information. The credit reflected in this course is for transcript reporting, recording and transfer only. For more information, go to http://www.jccc.net/home/depts/5104/site/newstudent/types/adm_avs/CMA_Update_Info-Requirements

Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $20.

AVHO 112
Rehabilitative Aide (2 CR)

Prerequisite: Proof of current Kansas CNA certification

This course includes both classroom and laboratory instruction for the aging process as well as the role of the rehabilitative aide as a member of the health care team. Students learn the skills required to enhance the mobility of elderly residents in long-term care as well as the skills required to care for residents with special needs. A certificate from the college will be issued. In-state tuition and fees $83 total. Out-of-state tuition and fees $281 total. 32 contact hrs. For additional information go to the jccc.edu web page: click on classes; click on credit class search; click the semester; course prefix is AVHO Health Occupations. Click on CRN number for information. The credit reflected in this course is for transcript reporting, recording and transfer only. For more information, go to http://www.jccc.net/home/depts/5104/site/newstudent/types/adm_avs/RA_Information_-_Requirements

AVHO 115
I V Therapy For LPNs (3 CR)

Prerequisites: Proof of Kansas LPN licensure. Present evidence of personal liability insurance at the time of application for admission to the program and maintain it throughout the clinical practicum. Maintenance of current CPR certification for the duration of the course. Evidence of negative TB test or chest X-ray within the past year.

This course provides review of basic physiology of the circulatory system and instruction in principles of site selection for veins appropriate for I.V. therapy. This course meets the Kansas requirements for LPNs seeking certification in I.V. therapy. In-state tuition and fees $196 total. Out-of-state tuition and fees $494 total. 48 contact hrs. For additional information go to the jccc.edu web page: click on classes; click on credit class search; click the semester; course prefix is AVHO Health Occupations. Click on CRN number for information. The credit reflected in this course is for transcript reporting, recording and transfer only. For more information, go to http://www.jccc.net/home/depts/5104/site/newstudent/types/adm_avs/IV_Therapy_Info-Requirements
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $50 to $100.

Heating,Vent.,Air Conditioning (HVAC)

HVAC 121
Basic Principles of HVAC (4 CR)

Prerequisite or corequisite: HVAC 123

This is a beginning course in heating, ventilation and air conditioning technology that is appropriate for HVAC majors and other interested students. Upon successful completion of this course, the student should be able to identify the function of the basic components of an air-conditioning system. Topics will include heat laws, refrigerants, oils and refrigeration cycles of residential and light commercial systems. In the lab, students will design, assemble and operate a working refrigeration system. Competencies will include brazing, wiring, evacuating and charging a system. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 3 hrs. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $30 to $150.

HVAC 123
Electromechanical Systems (4 CR)

This is a beginning course in electrical theory that is required for HVAC, electrical

and power plant technology, but is appropriate for all interested students. Common components found in the HVAC industry are used to develop these skills. Upon successful completion of this course, the student should be able to identify electrical components and their relationships to the various repair and troubleshooting techniques. The materials in this course will prove useful to service technicians whose background in electricity is limited. The course includes material from basic electrical theory to troubleshooting complex electrical circuits. This course will provide practice in application of electrical theory as well as in the interconnection of components of heating and cooling systems. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 3 hrs. lecture, 3 hrs. lab/wk.

HVAC 124
Equipment Selection and Duct Design (4 CR)
Prerequisites: HVAC 121 and HVAC 123

Upon successful completion of this course, the student should be able to identify techniques and procedures used in the residential construction industry to determine proper sizing of HVAC equipment and ducts to meet the requirements for a high-quality, comfortable climate in terms of heating, cooling, humidifying, dehumidifying, ventilation and air cleaning or filtering. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 3 hrs. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $5 to $10.

HVAC 125
Energy Alternatives (2 CR)

Upon successful completion of this course, the student should be able to identify diverse methods of alternate energy production. Some of the technologies that will be discussed are wind energy, photoelectric energy, nuclear energy, hydroelectric energy, biomass and alternate fuel vehicles. Students will understand the advantages of using various alternate energy technologies, the effects or by-products of each and the problems that might be encountered. Some student research will be included in the context of the course. Emphasis will be on the most promising or effective alternate energy technologies available. 2 hrs. lecture/wk.

HVAC 127
Residential Systems: Heating (4 CR)
Prerequisites: HVAC 121 and HVAC 123

Upon successful completion of this course, the student should be able to identify all the components and accessories and their relation to the functions of residential heating systems. Topics covered will be natural gas, propane, oil, forced air and hydronic-types of equipment. Emphasis will be on the electrical diagrams and mechanical principles of operation of these systems. Practical instruction in service diagnosis procedures and techniques for efficient operation, maintenance, troubleshooting and repair of these systems make up the lab portion of the course. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 3 hrs. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $30 to $150.

HVAC 137
Residential Systems: Air Conditioning (4 CR)
Prerequisites: HVAC 121 and HVAC 123

Upon successful completion of this course, the student should be able to identify all the components and accessories and their relation to the functions of

residential air conditioning systems. Topics covered will include electric and natural gas air conditioner condensing units, metering devices, evaporation coils, and refrigerants. Electrical diagrams, psychrometric charts and techniques for efficient operation, maintenance, troubleshooting and repair of these systems make up the laboratory portion of the course. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 3 hrs. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $30 to $150.

HVAC 143
Reading Blueprints and Ladder Diagrams (2 CR)

Upon successful completion of this course, the student should be able to identify all types of industrial plant blueprints. Included will be a discussion of machine parts and drawings as well as hydraulic, pneumatic, piping and plumbing, electrical, air conditioning and refrigeration drawings. Sketching used in industrial plants will be covered. A portion of the course will cover the types and use of ladder logic and various components such as input, output and diagrams. The structure, symbols and terminology of ladder logic diagrams will be introduced. Logic and decision-making functions are presented, along with practice in creating ladder logic diagrams. 2 hrs. lecture/wk.

HVAC 146
Plumbing Systems Applications (3 CR)

Upon successful completion of this course, the student should be able to demonstrate familiarity with many aspects of fuel gas piping, gas appliance venting, water heater installations, combustion air requirements and proper piping techniques. Classroom lectures center on methods for proper sizing of both fuel gas piping and vent sizing with emphasis on interpretation of both the Uniform Plumbing Code and the National Fuel Gas Code. There will be an emphasis on combustion air requirements. Laboratory competencies will include identification of materials and proper installation methods of fuel gas lines, vent piping systems and copper water line connections. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 2 hrs. lecture, 3 hrs. lab/wk.

HVAC 148
HVAC Installation and Start-up Procedures (3 CR)
Prerequisites: HVAC 121 and HVAC 123

Upon successful completion of this course, the student should be able to identify techniques and procedures to install new systems, retrofit systems and do an initial start-up, check-out furnaces and air conditioners. Topics will include electrical requirements, flue appliance location, permit and inspections, combustion air, sheet metal ducts, and mechanical standards. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 2 hrs. lecture, 3 hrs. lab/wk.

HVAC 150
Refrigerant Management and Certification (1 CR)

Upon successful completion of this course, the student should have knowledge and confidence necessary to pass the EPA Refrigerant Certification exam and properly, efficiently and responsibly handle refrigerants as set forth in the Clean Air Act of 1990. 1 hr. lecture/wk.

HVAC 155
Workplace Skills (1 CR)

Upon successful completion of this course, the student should be able to identify the job skills necessary to have a successful career in the field of their choice. Topics included listening skills, oral communication, human relations, decision making/problem solving, how to work as a team, time and resource management, work ethics, career planning and resume building. 1 hr. lecture/wk.

HVAC 167
Sheet Metal Layout and Fabrication (3 CR)

Upon successful completion of this course, the student should be able to identify the components, equipment and operation for sheet metal layout and fabrication. Practice problems are included at the end of each unit in order to provide the student with an opportunity to apply the methods attained by sheet metal layout. Shop facilities are available. The patterns will be fabricated and joined into a line of fittings. This gives the most complete test of pattern accuracy and also provides the experience needed by a competent layout person. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 2 hrs. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $30 to $150.

HVAC 221
Commercial Systems: Air Conditioning (4 CR)
Prerequisites: HVAC 121 and HVAC 123

Upon successful completion of this course, the student should be able to identify cooling systems used in commercial, institutional and industrial applications. Types of equipment include reciprocating and centrifugal chillers, absorption systems, cooling towers, fans and air handlers. Topics also include psychometrics, pressure-enthalpy diagrams and commercial load calculations, evacuation and charging. 3 hrs. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $30 to $150.

HVAC 223
Commercial Systems: Heating (4 CR)
Prerequisite: HVAC 123

Upon successful completion of this course, the student should be able to identify large heating systems used in commercial, institutional and industrial applications. Types of equipment include hot water, low-pressure and high-pressure steam boilers; auxiliary, safety and flame safeguard controls; steam traps; condensate return; and water treatment systems. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools. 3 hrs. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $30 to $150.

HVAC 229
Advanced Control Systems (4 CR)
Prerequisites: HVAC 123 and HVAC 121

Upon successful completion of this course, the student should be able to identify the components and theory in electronic, pneumatic and direct digital control systems as they apply to HVAC systems. This course will reinforce and build on those competencies learned in HVAC 123 and HVAC 121. Classroom lectures will center on components, wiring diagrams, calibration and sequences of operation, system components, theory of operation, wiring diagrams and installation methods. Laboratory competencies include identification, calibration, maintenance and problem diagnosis of pneumatic, electronic and DDC systems, thermostat controllers and their related sensors/transmitters. Students will program a complete building energy management system. Interactive instructional media

will be used in this course. 3 hrs. lecture, 3 hrs. lab/wk
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $30 to $150.

HVAC 231
HVAC Rooftop Units (3 CR)
Prerequisites: HVAC 121 and HVAC 123

Topics will include electrical controls and economizers of various rooftop units, roof curbs, installation, service, diagnosis, evacuation and charging of typical light commercial rooftop units. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 2 hrs. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $30 to $150.

HVAC 235
Residential Heat Pump Systems (4 CR)
Prerequisites: HVAC 121 and HVAC 123

Upon successful completion of this course, the student should be able to identify the function of all components and accessories of all electric and dual heat pump systems. Topics will include electric heat and heat pump fundamentals, principles and applications; refrigerant flow controls; defrost cycle controls; heat pump thermostats; indoor air distribution; dual fuel controls; and change-over stats. Emphasis will be on the electrical diagrams and mechanical principles of operation. These systems, as well as practical instruction in service and diagram procedures and techniques for the efficient operation, maintenance, troubleshooting and repair of these systems, will make up the lab portion of the course. The student will required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 3 hrs. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $30 to $150.

HVAC 271
HVAC Internship (3 CR)
Prerequisite: Program facilitator approval Required

Upon successful completion of this course, the student should be able to apply classroom knowledge to an actual work situation. The internship will provide advanced students with on-the-job experience under the supervision of professionals in the industry. The work will be developed cooperatively with area employers, college staff and each student to provide a variety of actual job experiences directly related to the student's career goals. 1 hr. lecture, minimum 15 hrs. on-the-job training/wk.

History (HIST)

HIST 120
Local and Kansas History (3 CR)
This course introduces students to the history of Kansas from the beginning of the Late Ceramic Period (1500) to the present. Emphasis will be on the examination of the living patterns of the various peoples who have inhabited the region during this time frame. This course will also analyze the social and economic factors and political objectives that transformed the central plains from the domain of the bison-hunting Plains Indian to a society based in a market-agricultural economy. 3 hrs./wk.

HIST 125
Western Civilization: Readings and Discussion I (3 CR)

The course explores the major developments, ideas and personalities that have shaped Western civilization. Organized around a readings and discussion format, students engage some of the world's most provocative and influential literature. Western Civilization I begins with the ancient cultures of the Middle East, Greece and Rome and follows the development of Western thought from the medieval period to the Renaissance and Reformation. 3 hrs. lecture/wk. It is not necessary to take HIST 125 before HIST 126.

HIST 126
Western Civilization: Readings and Discussion II (3 CR)

The course explores the major developments, ideas and personalities that, for the past 500 years, have shaped Western civilization. Organized around a readings and discussion format, the course allows students to engage some of the world's most provocative and influential literature. Western Civilization II begins with the three revolutions that define modernity - Scientific, French, and Industrial. The course also highlights the new ideologies of the 19th century and more recent themes of modernization and the cultural crisis of the 20th century. 3 hrs. lecture/wk. It is not necessary to take HIST 125 before HIST 126. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.

HIST 128
Medieval History (3 CR)

Medieval History is a detailed survey of the period from late Roman Antiquity to the early Renaissance. Primary and secondary texts and visual resources will be used to illuminate the period that saw first the decline into relative stagnation caused by barbarian onslaughts, and then gradual reemergence of a powerful civilization that revitalized itself by renewing the insights of ancient times. 3 hrs. lecture/wk.

HIST 129
Early Modern Europe 1500-1789 (3 CR)

This course is an introduction to early modern European history, with emphasis on the economic, social and political developments that have shaped the modern world: the Renaissance; the Catholic and Protestant Reformations; the rise of nation-states; the new inter-cultural contact between Europe and the world; the Commercial Revolution and the Enlightenment. 3 hrs. lecture/wk.

HIST 130
European History Since 1789 (3 CR)

This course covers the major political, intellectual, and economic and social developments in Europe from the end of the 18th century to the present, including modern political ideologies, major wars, the growth of strong governments, the effect of modern science on social and political thought, the Industrial Revolution, the creation of large middle classes, and the effect of modern technology. 3 hrs./wk.

HIST 132
History of Africa (3 CR)

This course introduces students to the history of Africa until the present. It emphasizes the fundamental characteristics and long-term developments in the evolution of African political and socioeconomic institutions. 3 hrs./wk.

HIST 135
Eastern Civilization (3 CR)

This course is an introduction to the societies and cultures of Asia. Through lectures, readings and discussions, the course will focus on aspects of the history, politics, art, literature and economics of China, Japan and India. The major traditional themes and concepts of these civilizations will be stressed. 3 hrs. /wk.

HIST 137
African American Studies (3 CR)

This course surveys the major themes and developments in African-American culture and history from the colonial period to the present. The course is divided into three five-week segments. Each segment relates to a historical period; slave, post-emancipation and contemporary. Each segment also permits a flexible, interdisciplinary approach that will include literature, fine arts and the social sciences. 3 hrs. lecture/wk.

HIST 140
U.S. History to 1877 (3 CR)

This survey course in U.S. history will emphasize developments and trends in American society from the early period of discovery and settlement through Reconstruction. Topics will include the Colonial era, the Revolutionary period, the Federalist era, the expansion of the Republic during the mid-19th century, and the Civil War and Reconstruction. The emphasis will be on analysis and interpretation of these developments. 3 hrs./wk. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.

HIST 141
U.S. History Since 1877 (3 CR)

This survey course will emphasize developments and trends in American society from the 1870s to the late twentieth century. Topics will include the Reconstruction era, industrialization, immigration, reform movements, World Wars I and II, social and cultural trends, and foreign policy. Emphasis will be on analysis and interpretation of these developments. 3 hrs./wk. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.

HIST 150
Islam: Religion & Civilization (3 CR)

This course covers the context in which Islam arose; the career of the Prophet Muhammad; the main teachings and practices of the religion; the Qur'an and other early Islamic literature; subsequent political developments in the religion and its spread; its main religious branches; its history during the Middle Ages; the Christian crusades and their consequences; the major components of Islamic civilization including law, the arts, literature, philosophy, science, and mathematics; Sufi; the effects of Western imperialism upon Islamic states; major developments in Islamic thought and practice since the seventeenth century; the Islamic diaspora; and Islam today. HIST 150 is the same course as REL 150 and HUM 150; enroll in one only. 3 hrs. lecture/wk.

HIST 151
World History I: Traditional World (3 CR)

This course provides students an introduction to the history of the major world civilizations up to approximately 1500. Upon successful completion of the course, students will be able to identify the major political, social, economic and technical developments in the histories of Egypt, Mesopotamia, other Near Eastern civilizations, Rome, Greece, India, China, sub-Saharan Africa, pre-Columbian

America and medieval Europe. Students will be able to define the concept of a traditional, as opposed to a modern, society. They will be able to compare these societies with each another and with the modern society of the contemporary United States. 3 hrs. lecture/wk.

HIST 152
World History II: Modern World (3 CR)

This course provides students an introduction to the history of the world since approximately 1500. Upon successful completion, students will be able to describe and analyze the development of modernism, which occurred first in the West, including the scientific revolution, secularism, industrialism and the rise of new political ideologies. They will be able to trace the expansion of modernization in both the Western and non-Western worlds and the response to modernism in non-Western countries. 3 hrs. lecture/wk.

HIST 160
Modern Russian History (3 CR)

This course examines Russian history within a Eurasian context. It is a study of three centuries of the social, political, economic and cultural forces that shaped Russian history, beginning with a survey of the events that place Russia outside the Western historical tradition. 3 hrs./ wk. or online. Usually this course is offered in the fall semester either on-campus or online. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.

HIST 162
Modern Latin America (3 CR)

This course is an examination of the economic, social, political and cultural history of Latin America since independence. Regional identities, such as Central America, and independent national states, such as Cuba and Mexico, are explored. Literary and intellectual trends together with contemporary popular culture are featured in the course. 3 hrs./wk.

HIST 164
Japan: Changing Tradition (3 CR)

Prerequisite: assistant dean approval

This self-paced course explores Japanese history, politics and economics from the early days of the Tokugawa regime from 1500 to the present. The thrust of the course is geared to exploring the themes that permeate the Japanese experience over the past two centuries.

HIST 195
History of the Middle East (3 CR)

This course introduces students to the environmental, political, economic, religious and ethnic landscape of the Middle East and Northern Africa. Though its focus is historical, the course prepares students for an understanding of the contemporary challenges faced by the region. Particular attention is paid to the Middle East and Northern Africa as the intersection of three monotheistic traditions, the central role of aridity and natural resources in its development, the interfacing of multiple cultures with Islam, the religious and ethnic diversity of the region today, and modern encounters with the nation-state system and western secularism. Students will also explore the contributions of the region to the larger world and the interactions of Middle Eastern and Northern African countries and people with Asia, Europe, and the United States. 3 hrs. lecture/wk.

Home Economics (HMEC)

HMEC 151
Nutrition and Meal Planning (3 CR)

This course covers the basic food groups, their use in meal planning, their functions and their nutritional values. In addition to the current trends in eating, this course covers diets and exercise, as well as fad diets, life-cycle nutritional needs, and the effects of nutrient intake on growth and development. This is a required course for the food and beverage program and the chef apprenticeship program. 3 hrs./wk.

Honors Program (HON)

HON 250
Honors Forum: In Search of Solutions (3 CR)

This course will focus on two topics during the semester and how those topics affect the local, national and global communities. The course complements other courses in the curriculum by applying the dual emphases of specific content and skill development to the areas of interaction, analysis, synthesis and conflict resolution. Students will study each issue in a historical and contemporary context, develop a greater understanding of the issues, and take a position on the issues. This position will be subjected to further challenge and dialogue. In this course, the process of reflecting, researching, analyzing and evaluating are as important as content. As points of view concerning the issue are developed, the students must articulate and defend these viewpoints as they are challenged by others and make judgments among alternative options. The first topic is selected by the faculty members, then midway through the semester, the students will select the second topic. This course will require students to use many forms of research, including the Internet and electronic databases. In addition, students will be expected to use e-mail for sharing information with classmates and instructors.

Horticulture (HORT)

HORT 115
Home Horticulture (2 CR)

This course provides basic knowledge for the design and management of home lawns, flower and vegetable gardens, and landscape trees and shrubs. Students will learn basic plant anatomy and physiology concepts; how to recognize some common plant deficiency symptoms; the use of fertilizers and pesticides; identification of some common trees, shrubs and garden plants; and the major considerations of good landscape design. 1 hr. lecture, 2 hrs. lab/wk.

HORT 120
Introduction to Urban Agribusiness (3 CR)

This is a general survey course for students who wish to learn more about the broad field of agribusiness. Particular emphasis is on the many facets of landscape and grounds management. Career areas that will be covered are interior landscaping, greenhouse management, the position of pesticide applicators' position and golf course management. 3 hrs. lecture/wk.

HORT 135
Landscape Design (3 CR)

The course is designed to familiarize students with aspects of landscape design. Students will analyze the site and preferences of the client and complete a

landscape design following basic design principles. Students will learn presentation graphics, hand lettering techniques, and how to make a hand drawing to scale. Note: Plant material courses (HORT 214, HORT 215, HORT 220) could be helpful for this course but are not required. 2 hrs. lecture, 2 hrs. lab/wk.

Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $30.

HORT 140
Turfgrass I (3 CR)

The basics of turfgrass identification, selection, use and care will be covered. The emphasis will be on efficient management of soil and turf on large or small grounds. Upon successful completion of this course, students should be able to demonstrate their ability to properly identify the major categories of turfgrass; establish and maintain turfgrass; identify turfgrass pests; and develop a pest control fertilizer program. Irrigation systems, their maintenance and repair will also be discussed. 2 hrs. lecture, 2 hrs. lab/wk.

HORT 150
Fruits, Vegetables and Herb Crops (2 CR)

This course is designed to familiarize garden center employees with the plant materials and production of crops many homeowners use and grow. This course will help the employee answer many homeowner questions about production, varieties and potential crop problems. Home hobbyists may also wish to enroll in this course. 1 hr. lecture, 2 hrs. lab/wk.

HORT 160
Garden Center Operations (3 CR)

This course is designed for garden center employees and provides background on the elements necessary for success in a competitive retail environment. The business organization is emphasized, including environmental monitoring, selling, inventory issues, merchandising, advertising, cost effectiveness, labor/team relationships and customer service. In addition, safety and legal issues are examined. 3 hrs. lecture/wk.

HORT 165
Arboriculture (3 CR)

This course will prepare the student to work with trees in Zones 5-6. In lecture and lab settings students will learn and demonstrate how to properly plant, prune and maintain trees, identify hazard trees and proper pruning and tree removal techniques. Emphasis will be placed on ANSI and OSHA safety requirements. At the end of this course the student will be prepared to take the test for arboriculture certification in Kansas. 2 hrs. lecture 3 hrs. lab/wk.

HORT 201
Introduction to Horticultural Science (4 CR)

This is an introduction to the principles and practices of horticultural plant systems. Plant structure and function will be discussed, along with the effects of environmental factors on plant growth. General cultural practices will be described, including pest control, mineral nutrition and plant propagation. 3 hrs. lecture, 2 hrs. lab/wk.

HORT 205
Plant Propagation (3 CR)

Prerequisite: HORT 201 or permission of assistant dean

This course provides basic knowledge of the art and science of sexual and asexual methods of propagating plants. Students study the processes of seed development, seed dormancy, germination, root initiation and grafting. Students will learn basic seed sowing, cutting and grafting skills. The students will be able to demonstrate the selection of appropriate propagation methods and choose the proper environmental conditions necessary to achieve successful propagation of seeds or cuttings. 2 hrs. lecture, 2 hrs. lab/wk.

HORT 210
Concepts of Floral Design (3 CR)

This is an introductory course for students to learn the design basics of flower arranging. The course will help the students develop an eye for color combinations, flow of lines, balance, geometric shapes and textures in materials used, mechanics of design, customer perspectives and the post-harvest care of floral materials. 2 hrs. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100 to $150.

HORT 214
Woody Plants I, Deciduous (3 CR)

The class places emphasis on identification, ornamental characters, site requirements, and use of woody ornamental deciduous trees and shrubs with special emphasis on the cultivated varieties in climatic zones 5 and 6. Plant uses and seasonal effects and influences that affect plant choices will be also be taught. This course will assist the grounds maintenance employee, landscaper, and garden center employee in identifying plant materials used in the landscape. 2 hrs. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10.

HORT 215
Woody Plants II, Evergreens (3 CR)

This course places emphasis on identification, ornamental characteristics, site requirements and use of evergreen trees and shrubs and flowering shrubs with special emphasis on the cultivated varieties in climatic zones 5 and 6. Plant uses and seasonal effects and influences that affect plant choices will be taught. This course will assist the grounds maintenance employee, landscaper and garden center employee in identifying plant materials used in the landscape. 2 hrs. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10.

HORT 220
Herbaceous Plants (3 CR)

This course will focus on the identification, ornamental characters, culture, propagation, and use of herbaceous perennials, bulbs, ground covers, vines and annuals. This course will assist the grounds maintenance employee, landscaper, and garden center employee in identifying and selecting herbaceous plant materials with additional emphasis on uses and maintenance of these plants when used in the landscape. 2 hrs. lecture, 3 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10.

HORT 225
Plant Problems (3 CR)

Prerequisites: HORT 214 and HORT 220 or permission of assistant dean

This course is a broad-spectrum overview of plant insects, diseases and nutrition. Students will look at plants to identify the common characteristics found when diagnosing plant problems. Identification, treatment and treatment alternatives will be considered to help customers make diagnostic decisions for the use of chemicals and integrated pest management techniques (IPM). 2 hrs. lecture, 3 hrs. lab/wk.

HORT 235
Landscape Maintenance and Techniques (3 CR)

This course is designed to familiarize students with the principles and techniques involved in landscape maintenance including pruning techniques, fertilization, irrigation, spray schedules and weed control. Installation and maintenance of annual and perennial plant material is examined. In addition, the student will learn to design preventive strategies and identify and examine disease and insect damage. The students will learn how to maintain good customer relations. 2 hrs. lecture, 2 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $30.

HORT 240
Turfgrass II (3 CR)

Prerequisite: HORT 140

This course is a continuation of turfgrass I (HORT 140). Topics include green construction, top dressing, sprayer calibration, management programs (e.g., setting up a lawn care program) and the influence environment has on turfgrass growth. 2 hrs. lecture 2 hrs. lab/wk.

HORT 245
Commercial Crop Production (3 CR)

This course is designed to familiarize Market Farmers with the plant materials and production of crops grown in the Market Farming industry. This course will help answer questions about varieties of plants to grow, establishment, growth, harvesting and post-harvesting of crop, varieties of plants to grow. Students will become familiar with different marketing options and good record keeping. 3 hrs. lecture/wk.

HORT 255
Landscape Pest Control (3 CR)

This course will explore the general concepts of turf, ornamental, commercial crop and vegetable garden maintenance and pest control in the local area. The student will become familiar with federal and state regulations pertaining to horticulture chemical application. Upon completion of this course, the student should be prepared to take the Kansas or Missouri licensing examination to become a certified applicator of restricted horticultural pesticides and herbicides. 3 hrs. lecture/wk.

HORT 260
Horticulture Soils (3 CR)

This course covers soil components as well as the physical, chemical and biological properties of soils that affect plant growth. Emphasis will be placed on horticultural substrates and urban soils and their applications. 2 hrs. lecture, 2 hrs. lab/wk.

HORT 265
Landscape Construction (3 CR)

This course will cover the theories, principles and practices used in the interpretation and implementation of landscape construction. It will include site planning and preparation, safety principles, tool use and identification, landscape and construction materials, job bid development and project management. Construction projects in the class will vary by semester. 2 hrs. lecture, 2 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100 to $235.

HORT 270
Horticulture Internship (3 CR)

Prerequisite: Approval of assistant dean

Student should be able to apply classroom knowledge to an actual work situation. The internship will provide students on-the-job experience under the supervision of professionals in the Horticultural industry. The work will be developed cooperatively with area employers, college staff and each student to provide a job experience in the area of their horticultural focus and career goals. 20 hrs field study

HORT 272
Sustainable Agriculture Fall Practicum (2 CR)

Through practical experience complemented by lectures and discussions, students will gain exposure to a broad range of tasks facing the market farmer during the fall and early winter seasons. This includes production and marketing of summer crops, planning, and production of fall crops in high tunnels and open field, and marketing these fall crops. Topics include production planning, planting, integrated crop management, harvest and postharvest practices, marketing through various channels, tools and equipment, soil fertility management, and record keeping. Practicum activities will integrate with other courses in this market farming certificate program. Students will learn both conventional and organic production techniques. Entrepreneurship will be emphasized throughout. 7 hrs. practicum/wk.

HORT 274
Sustainable Agriculture Spring Practicum (2 CR)

Through practical experience complemented by lectures and discussions, students will gain exposure to a broad range of tasks facing the market farmer during the winter and early spring seasons. This includes production and marketing of winter crops and planning and production of spring and summer crops in high tunnels and open field and marketing these spring crops. Topics include production planning, planting, integrated crop management, harvest and postharvest practices, marketing through various channels, tools and equipment, soil fertility management, and record keeping. Practicum activities will integrate with other courses in this market farming certificate program. Students will learn both conventional and organic production techniques. Entrepreneurship will be emphasized throughout. 7 hrs practicum/wk.

HORT 276
Sustainable Agriculture Summer Practicum (2 CR)

Through practical experience complemented by lectures and discussions, students will gain exposure to a broad range of tasks facing the market farmer during the summer season. This includes planning, production and marketing of spring and summer crops and planning and production of fall crops in high tunnels and open field. Topics include production planning, planting, integrated crop management, harvest and postharvest practices, marketing through various channels, tools and equipment, soil fertility management, and record keeping.

Practicum activities will integrate with other courses in this market farming certificate program. Students will learn both conventional and organic production techniques. Entrepreneurship will be emphasized throughout. 7 hrs. practicum/wk.

Hospitality Management (HMGT)

HMGT 120
Food Service Sanitation (1 CR)

This course covers the basic principles of providing and serving safe food. It also provides the student with safe food-handling procedures necessary to manage a sanitary and safe food service operation in compliance with the National Food code and the National Restaurant Association. The successful completion of the Serv Safe Sanitation exam will result in a national sanitation certification. 1 hr. lecture/wk.

HMGT 121
Perspectives of Hospitality Management (3 CR)

This introductory course is designed to provide students with current information on topics relevant to career exploration, employment and operational specifics of the various segments of the hospitality industry. The course includes exploration of the tourism, lodging, food and beverage and related industries, along with the operational characteristics unique to each and the critical concepts of service management. The identification of current events and trends will be included along with the evaluation of impact on the hospitality industry. This course also identifies and explores career opportunities and includes the professional profiles and job search materials directly related to the hospitality industry. 3 hrs. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $25 to $50.

HMGT 123
Professional Cooking I (3 CR)

Prerequisite or corequisite: HMGT 120

This is the first of two courses in professional cooking methods for students enrolled in hospitality management programs. Upon completion of this course, the student should be able to demonstrate skills in basic cooking methods, recipe conversion, and professional food preparation and handling. Additionally, the student should be able to safely operate common food service equipment used in commercial kitchens. 1 hr. lecture, 2.5 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $50 to $200.

HMGT 126
Food Management (4 CR)

Prerequisites: HMGT 123 and HGMT 230 and HMGT 277 and admission to the hospitality management program

This course offers an overview of restaurant management practices used in the hospitality industry. Emphasis will be on demonstrating the components of menu planning and the styles of food service used for various occasions -- buffet service and French, Russian and American service. The student will participate in the operation of the campus restaurant, including food preparation, service, sales promotion, purchasing and costing. 7 hrs./wk.

HMGT 128
Supervisory Management (3 CR)

This course contains the basic supervisory management skills, management styles, motivation with emphasis on human relations, delegation, training, evaluation and communication. In addition, the hiring and firing functions within FLSA guidelines will be covered. 3 hrs./wk.

HMGT 130
Hospitality Law (3 CR)

This course offers an overview of product and dram shop liability as well as of the various areas of federal and state legislation that regulate the hospitality industry. Emphasis will be on familiarizing the hospitality manager with ways to avoid costly and time-consuming lawsuits. A manager's or owner's legal rights and responsibilities also will be discussed. Upon successful completion of this course, the student should be able to recognize potential legal problems. 3 hrs./wk.

HMGT 132
Seminar in Housekeeping Operations (3 CR)

This course presents a systematic approach to managing housekeeping operations in the hospitality industry. The course will also include related health department and OSHA regulations. While enrolled in this class, a student must work a minimum of 15 hours a week in a lodging operation. The work experience is concurrent but does not necessarily concentrate on the subject being taught in the course. This course is typically offered in the fall semester. 2 hrs./wk.

HMGT 145
Food Production Specialties (3 CR)

Prerequisite: HMGT 123

This course covers the fundamentals of convenience baking, hors d'oeuvre and cold kitchen preparation. It provides knowledge of and basic skills in the pastry kitchen, where the student can handle convenience products from the frozen or dried state and produce finished pies, cakes and dessert items. It provides further knowledge of and skill in the garde-manger kitchen, specifically making salads, cocktail hors d'oeuvres and cocktail sandwiches, as well as making economic purchases for gourmet food items. In addition, the student will learn how to make intermezzo ices, identify different types of cheese, and design and make a general plan for a buffet. 1 1/2 hrs. lecture, 2 hrs. lab/wk.

HMGT 150
Seminar: Food Service Sales and Marketing (3 CR)

This course includes detailed information in distinguishing the difference between marketing, sales, promotion, advertising and merchandising. In addition, development and quantifying the cost of a marketing plan by analyzing markets and developing a primary target market will be discussed. This course is a seminar course, and students are required to be employed 15 hours per week in a job related to the hospitality industry. 3 hrs. lecture, 15 hrs. internship/wk.

HMGT 165
Food Industry Compliance & Safety (3 CR)

Upon successful completion of this course, the student should be able to analyze and explain the basic legal compliance issues regarding food safety and the post-harvest handling of local food products. This course focuses on the legal compliance issues of market farming as well as the food safe handling principles necessary for an individual involved in market farming. It will provide students with practical methods of application involved with food safety and post-harvest

marketing. 3 hrs. lecture/wk.

HMGT 167
Local Food Production (3 CR)

Upon successful completion of this course, the student should be able to analyze and explain the basic cooking methods, recipe conversion and professional food preparation and handling of local food products. Additionally, the student should be able to safely operate common food service equipment used in commercial kitchens. It will provide students with practical methods of application involved with safe handling and production of post-harvest local food products. 2 hrs. lecture, 1.5 hrs. instructional lab/wk.

HMGT 203
Hotel Sales and Marketing (3 CR)

Prerequisites: HMGT 121 and admission to the hospitality management program

This course will focus on practical sales and marketing techniques for the hotel industry. It will cover a marketing plan and advertising campaign for a hotel, including identifying target markets, prospecting for sales leads and using sales techniques. This course is typically offered in the fall semester. 3 hrs. lecture/wk.

HMGT 207
Hospitality Human Resource Management (3 CR)

Prerequisite: HMGT 128

This course will examine hospitality human resources management from the global perspective as the rise of multinational hospitality corporations and a multicultural society place new requirements on managers with human resource responsibilities. Special emphasis will be placed on both the "soft skills" involved in counseling, interpersonal relations and different management theories, as well as the "hard skills" involved in the legislative aspects of managing people. This course will concentrate on how to manage managers. 3 hrs. lecture/wk.

HMGT 220
American Regional Cuisine (3 CR)

Prerequisite: HMGT 230

This course introduces the student to regional American cooking from nine regional culinary traditions and two specialty traditions within American cuisine. Students will study the cuisine of New England; the Mid-Atlantic states; the Deep South; Florida and the Caribbean; Cajun and Creole; the Central Plains and Rocky Mountain states; Tex-Mex and the American Southwest; California and Hawaii; the Pacific Northwest, as well as vegetarian cuisine and kosher dietary laws. Upon completion of this course, the student should be able to demonstrate skills in cooking and presenting classic American dishes in their traditional forms within a restaurant setting. 1 hr. lecture, 2.5 hrs. lab/wk.

HMGT 221
Design and Facilities Management (3 CR)

Prerequisites: HMGT 123 and HMGT 271

This course includes detailed information about food service design that covers layout, design and equipment specifications. In addition, facilities operations will be discussed regarding electrical, water and transportation systems; refrigeration; waste disposal; energy management; and HVAC. Preventive maintenance will be emphasized. 3 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $25 to $100.

HMGT 223
Fundamentals of Baking (3 CR)

This course covers bakeshop production as it relates to the basic principles of ingredients, measurements, mixing, proofing, baking and final presentation. In addition, the student will be able to identify the various types of baking equipment used in the preparation of bakeshop products. The class includes lecture and participation. 1 hr. lecture, 2.5 hrs. lab/wk.

HMGT 226
Garde Manger (3 CR)
Prerequisite: HMGT 230

This course is designed for the student to learn cold food production and charcuterie. The course will allow the student to develop fundamental principles of the cold kitchen and modernize traditional methods of salad preparation. 1 hr. lecture, 2.5 hrs. lab/wk.

HMGT 228
Advanced Hospitality Management (3 CR)
Prerequisite: assistant dean's approval

This course includes detailed information about various components of menu planning, food service, supervision, design and beverage control. In addition, an understanding of the external factors affecting the hotel-restaurant industry will be discussed. Skills necessary to secure a position in management within the hospitality industry will be emphasized, and case studies and computer simulation (HOTS) will be used for critical thinking analysis. Business plans will be developed as part of the course project. 3 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $25 to $50.

HMGT 230
Professional Cooking II (3 CR)
Prerequisites: HMGT 120 and HMGT 123

This is the second of two courses in professional cooking methods for students enrolled in hospitality management programs. Upon completion of this course, the student should be able to demonstrate advanced level skills in cooking methods, recipe conversion, and professional food preparation and handling. Additionally, the student should be able to safely operate advanced food service equipment used in commercial kitchens. This course consists of lecture, demonstration and participation in food preparation. 1 hr. lecture, 2.5 hrs. lab/wk.

HMGT 231
Advanced Food Preparation (4 CR)
Prerequisites: HMGT 230 and assistant dean's approval

This course is designed to develop a student's advanced culinary skills in preparation of international cuisine commonly served in today's operations in Latin America, Europe, Asia, the Middle East, the Far East and the Pacific area. 4 hrs. lecture/wk.

HMGT 235
Seminar: Risk Management and Loss Prevention (3 CR)

This course explains the issues surrounding the need for individualized security programs, examines a wide variety of security and safety equipment and procedures, discusses guest protection and internal security for asset protection. It explores risk management and loss prevention issues and outlines OSHA

regulations that apply to lodging properties. While enrolled in this class, a student must work a minimum of 15 hours a week in a lodging operation. The work experience is concurrent but does not necessarily concentrate on the subject being taught in the course. This course is typically offered in the spring semester. 2 hrs lecture, 15 hrs. work/wk.

HMGT 240
Advanced Baking (4 CR)

Prerequisites: HMGT 123 and HMGT 223

This course covers the principles needed to enter the baking and pastry industry. The course provides knowledge of specialty ingredients and techniques needed to make tortes, finished desserts and a wedding cake. The student will be instructed in the making of these items through lecture and will prepare a variety of such items in lab. 4 hrs. lecture, lab/wk.

HMGT 248
Confectionery Arts (3 CR)

This course covers the design and production of artistic centerpieces made from confections. It provides knowledge of and basic skills in making decorative dining table centerpieces using food products such as cooled and pulled sugar syrup, isomalt, pastillage, marzipan and chocolate. The student will be instructed in the preparation of these ingredients and will construct center and showpieces after viewing demonstrations. 4.5 hrs. lecture, lab/wk.

HMGT 250
Introduction to Catering (3 CR)

This course includes detailed information about the different types of catered events within the hospitality industry. Topics covered include the importance of marketing, contract writing, food production, room arrangements and required personnel relative to specific catered events. 3 hrs. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $5 to $25.

HMGT 256
Casino Management (3 CR)

This course is designed to familiarize students with the unique conditions and management challenges associated with a casino property. An overview of game operation and rules will serve as a foundation. Management controls will be emphasized including how to compute statistical data to assist management in operations. The course is not intended to be a training exercise. Casino marketing and ways to develop effective player rating systems will be analyzed. The history of the casino industry and regulatory environment will also be examined. The course is not intended to be a training exercise for those interested in learning to deal games. 3 hrs. lecture/wk.

HMGT 265
Front Office Management (3 CR)

This course provides a full understanding of the flow of business from the front office, beginning with the reservations process to checkout and settlement. It also includes the night audit and statistical analysis of rates and revenue management. This course is typically offered in the spring semester. 3 hrs./wk.

HMGT 268
Hospitality Managerial Accounting (3 CR)

Prerequisites: MATH 120 and HMGT 121 and HMGT 273

This course introduces the student to basic managerial accounting. This includes accounting concepts, processing data and the flow of financial information within a hospitality operation. The course provides a working knowledge of an income statement, balance sheet, statement of owner's equity and cash flows. 3 hrs. lecture/wk.

HMGT 271
Seminar in Hospitality Management: Purchasing (3 CR)

This course offers an overview of purchasing techniques and specification writing for commodities used in the hospitality industry. Emphasis will be on decision-making skills in the areas of quality, quantity, specifications and general value analysis. Two hours in class and a minimum of 15 hours a week are required in a supervised work situation in an approved area of the hospitality industry. Work experience is concurrent but does not necessarily concentrate on the subject being taught in the course.

HMGT 273
Hospitality Cost Accounting (3 CR)
Prerequisites: MATH 120 or higher and HMGT 121

This course includes detailed information on how to prepare operation statements for a food service operator, including inventory and control systems. Areas of concentration will be food cost controls, labor cost controls, purchasing controls and profit production. The practice set will be used to reinforce control systems. 2 hrs./wk.

HMGT 275
Seminar in Hospitality Management: Internship (3 CR)
Prerequisite: Admission to the hospitality management program

This course provides industry experience for students in cooperating businesses, agencies and organizations. While enrolled in this course, a student must work a minimum of 320 hours in an approved position in the hospitality industry. By arrangement.

HMGT 277
Seminar in Hospitality Management: Menu Planning (3 CR)
Prerequisite: HMGT 123

This course provides the basic knowledge of menu design and planning. Students will learn the components of menu design and planning for each concept category. The course will cover the topics of menu layout, selection and development, price structures and the theory of menu design. A minimum of 15 hours a week is required in a supervised work situation in an approved area of the hospitality industry. Work experience is concurrent but does not necessarily concentrate on the subject being taught in the course. 2 hrs. lecture/wk. Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $5 to $25.

HMGT 279
Beverage Control (3 CR)

This course covers the history of wines and their use and storage procedures. The students should gain an understanding of beverage control and how it is used in all types of operations. The course will also cover in-depth study of spirits, internal control systems and local/state alcoholic beverage control laws. 3 hrs./wk.

HMGT 281
Culinary Arts Practicum I (2 CR)

Prerequisite: Acceptance into the American Culinary Federation Chef Apprenticeship training program and hospitality management assistant dean's approval

A qualified chef who is a member of the American Culinary Federation will supervise this on-the-job apprentice training. Upon successful completion of this course, the student should be able to apply food preparation and presentation techniques and gain experience in all phases of food service operation.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100 to $300.

HMGT 282
Culinary Arts Practicum II (2 CR)

Prerequisite: HMGT 281

A qualified chef who is a member of the American Culinary Federation will supervise this on-the-job apprentice training. Upon successful completion of this course, the student should be able to apply food preparation and presentation techniques and gain experience in all phases of food service operation. This course is a continuation of Culinary Arts Practicum I.

HMGT 285
Culinary Arts Practicum III (2 CR)

Prerequisite: HMGT 282

A qualified chef who is a member of the American Culinary Federation will supervise this on-the-job apprentice training. Upon successful completion of this course, the student should be able to apply food preparation and presentation techniques and gain experience in all phases of food service operation. This course is a continuation of Culinary Arts Practicum II.

HMGT 286
Culinary Arts Practicum IV (2 CR)

Prerequisite: HMGT 285

A qualified chef who is a member of the American Culinary Federation will supervise this on-the-job apprentice training. Upon successful completion of this course, the student should be able to apply food preparation and presentation techniques and gain experience in all phases of food service operation. This course is a continuation of Culinary Arts Practicum III.

HMGT 287
Culinary Arts Practicum V (2 CR)

Prerequisite: HMGT 286

A qualified chef who is a member of the American Culinary Federation will supervise this on-the-job apprentice training. Upon successful completion of this course, the student should be able to apply food preparation and presentation techniques and gain experience in all phases of food service operation. This course is a continuation of Culinary Arts Practicum IV.

HMGT 288
Culinary Arts Practicum VI (2 CR)

Prerequisites: HMGT 287 and assistant dean's approval and approval of hospitality management assistant dean

A qualified chef who is a member of the American Culinary Federation will

supervise this on-the-job apprentice training. Upon successful completion of this course, the student should be able to apply food preparation and presentation techniques and gain experience in all phases of food service operation. This course is a continuation of Culinary Arts Practicum V.

Hospitality Mgt Pastry Baking (HMPB)

HMPB 155
Pastry Shop Production I (4 CR)

Prerequisites: HMGT 120 and HMGT 123 Corequisites: HMPB 160 and HMPB 233 and HMPB 252

This course will provide hands-on instruction of techniques used to make basic pastry shop staples used in the production of items intended for retails sales in a professional pastry shop. This course is typically offered in the fall semester. 1 hr. lecture & 4 hrs. lab/wk.

HMPB 160
Pastry Shop Principles I (4 CR)

Prerequisites: HMGT 120 and HMGT 123 Corequisites: HMPB 155 and HMPB 233 and HMPB 252

This course will examine the fundamental baking concepts including sanitation, ingredient identification and usage, weights and measures, inventory and product ordering needed as it pertains to a professional pastry shop. Students will be operating a working bake shop. This course is typically offered in the fall semester. 1 hr. lecture 3 hrs. lab/wk.

HMPB 233
Patisserie (4 CR)

Prerequisites: HMGT 120 and HMGT 123 Corequisites: HMPB 155 and HMPB 160 and HMPB 252

This course will provide hands-on instruction of techniques to make finished pastry items such as tortes, tarts, pastries, cookies, candies and breads as well as how to present items in a professional manner. This course is typically offered in the fall semester. 1 hr. lecture 3 hrs. lab/wk.

HMPB 252
Pastry Shop Business Basics I (3 CR)

Prerequisites: HMGT 120 and HMGT 123 Corequisites: HMPB 155 and HMPB 160 and HMPB 233

This course will provide basic hands-on techniques used to market finished pastry items, customer service, setting up, restocking and maintaining a display case, as well as taking pastry orders. This course is typically offered in the fall semester. 1 hr. lecture 3 hrs. lab/wk.

HMPB 255
Pastry Shop Production II (4 CR)

Prerequisites: HMPB 155 and HMPB 160 and HMPB 233 and HMPB 252 Corequisites: HMPB 260 and HMPB 257 and HMPB 252

This course will provide hand-on instruction of advanced techniques used to make advanced staples used in the production of advanced pastries, cakes, tarts, and tortes intended for retail sales in a professional pastry shop. This course is typically offered in the spring semester. 1 hr lect. 3 hrs lab./wk.

HMPB 257
Sugar Basics (4 CR)

Prerequisites: HMPB 155 and HMPB 160 and HMPB 233 and HMPB 252
Corequisites: HMPB 255 and HMPB 260 and HMPB 262

This course will provide hands-on instruction of pulled and brown sugar techniques used for garnishing advanced pastry items. The student will learn how to cook, pull, blow and store sugar pieces used in a professional pastry shop. This course is typically offered in the spring semester. 3 hrs. lab and 1 hr. lab/wk.

HMPB 260
Pastry Shop Principles II (4 CR)

Prerequisites: HMPB 155 and HMPB 160 and HMPB 233 and HMPB 252
Corequisites: HMPB 255 and HMPB 257 and HMPB 262

This course will examine the advanced baking concepts including high dollar ingredient identification and usage, storage, advanced inventory control, costing and product sources and product availability as it pertains to a professional pastry shop. This course is typically offered in the spring semester. 1 hr. lecture, 3 hrs. lab/wk.

HMPB 262
Pastry Shop Business Basics II (3 CR)

Prerequisites: HMPB 155 and HMPB 160 and HMPB 233 and HMPB 252
Corequisites: HMPB 255 and HMPB 260 and HMPB 257

This course will provide advanced hands-on techniques used to market finished pastry items, execute excellent customer service, establishing operational guidelines, inventory and restocking, product ordering, product research, maintaining a display case, as well as taking pastry orders. This course is typically offered in the spring semester. 1 hr. lecture 2 hrs. lab/wk.

Humanities (HUM)

HUM 122
Introduction to Humanities (3 CR)

This interdisciplinary study begins with a look at artistic and technical elements of several art forms, including painting, sculpture, architecture, music, theater, film, dance and literature. Major themes expressed in the works and their reflection of the values of their culture are also examined.

HUM 137
Introduction to Russian Culture (3 CR)

This course is a survey of the cultural history of Russia from the ninth century to the present. The approach is interdisciplinary, examining representative examples of Russian art, architecture, music, theater, dance, literature and philosophy in their historical context. In addition to developing the students' appreciation of Russia's contribution to world culture, the course aims to enhance students' understanding of the contemporary world. 3 hrs. lecture/wk. When paired with Introduction to Literature, Russian emphasis, it includes an online component. Usually this course is offered in the spring semester. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.

HUM 138
Introduction to Russian Culture, Field Study (1 CR)

Prerequisite: HUM 137 or approval of instructor

This course is the field study portion of the HUM 137, Introduction to Russia, course. Students study, on site, selected works of art, architecture, music, literature, theater and film for the various historical periods from the perspective of Russian experts in these fields. In addition, students enhance their knowledge of Russian history by visiting the sites of many of the major events that have shaped the development of Russia's culture. 2 hrs. lab/wk.

HUM 145
Introduction to World Humanities I (3 CR)

This course will acquaint students with the arts and ideas of the world's major civilizations, from antiquity through the Renaissance. The approach will be interdisciplinary, covering the artistic values embodied in painting, sculpture, architecture, literature, theater, music and dance as they have emerged out of their historical contexts. In addition to providing the fundamental principles, methodologies and theories used in the study of the humanities, the course aims to enhance students' understanding of the contemporary world. 3 hrs. lecture/wk.

HUM 146
Introduction to World Humanities II (3 CR)

This course will acquaint students with the arts and ideas of the world's major civilizations, from the Renaissance to the present. The approach will be both interdisciplinary and chronological, covering the artistic values embodied in painting, sculpture, architecture, literature, theater, music and dance as they have emerged out of their historical contexts. In addition to providing the fundamental principles, methodologies and theories used in the study of the humanities, the course aims to enhance students' understanding of the contemporary world. 3 hrs. lecture/wk.

HUM 150
Islam: Religion & Civilization (3 CR)

This course covers the context in which Islam arose; the career of the Prophet Muhammad; the main teachings and practices of the religion; the Qur'an and other early Islamic literature; subsequent political developments in the religion and its spread; its main religious branches; its history during the Middle Ages; the Christian crusades and their consequences; the major components of Islamic civilization including law, the arts, literature, philosophy, science, and mathematics; Sufi; the effects of Western imperialism upon Islamic states; major developments in Islamic thought and practice since the seventeenth century; the Islamic diaspora; and Islam today. HUM 150 is the same course as HIST 150 and REL 150; enroll in one only. 3 hrs. lecture/wk.

HUM 155
Classical Mythology (3 CR)

This course provides a systematic study of the myths and epic cycles of the Greeks and Romans in both literature and art and investigates their survival and metamorphosis in the literature and visual arts of Western Europe. In addition, this course provides several methodological frameworks with which to analyze several types of tales and their relation to history, religion, rituals and art.

HUM 164
Civilization (3 CR)

This course covers the major ideas and events of Western civilization communicated through the arts. The course begins after the fall of the Roman Empire and includes material to the 20th century.

Industrial Technology (INDT)

INDT 125
Industrial Safety (3 CR)
Upon successful completion of this course, the student should be able to identify various industrial safety and health considerations, list basic safety rules and regulations, identify the proper personal protective equipment needed for common industrial tasks and recognize the need for an ongoing safety program. 3 hr. lecture/wk.

INDT 140
Quality Improvement Using SPC (2 CR)
Upon successful completion of this course, the student should be able to describe and apply basic concepts of quality improvement. This course will examine the application of the "Transformation of America" concept to American businesses. Statistical process control will be introduced as a tool to improve quality. W. Edwards Deming's 14 points and the management changes required to implement quality improvement also will be covered. 2 hrs. lecture/wk.

INDT 155
Workplace Skills (1 CR)
Upon successful completion of this course, the student should be able to identify the job skills necessary to have a successful career in the field of his or her choosing. Topics include listening skills, oral communication, human relations, decision making/problem solving, how to work as a team, time and resource management, work ethics and career planning. 1 hr. lecture/wk.

Information Technology (IT)

IT 200
Networking Technologies (3 CR)
This course is designed to provide students with the fundamentals of networking technology. Concepts covered include network terminology and protocols, network standards, LANs and WANs, the layers of the OSI reference model, cabling practices, network topologies, and IP addressing.

IT 203
Voice over IP Fundamentals (4 CR)
Prerequisite: IT 200

This course is designed to provide students with the fundamentals of Voice over IP (VoIP) networking technology. Concepts covered include an explanation of the national voice and data network, telephony terminology, VoIP protocol analysis and telephony survey techniques. 3 hrs. lecture, 2 hrs. lab/wk.

IT 205
Implementing Windows Client (3 CR)
Prerequisite: IT 200

The focus of this course is the use of Microsoft Windows as an operating system in a business environment. Planning a simple network system, installation and configuration of the software and hardware, resource management, connectivity, running application software under Windows, monitoring and optimizing system hardware, and troubleshooting all lead the student to a deeper understanding of

local area network use and administration. 2 hrs. lecture, 3 hrs. lab/wk.

IT 221
Windows Server (3 CR)
Prerequisites: IT 200 and ELEC 126 and IT 205

This course is designed to provide students with the knowledge and skills to perform competently in the role of a network administrator utilizing the Windows network operating system. Students completing this course will be able to accomplish basic fundamental network management tasks, including planning server roles and subsequent requirements, planning the network file system, implementing user accounts and file system security, implementing network printing, and managing the network servers. 2 hrs. lecture, 3 hrs. lab/wk.

IT 225
Windows Active Directory Services (3 CR)
Prerequisite: IT 221

The focus of this course is using Microsoft Windows Server or Advanced Server software to install, configure and troubleshoot Active Directory components, Domain Name Space (DNS) for Active Directory and Active Directory security solutions. The course also emphasizes the skills required to manage, monitor and optimize the desktop environment using Group Policy. 2 hrs. lecture, 3 hrs. lab/wk.

IT 227
SQL Server Administration (3 CR)
Prerequisite: IT 221

Upon successful completion of this course, the student should be able to administer an SQL server installation. Topics covered include installing, upgrading and configuring SQL servers using SQL utilities; working with databases and users; backing up and restoring databases and log files; automating maintenance tasks; managing, copying and moving data; replicating; tuning; and troubleshooting. 2 hrs. lecture, 3 hrs. lab/wk.

IT 228
Exchange Server (3 CR)
Prerequisite: IT 225

This course is designed to provide network administrators with information that enhances their ability to manage an Exchange server network. Included are topics related to server and client mail management and server performance, e-mail concepts and advanced Internet networking. 3 hrs. lecture, 2 hrs. lab/wk.

IT 230
UNIX Fundamentals (3 CR)

This course is designed to provide students with a fundamental understanding of the UNIX operating system environment. Students successfully completing this course will be able to execute common Unix commands and utilities; and accomplish basic system tasks such as navigating the file system, applying file system security, managing user accounts, installing and configuring user software, using the printing environment, and managing the resources of a basic Unix system. 2 hrs. lecture, 3 hrs. lab/wk.

IT 231

UNIX Administration (3 CR)

Prerequisite: IT 230

This course is designed to provide students with the necessary knowledge and skills to perform competently as a Unix system administrator. Students successfully completing this course should be able to perform basic system administration tasks including installing, configuring and troubleshooting a basic Unix system, managing devices, implementing the printing environment, creating and maintaining file systems, installing packages, and configuring the graphical user interface. 2 hrs. lecture, 3 hrs. lab/wk.

IT 232
UNIX Networking and Security (4 CR)

Prerequisite: IT 231

This course is designed to provide network administrators with information that enhances their ability to manage a Unix network in the enterprise. Included are topics that are related to Unix management of DNS, DHCP, NFS, and Samba. 3 hrs. lecture, 2 hr. lab/wk.

IT 245
Network Infrastructure (3 CR)

Prerequisite: IT 221

This course is designed to provide an in-depth understanding of the ability to install, manage, monitor, configure and troubleshoot DNS, DHCP, Remote Access, Network Protocols, IP Routing and WINS in a Windows 2000 network infrastructure. In addition, it will provide an in-depth understanding of the ability to manage, monitor and troubleshoot Network Address Translation and Certificate Services. Laboratory exercises will accompany the lectures. 2 hrs. lecture, 3 hrs. lab/wk.

IT 246
Introduction to Routers (3 CR)

Prerequisite: IT 200

This course is designed to provide students a fundamental understanding of network routing and the operation of routers. Topics include installing and configuring routers, OPSF and Link State routing protocols, working with metrics and route selection, and TCP/IP configuration. Programming and setup using Cisco routers will be conducted. Laboratory exercises will accompany lectures. 2 hrs. lecture, 3 hrs. lab/wk.

IT 247
Introduction to Wide-Area Networks (3 CR)

Prerequisite: IT 246

This course is designed to provide students a fundamental understanding of internetworking. Topics include local area network segmentation using switches and routers. Wide area network physical technologies will be studied. Configuring WAN protocols using PPP, ISDN and Frame Relay will be presented. Securing the network with standard and extended access lists will be performed. IP and IPX routing will be covered. Programming and configuration will be conducted using Cisco routers and switches. Laboratory exercises will accompany lectures. 2 hrs. lecture, 3 hrs. lab/wk.

IT 249
Advanced Routing (3 CR)

Prerequisite: IT 247

This course provides advanced instruction of Cisco routers found in medium to large networks. It is intended for students preparing for advanced Cisco certification. Upon completion of this course, the student will be able to select and implement the appropriate Cisco services required to build a scalable router network. Topics covered include extending IP addressing, implementing OSPF for a single area and multiple areas, configuring EIGRP, and implementing BGP. This course will follow semester five in the Cisco Networking Academy curriculum.

IT 250
Networking Seminar (3 CR)
Prerequisite: IT 225 and IT 247

This course is designed to teach advanced concepts in information technology. Topics covered are section specific and include e-mail servers, Web servers, database servers, routing, switching and advanced LAN design concepts. Prerequisites are posted for each section. Students may use this course as a capstone for applying concepts and procedures developed in previous courses using realistic business scenarios. 2 hrs. lecture, 3 hrs. lab/wk.

IT 251
Network Security Fundamentals (4 CR)
Prerequisite: IT 247

This course is designed to provide students with a fundamental understanding of network security principles and implementation. Topics covered include authentication, the types of attacks and malicious code that may be used against computer networks, the threats and countermeasures for e-mail, Web applications, remote access, and file and print services. A variety of security topologies will be discussed as well as technologies and concepts used for providing secure communication channels, secure internetworking devices, intrusion detection systems, and firewalls. Hands-on exercises will be used to reinforce the concepts. 3 hrs. lecture, 2 hrs. lab/wk.

IT 252
Firewall Security (4 CR)
Prerequisite: IT 247

This course is designed to teach students how to protect local area networks (LANs) using firewall security devices. It focuses on the overall security process based on a security policy with an emphasis on hands-on skills. It covers the basic functionality of the Cisco Private Internet Exchange (PIX) product family. Students will learn specific PIX configurations and settings designed to maximize security. This course is also intended to prepare students to pass the Cisco Secure PIX Firewall Certification exam. 3 hrs. lecture, 2 hrs. lab/wk.

IT 253
Advanced Switching (3 CR)
Prerequisite: IT 247

This course provides advanced instruction of Cisco switches found in medium to large networks. It introduces students to the deployment of the state-of-the art campus Local Area Networks (LAN). The course focuses on the selection and implementation of the appropriate Cisco Internetworking Operating System (IOS) services to build reliable scalable multilayer-switches LANs. Students will develop skills with Virtual LANs (VLAN), Virtual Trunking Protocol (VTP), Spanning Tree Protocol (STP), inter-VLAN routing, redundancy, Quality of Service (QoS) issues, campus LAN security, and transparent LAN services.

IT 254

Remote Access Networks (3 CR)

Prerequisite: IT 247

This is an advanced course that covers the techniques and features for enabling or enhancing Wide Area Network (WAN) and remote access solutions. It focuses on using one or more of the available WAN dialup or permanent connection technologies for remote access between enterprise sites. This course includes asynchronous modem connections, Point-to-Point Protocol (PPP) features, and network security using Virtual Private Networks (VPNs). Students will apply common remote access solutions including ISDN Basic Rate Interface and Primary Rate Interface (BRI and PRI), Dial-On-Demand Routing (DDR), Frame Relay, dial backup, Quality of Service (QOS), and Authentication Authorization Accounting (AAA). 3 hrs. lecture, 2 hrs. lab/wk.

IT 255
Wireless Security (4 CR)

Prerequisite: IT 247

This course is designed to teach the student how to build, maintain and configure security on a Wireless Local Area Network (WLAN). It provides the student with hands-on projects to reinforce WLAN concepts from LAN cabling and other information technology and electronics courses. Upon completion of this course, students should be able to design, document and troubleshoot the security plan and operation of a WLAN. This course is also intended to prepare the student to pass the Cisco Wireless LAN Certification exam. 3 hrs. lecture, 2 hrs. lab/wk.

IT 271
Information Technology Internship I (3 CR)

Prerequisites: IT 210 or IT 221 or IT 230 and approval of the assistant dean

This course affords the student the opportunity to apply classroom knowledge to an actual work environment. It will provide advanced information technology students with appropriate on-the-job experience with area employers, under instructional oversight, which will promote the student's career goals. Student will work a total of 300 hours a semester at an approved job site.

IT 272
Information Technology Internship II (3 CR)

Prerequisites: IT 271 and approval of the assistant dean

This course is a continuation of IT 271, Internship I. It provides the student additional opportunity to apply classroom knowledge to an actual work environment. Students will work a total of 300 hours per semester at an approved job site.

Interactive Media (CIM)

CIM 130
Interactive Media Concepts (2 CR)

This survey course introduces students to the interactive media field. Topics to be covered include the definition of interactive media, the basic stages of interactive media creation and project management fundamentals. Current and future trends in interactive media will also be covered. 2 hrs. lecture/wk.

CIM 133
Screen Design (4 CR)
Prerequisite: CDTP 135

This course will cover fundamental visual principles and the creation of graphic elements, as well as the layout of those visual elements, for the computer screen. Visual perception, composition, color and typographic principles will be covered as applicable to presentation graphics, Web graphics, CD-ROM and kiosk graphics. Cross-platform issues will be addressed. This course is intended to provide nondesigners with fundamental visual literacy. 3 hrs. lecture, 2 hrs. lab/wk.

CIM 135
Digital Imaging and Video (3 CR)

Prerequisite: CDTP 135 Recommended: PHOT 121

This course provides an introduction to electronically mediated photography, including digital video. The course covers basic concepts of photographic communication and design. The course covers basic techniques of electronic photography, including operation of input devices, two-dimensional and time-based computer imaging and digital video production software programs and output devices. Recommended prior courses are Fundamentals of Photography and Introduction to Photoshop. 6 hrs. integrated lecture, studio/wk.

CIM 140
Interactive Media Assets (4 CR)

Prerequisites: CDTP 135 and CDTP 145 and CWEB 105 and CWEB 130
Prerequisite or corequisite: CIM 130

This course explores the creation, acquisition and management of assets for use in the development of interactive media. Assets to be covered include digital graphics, digital sound, digital video and computer-based animation. 3 hrs. lecture, 2 hrs. lab/wk.

CIM 154
Interactive Authoring I: Director (4 CR)

Prerequisite: CIM 130 and Prerequisite or corequisite: CIM 140

This course will provide a hands-on approach to authoring/programming. Upon completion of this course, the student should be able to produce a Director interactive media or Internet presentation that includes text, graphics, sound, movies and animation. The student should have the skills needed to create both a linear presentation and an interactive presentation. Navigational strategies for CD-ROM and Internet will be discussed. 3 hrs. lecture, 2 hrs. lab/wk.

CIM 156
Interactive Authoring I: Web (4 CR)

Prerequisite: CIM 130 Prerequisite or corequisite: CIM 140

This course will focus on the front-end aspects of Web design, HTML, authoring, graphics production and media development. The course will introduce concepts about the way the World Wide Web works, which will orient students to the peculiarities of the Web and introduce them to new technologies that are destined to have an important effect on the Web's future but are currently in various stages of development. Students will examine specifications for each project, carefully analyze individual sites and, as a class, establish a set of criteria that define what works, what doesn't and why. 3 hrs. lecture, 2 hrs. lab/wk.

CIM 200
Interactive Communication Form (3 CR)

Prerequisite or corequisite: CIM 130

This course will focus on concepts and forms of human communication

historically, currently and in the future of our culture. Immediated and mediated forms of communication, such as lecture, telephony, television, print and computer interaction, will be explored. Particular attention will be given to how communication forms affect content. Emphasis will be on the integration of communication forms as demonstrated by interactive media applications. 3 hrs. lecture/wk.

CIM 230
Interactive Media Development (4 CR)

Prerequisite: CIM 154 or CIM 156 and Corequisite: CIM 250

The course will provide a conceptual as well as a hands-on exploration of the development process for interactive media. Information design, interaction design and presentation design will be equally emphasized. Students produce a series of projects starting with the use of text and graphics and building toward more complex projects employing animation and video. 3 hrs. lecture, 2 hrs. lab/wk. This course is taught in the fall semester.

CIM 235
Advanced Digital Video (3 CR)

Prerequisite: CIM 135

This course provides advanced instruction in the production and applications of digital video. The course covers advanced concepts and techniques in video design and production, from the initial preproduction scripts and storyboards through actual shooting to nonlinear editing, mastering and output. The emphasis is on in-depth, advanced, practical experience in producing professional-level video products for a variety of applications, including education, corporate, documentary and entertainment. 6 hrs. integrated lecture studio/wk.

CIM 250
Interface Design (4 CR)

Prerequisite: CIM 154 or CIM 156 Corequisite: CIM 230

This course will specifically focus on the issues and complexity of interface design for interactive media applications. Students are provided an in-depth study of the use of the building blocks of interface design: backgrounds, windows and panels, buttons and controls, text, images, sound, video and animation. Through readings, critiques, exercises and discussions, students will explore what makes the interface of an interactive media application successful. 3 hrs. lecture, 2 hrs. lab/wk. This course is taught in the fall semester.

CIM 254
Interactive Authoring II: Director (4 CR)

Prerequisite: CIM 154

At completion of this course, the student should be able to create Director applications using Director's scripting language and the Internet capabilities of Macromedia Director. The primary emphasis of the course is hands-on experience with the Lingo, Behaviors, Shockwave and scripts of Director. During the course, students will be involved in learning advanced Lingo. 3 hrs. lecture, 2 hrs. lab/wk.

CIM 270
Interactive Media Project (4 CR)

Prerequisites or corequisites: CIM 200 and CIM 230 and CIM 250

This project-oriented course will require students to actively participate in a group interactive media project, which will require each student to analyze the problem;

write a project proposal; design, produce and gather assets for the project; prototype and create a project; and test and evaluate the final project. 3 hrs. lecture, 2 hrs. lab/wk. This course is taught in the spring semester.

CIM 272
Interactive Media Internship (1 CR)

Prerequisite: facilitator approval required

Students will work in an approved training situation under instructional supervision. The internship is designed to give the student the opportunity to use the skills learned in the interactive media program. Student interns will be required to complete a minimum of 180 hours of on-the-job training. ANI 272 and CIM 272 are the same course; do not enroll in both.

CIM 273
Career Preparation (4 CR)

Prerequisites: CIM 230 and CIM 250 and Prerequisite or corequisite: CIM 270

This course will provide interactive media majors instruction in the presentation of his or her work in a digital portfolio format of professional quality. A printed and written resume will be produced. Self-promotion, networking, job searches and interview skills will also be covered. 3 hrs. lecture, 2 hrs. lab/wk. CIM 273 is the same course as ANI 273; do not enroll in both. This course is taught in the spring semester.

Interior Design (ITMD)

ITMD 121
Interior Design/Tech Prep (3 CR)

This course provides basic, introductory knowledge about interior design. Upon successful completion of this course, the student should understand the significance of interior design, complete projects using the elements and principles of design and color theory in interior spaces, use space planning skills to arrange furniture on a floor plan, and present the floor plan and its decorative scheme. 3 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $75 to $100.

ITMD 123
Space Planning (3 CR)

Prerequisites: ITMD 121 with "C" or higher and DRAF 164 with a grade of "C" or higher or DRAF 261 with "C" or higher

This is an advanced course focusing on space planning. Upon successful completion of this course, the student should be able to demonstrate an advanced level of furniture arrangement on a floor plan. 4 hrs. integrated lecture and lab/wk. Note: the prerequisites ITMD 121 and either DRAF 164 or DRAF 261 all require a grade of "C" or higher.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $50.

ITMD 125
Interior Textiles (3 CR)

This course is a comprehensive study of textiles used in interior design. Upon successful completion of this course, the student should be able to differentiate fibers and textiles according to their specific characteristics and to select fibers and interior textiles for specific applications. Specific course content includes

properties and characteristics of natural and man-made fibers; construction methods; and various finishing processes, such as weaving, knitting, felting, printing and dyeing. The course will concentrate on textiles designed for interior applications. 2 hrs. lecture, 2 hrs. lab/wk

ITMD 127
Elements of Floral Design (1 CR)

This course provides in-depth knowledge and hands-on application of floral design. Upon successful completion of this course, the student should be able to use the principles of floral design, develop a proficiency in the techniques of line and mass arrangements, possess a greater appreciation for flowers and other plant material, apply the mechanics and design considerations involved in working with silk and dried materials, and design and create silk and dried floral arrangements. 1.5 hrs. integrated lecture, lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100 to $150.

ITMD 129
Design Presentation (3 CR)

Prerequisites: ITMD 121 with a grade of "C" or higher and DRAF 164 with a grade of "C" or higher or DRAF 261 with a grade of "C" or higher

This is an intermediate course focusing on interior design presentation skills. Upon successful completion of this course, the student should be able to demonstrate visual communication skills including isometric, axonometric, oblique and perspective drawings as well as the use of rendering techniques and color to enhance drawings. Additionally the student should be able to organize, mount and verbally present storyboards to communicate the design concept. 2 hrs. lecture, 2 hrs. lab/wk. NOTE: The prerequisite of ITMD 121 and either DRAF 164 or DRAF 261 require a grade of "C" or higher.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $75 to $100.

ITMD 132
Materials and Resources (3 CR)

This course provides in-depth knowledge about materials used in interior spaces. Upon successful completion of this course, the student should be able to evaluate the quality of interior materials; demonstrate the ability to use catalogs and other product information resources; identify manufacturing and/or construction techniques used in products; use correct terminology to describe the various types of interior materials; and compare the design, use, durability and cost of materials. 3 hrs./wk. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.

ITMD 133
Furniture & Ornamentation/Antiquity to Renaissance (3 CR)

This course provides in-depth knowledge in the study of Western furniture and ornament. Upon successful completion of this course, the student should be able to analyze and compare the furniture, ornamentation, design motifs and textiles of historical periods from antiquity to the Renaissance. Additionally, the student should be able to define the religious, political and social influences on the ornamentation and furnishings of each period. The student should also be able to identify the craftsmanship and materials used in the furniture of each historical period and correctly use vocabulary related to each era. 3hrs./wk.

ITMD 140
Window Treatments (1 CR)

Prerequisites: ITMD 121 and ITMD 125 both with a grade of "C" or higher and Prerequisite or Corequisite: ITMD 271 or ITMD 275 both with a grade of "C" or higher

This course provides comprehensive knowledge about draperies and window treatments and their construction. Upon successful completion of this course, the student should demonstrate the use of correct vocabulary relating to drapery and window treatments, explain the equipment used in the drapery industry, distinguish appropriate textiles and hardware for specific window treatments, measure for window treatments, and describe and select the proper suspension system for specific window treatments. The student will measure, select and present the proper style, fabric and suspension system for a specific window treatment. 1 hr./wk. NOTE: The prerequisites of ITMD 121 and ITMD 125 both require a grade of "C" or higher and Prerequisites or Corequisites ITMD 271 or ITMD 275 both require a grade of "C" or higher.

ITMD 143
Accessory Fundamentals (1 CR)

Prerequisite: ITMD 121 with a grade of "C" or higher

This course provides in-depth knowledge about accessories and accessory placement. Upon successful completion of this course, the student should be able to identify the various principles and elements of design as they relate to accessories. Students should be able to identify and explain the difference between functional and decorative accessories. Additionally, the student should demonstrate an understanding of the quality of different types accessories, how to identify the client's personal style, and how to successfully place different types of accessories. 1 hr. lecture/wk. NOTE: The prerequisite of ITMD 121 requires a grade of "C" or higher.

ITMD 145
Upholstered Furniture (1 CR)

Prerequisites: ITMD 121 and ITMD 125 both with a grade of "C" or higher and Prerequisite or corequisite: ITMD 271 or ITMD 275 both with a grade of "C" or higher

This course provides comprehensive knowledge about upholstery construction. Upon successful completion of this course, the student should be able to demonstrate the use of correct vocabulary relating to upholstery construction, explain the equipment used in the upholstery industry, identify appropriate textiles and materials for upholstery use, and describe the various suspension systems used in bench-constructed and mass-produced furniture. 1 hr./wk. NOTE: The prerequisites of ITMD 121 and ITMD 125 both require a grade of "C" or higher and Prerequisites and Corequisites ITMD 271 or ITMD 275 both require a grade of "C" or higher.

ITMD 147
Lighting Basics (1 CR)

Prerequisite: ITMD 121 with a grade of "C" or higher or FASH 125

This course provides general knowledge about lighting design and planning. Upon successful completion of this course, the student should be able to define and use vocabulary relating to lighting design and planning. The student should be able to recognize and explain lighting application and technology used in the lighting industry. 1 hr. lecture/wk. NOTE: The prerequisites are FASH 125 and ITMD 121 which requires a grade of "C" or higher.

ITMD 148
History of Asian Furniture and Design (2 CR)

Prequisite: Program Facilitator Approval

This course provides in-depth knowledge in the study of Asian furniture and

ornament. Upon successful completion of this course, the student will be able to analyze and compare furniture, ornamentation, design motifs and textiles of the Near East and Far East during historical periods from antiquity to modern times. The student should be able to identify the religious, political and social influences on the ornamentation and furnishings of each period. In addition, the student should be able to identify the craftsmanship and materials used in the furniture of each historical period and to demonstrate the use of correct vocabulary related to each era. 2 hrs./wk.

ITMD 149
Casegoods (1 CR)

Prerequisite: ITMD 121 with a grade of "C" or higher

Upon successful completion of this course the student should be able to understand various construction techniques, describe different wood species and their properties, and explain the best functional and decorative uses for each wood species. The student will apply principles and elements of design when selecting casegoods, describe care and repair of casegoods, and understand current trends in the casegood industry. 1 hr. lecture/wk. NOTE: The prerequisite ITMD 121 requires a grade of "C" or higher.

ITMD 150
Asian Rugs and Carpets (1 CR)

This course provides in-depth knowledge in the study of Asian carpets and rugs. Upon successful completion of this course, the students will be able to analyze and compare materials, ornamentation, design motifs and textiles of the Near East and Far East during historical periods from antiquity to modern times. The student should be able to identify the religious, political and social influences on the ornamentation and furnishings. In addition, the student should be able to demonstrate the use of correct vocabulary. 1 hr./wk.

ITMD 175
Advanced Floral Design (1 CR)

Prerequisite: ITMD 127

This course is a continuation of Elements of Floral Design and provides the student with a more comprehensive application of floral design for home interiors. Upon successful completion of this course, the student will be able to determine the appropriate floral design for an existing home, design a variety of florals for specific placement, work with other students on a specific project and learn how to buy and price interior floral designs. 1 hr. lecture, 1.5 hrs. lab/wk.

ITMD 180
Leadership in Design (1 CR)

Prerequisite: ITMD 123 with a grade of "C" or higher

Upon successful completion of this course, the student should be able to identify leadership skills necessary to have successful involvement in the field of interior design and professional organizations. Topics include group communication methods, time management, team-building skills, and organizing and facilitating meetings. Students desiring leadership opportunities in professional organizations are encouraged to enroll. 1 hr. lecture/wk. NOTE: The prerequisite of ITMD 123 requires a grade of "C" or higher.

ITMD 189
Sustaining Design (1 CR)

Upon successful completion of this course the student should be able to understand and explain the concepts, terminology and global issues of the various

ecological approaches to design and of the impact of design on the environment. The student will have an understanding of the cradle-to-cradle paradigm. Students will learn to identify the impact their selections will have on the environment and to consider ecological options when specifying products. 1 hr. lecture/wk.

ITMD 213
Lighting Design and Planning (3 CR)

Prerequisite: ITMD 121 with grade of "C" or higher or FASH 125

This course provides in-depth knowledge about lighting design and planning giving the student the ability to not only understand but to manipulate and create the lighting plan. Upon successful completion of this course, the student should be able to define and use vocabulary relating to lighting design and planning and to recognize and explain lighting application and technology used in the lighting industry. Additionally, the student should be able to identify and describe proper fixtures and equipment for lighting applications and demonstrate skills in selecting proper lighting designs for specific applications. 3 hrs. lecture/wk. NOTE: The prerequisite of ITMD 121 requires a grade of "C" or higher or FASH 125.

ITMD 219
Issues in Interior Design (3 CR)

Prerequisite: ITMD 221 with a grade of "C" or higher

This course is designed to educate the student on the current issues that affect the interior design profession such as environmental design, green/sustainable design and Universal Design. These topics may vary based on current industry concerns. Upon successful completion of this course, the student should be able to identify, explain and analyze ramifications to the industry that arise from the economy, politics and social culture. 3 hrs. lecture/wk. NOTE: The prerequisite of ITMD 221 requires a grade of "C" or higher.

ITMD 221
Residential Design (3 CR)

Prerequisites: DRAF 264 with a grade of "C" or higher and ITMD 123 with a grade of "C" or higher and ITMD 129 with a grade of "C" or higher or ITMD 122 with a grade or "C" or higher

This is an advanced course focusing on residential design. Upon successful completion of this course, the student should be able to demonstrate an advanced level of space planning and furniture arrangement on a floor plan. In addition, the student will develop color schemes that will solve specific assigned interior design problems and demonstrate the ability to coordinate fabrics, colors, texture, patterns and finishes in a complete floor plan for a residential unit. The student will produce floor plans and additional views enhanced by color and shadow. 2 hrs. lecture, 3 hrs. lab/wk. NOTE: The prerequisites of DRAF 264 and ITMD 123 and either ITMD 129 or ITMD 122 all require a grade of "C" or higher.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $50.

ITMD 223
Commercial Design (3 CR)

Prerequisite: DRAF 264 with a grade of "C" or higher

This is an advanced course focusing on contract design. Upon successful completion of this course, the student will be able to define and use vocabulary related to contract design, identify and use proper architectural symbols common to contract floor plans and elevations, and explain the differences between residential and contract design. Additionally, the student should be able to demonstrate the skills necessary to convert, redesign and create contract design space; explain the concept of open office planning; and compare and analyze the costs and benefits of open planning versus closed planning. 2 hr. lecture, 3 hrs. lab/wk. NOTE: The prerequisite of DRAF 264 requires a grade of "C" or higher.

Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $50.

ITMD 225
Interior Textiles II (3 CR)

Prerequisite: ITMD 125 with a grade of "C" or higher

This course is an advanced study of textiles used in interior design. Upon successful completion of this course, the student should be able to differentiate fibers and textiles according to their specific characteristics and to select fibers and interior textiles for specific applications. The course concentrates on textiles designed for residential and contract applications. 2 hrs. lecture 2 hrs. lab/wk. NOTE: The prerequisite of ITMD 125 requires a grade of "C" or higher.

ITMD 231
Furniture & Ornamentation Renaissance to 20th Century (3 CR)

This course provides in-depth knowledge in the study of Western furniture and ornament. Upon successful completion of this course, the student should be able to analyze and compare furniture, ornamentation, design motifs and textiles of historical periods from the Renaissance to the 20th century. Additionally, the student should be able to define the social, religious and political influences on the ornamentation and furnishings of each period. The student should also be able to identify the craftsmanship and materials used in the furniture of each historical period and correctly use vocabulary related to each era. 3 hrs./wk. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.

ITMD 234
Kitchen and Bath: Planning and Design (3 CR)

Prerequisites: DRAF 264 with a grade of "C" or higher and either ITMD 122 with a grade of "C" or higher or ITMD 123 with a grade of "C" or higher

This is a comprehensive course in kitchen and bath design and planning. Upon successful completion of this course, the student should be able to define and use proper vocabulary related to kitchen and bath design and construction, identify and use proper architectural symbols common to kitchen and bath plans and elevations, state the space relationships required for proper kitchen and bath usage, convert to metric measurements, and draw a kitchen and bath floor plan and elevation. 2 hrs. lecture, 1 hr. lab/wk. NOTE: The prerequisite of DRAF 264 and either ITMD 122 or ITMD 123 all require a grade of "C" or higher.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $50 to $75.

ITMD 237
Capstone: Merchandising and Entrepreneurship (2 CR)

Prerequisite: Approval of program facilitator

This course is designed as a capstone for the Interior Merchandising and Interior Entrepreneurship programs. It should be taken in conjunction with or after completion of the final interiors studio course or in the graduating semester. Upon successful completion of this course, the student should be able to select and rework portfolio materials for maximum visual potential and appeal. In addition, the student will prepare a resume, conduct a job search, and present written and oral presentations based on resource and product files from other classes. 2 hrs. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $75 to $100.

ITMD 239

Capstone: Interior Design (2 CR)

Prerequisite: Program Facilitator Approval

This course is designed as a capstone for the Interior Design Program. It should be taken in conjunction with or after completion of the final interiors studio course or in the graduating semester. Upon successful completion of this course, the student should be able to select and rework portfolio materials for maximum visual potential and appeal. In addition, the student will prepare a resume, conduct a job search, and present written and oral presentations based on resource and product files from other classes. 2 hrs. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $75 to $100.

ITMD 250
20th Century Designers (1 CR)

This course provides in-depth knowledge in the study of the 20th-century designers. Upon successful completion of course, the student should be able to analyze and compare furniture, ornamentation, design motifs and textiles of various 20th-century designers. Recognition of periods and individual styles is stressed. The student will have an opportunity to study a specific designer in depth. 1 hr lecture /wk.

ITMD 271
Budgeting and Estimating (3 CR)

Prerequisites: ITMD 121 with a grade of "C" or higher and ITMD 125 with a grade of "C" or higher and MATH 120 or higher with a grade of "C" or higher

Upon successful completion of this course, the student should be able to demonstrate a business-like approach toward job and work, explain and list methods of pricing interior design/merchandising materials and services, measure accurately for materials, utilize business math in interior design/merchandising applications, and accurately compute cost in cases. 3 hrs. lecture/wk. NOTE: The prerequisites of ITMD 121 and ITMD 125 and MATH 120 or higher all require a grade of "C" or higher.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $20.

ITMD 273
Interiors Seminar: Practices and Procedures (2 CR)

Prerequisite: ITMD 122 with a grade of "C" or higher or ITMD 123 with a grade of "C" or higher

Upon successful completion of this course, the student should be able to demonstrate the use of proper interior design industry terminology, appropriate business forms and contracts, define the types of business legal structure, and solve business organizational and ethical problems through use of case studies. 2 hrs./wk. NOTE: The prerequisite of ITMD 122 or ITMD 123 both require a grade of "C" or higher.

ITMD 282
Interiors Internship I (1 CR)

Prerequisite: ITMD 121 with a grade of C or higher

Upon successful completion of this course, the student should be able to apply classroom knowledge to an actual work situation. This course consists of supervised work experience in an approved training situation. It is designed to provide practical experience in the interiors industry. A minimum of 15 hours each week on-the-job training is required. NOTE: The prerequisite of ITMD 121 requires a grade of "C" or higher.

ITMD 284
Interiors Internship II (1 CR)
Prerequisites: ITMD 121 with a grade of C or higher and ITMD 282 with a grade of C or higher

Upon successful completion of this course, the student should be able to apply classroom knowledge to an actual work situation. This course consists of supervised work experience in an approved training situation. It is designed to provide practical experience in the interiors industry. A minimum of 15 hours each week on-the-job training is required. NOTE: The prerequisite of ITMD 121 and ITMD 282 both require a grade of "C" or higher.

ITMD 295
Field Study: Design and Merchandising (3 CR)
Prerequisites: ITMD 121 and approval of the program facilitator

This travel-for-credit course consists of visits to manufacturing plants, a market showroom and a merchandise mart in a major market city.

ITMD 296
Interior Design: the Orient (3 CR)

Upon successful completion of this course, the student should be able to recognize and identify Asian furniture pieces and accessories from different countries; define and use vocabulary common to the art periods; and compare and contrast furniture and accessory pieces observed in museums, temples, homes and antique stores. This course will include five 3-hour pre-departure seminars followed by a three-week field trip to Japan, Hong Kong and Thailand.

Interpreter Training (INTR)

INTR 122
Intermediate American Sign Language I (3 CR)
Prerequisite: INTR 121 or ASL 121 or FL 181 with a grade of "C" or higher and Corequisite: Students accepted in the interpreter training program must take corequisites of INTR 130 and INTR 126 and (INTR 147 or ASL 145) and (INTR 145 or ASL 145) all with a grade of "C" or higher

This course will focus on the development of intermediate American Sign Language communication skills. Comprehension skills and linguistic features of the language taught in context will be emphasized. 6 hrs.lecture-lab/wk. The daytime sections only are open to students in the interpreter training program. INTR 122, FL 270 and ASL 122 are the same courses; only enroll in one. Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

INTR 123
Intermediate American Sign Language II (3 CR)
Prerequisite: INTR 122 or ASL 122 or FL 270 with a grade of "C" or higher and Corequisite: For students accepted in the interpreter training program: INTR 131 and INTR 135 and INTR 242 and INTR 248 all with a grade of "C" or higher

The course will continue study of intermediate American Sign Language. It is designed to develop further intermediate communication skills in American Sign Language. Information about the linguistic and cultural features will be included in the context of language learning experiences. 6 hrs. integrated lecture-lab/ wk. The daytime sections are open only to students in the interpreter training program. INTR 123, FL 271 and ASL 123 are the same courses; only enroll in one. Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks.

$10 to $20.

INTR 126
Classifiers in American Sign Language (2 CR)

Prerequisites: INTR 121 or ASL 121 with grade of "C" or higher and acceptance in the interpreter training program Corequisites: (INTR 122 or ASL 122) and INTR 130 and (INTR 147 or ASL 147) and (INTR 145 or ASL 145)

The course will provide an in-depth analysis of classifiers in ASL through discussion and demonstration of the three different categories of classifiers in ASL: representative classifiers (noun and its action), descriptive classifiers (size-and-shape, extent, perimeter, pattern and texture), and instrumental classifiers (manipulative and handle). Students will learn to comprehend and produce classifiers from all three categories.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $400 to $500.

INTR 130
Survey of the Interpreting Profession (3 CR)

Prerequisites: INTR 121 or FL 181 or ASL 121 with a grade of "C" or higher and acceptance in the interpreter training program Corequisites: (INTR 122 or ASL 122) and INTR 126 and (INTR 147 or ASL 147) and (INTR 145 or ASL 145) all with a grade of "C" or higher

This course provides an introduction to interpreting as an occupation. Students will come to understand interpersonal communication skills, professional ethics, parameters of responsibilities, community resources and legal ramifications as they relate to the interpreter. 3 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $50.

INTR 131
Interpreting Preparation Skills (2 CR)

Prerequisites: INTR 130 with a grade of "C" or higher and acceptance into the interpreter training program Corequisites: INTR 123 and INTR 135 and INTR 242 and INTR 248 all with a grade of "C" or higher

This course provides students with a foundation in the theory of interpretation. Students will explore the Colonomos Model of interpreting and apply this model by first using pre-interpreting skills in isolation. Then students will progress from producing translations to interpreting consecutively. 4 hrs. integrated lecture-lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $50.

INTR 135
Intro to American Sign Language Linguistics (3 CR)

Prerequisite: INTR 122 or ASL 122 or FL 270 with a grade of "C" or higher Corequisites: for students accepted in the interpreter training program enroll in: INTR 123 and INTR 242 and INTR 131 and INTR 248 all with a grade of "C" or higher

This course introduces students to the structural and grammatical principles of ASL. Students will explore concepts of equivalency between English and ASL 3 hrs. lecture/wk. The daytime sections are open only to students in the interpreter training program. INTR 135 and ASL 135 are the same course; do not enroll in both.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $50.

INTR 145
Introduction to the Deaf Community (3 CR)

Prerequisite: Acceptance to interpreter training program and Prerequisite or corequisite: ANTH 125 and SPD 120 for Interpreter Training Program Corequisites for Interpreter Training Prog: INTR 122 and INTR 126 and INTR 130 and INTR 147 all with a grade of "C" or higher Note: Prerequisite or corequisite of INTR 120 or ASL 120 or FL 180 required for students in the American Sign Language Studies Certificate

This course will prepare students to develop and recognize the diversity within the Deaf Community, significant events and figures in Deaf History, and basic norms and values of Deaf Culture. Students will examine and compare Deaf Culture and hearing culture in America. The daytime sections are open only to students in the interpreter training program. 3 hrs./wk. INTR 145 and ASL 145 are the same course; do not enroll in both.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $50.

INTR 147
Fingerspelling I (2 CR)

Prerequisite: INTR 121 or FL 181 or ASL 121 with a grade of "C" or higher and Corequisites: For students accepted in the interpreter training program, enroll in: (INTR 122 or ASL 122) and INTR 126 and INTR 130 and (INTR 145 or ASL 145) all with a grade of "C" or higher

Students will work on developing beginning expressive and receptive fingerspelling skills based on word recognition principles. 1 hr. lecture, 2 hrs. lab/wk. The daytime sections are open only to students in the interpreter training program. INTR 147 and ASL 147 are the same course; do not enroll in both.

INTR 150
American Sign Language Literature (3 CR)

Prerequisite: INTR 122 with a grade of "C" or higher

This course will provide introduction, discussion, and demonstration of literature in American Sign Language (ASL). The literature involves ASL Poetry, ASL Storytelling/Narratives, Deaf Humor, Deaf Folklore and other genres that have been passed on from one generation to another by culturally deaf people. Students will receive, analyze and retell a variety of ASL literature. 3 hrs. lecture/wk. INTR 150 and ASL 150 are the same course; do not enroll in both.

INTR 181
Interpreting Practicum I (1 CR)

Prerequisite: INTR 130 with a grade of "C" or higher Corequisites: (INTR 145 or ASL 145) and INTR 223 and INTR 226 and INTR 250 all with a grade of "C" or higher

Students will observe skilled interpreters in various interpreting situations in a variety of settings during the semester. 2 hrs. lab, field work/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $50.

INTR 223
Advanced American Sign Language (3 CR)

Prerequisite: INTR 123 or ASL 123 or FL 271 with a grade of "C" or higher Corequisites: INTR 250 and INTR 226 and INTR 181 all with a grade of "C" or higher

This course is a continuation of Intermediate American Sign Language II. Students will learn about culturally significant topics related to the Deaf community, more complex ASL grammatical features and conversational skill

development. Comprehension skills and linguistic features of ASL will be taught to a variety of contexts in simulated, typical interaction. Students will have opportunities to utilize what they learn about advanced ASL through class activities, dialogues, short stories, general conversations and class discussions. Sign comprehension and production skills will be emphasized. This course meets for six hours of internship/week.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $25.

INTR 226
Specialized and Technical Vocabulary (2 CR)

Prerequisite: INTR 123 or ASL 123 with a grade of "C" or higher Corequisites: INTR 181 and INTR 250 and INTR 223 all with a grade of "C" or higher

This course will expand the interpreter training students' vocabulary related to specialized and technical contexts. Students will discuss vocabulary use in a variety of contexts to include socially restricted terms and phrases Deaf people use; colloquialisms; varying registers; terminology in medical, mental health, religion, sex, drugs; and strong language in ASL. Students' development of comprehension and production skills in common formal and informal settings will be emphasized. Students will also discuss Signing Exact English (SEE II) and the differences from American Sign Language (ASL). 3 hrs. integrated lecture-lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $50.

INTR 242
Fingerspelling II (2 CR)

Prerequisite: INTR 142 with a grade of "C" or higher Corerequisites: INTR 123 and INTR 131 and INTR 135 and INTR 248 all with a grade of "C" or higher

This course focuses on continued development of expressive and receptive fingerspelling skills based on word and phrase recognition and expression. 1 hr. lecture, 2 hrs. lab/wk.

INTR 248
Deaf Community Ethnography (3 CR)

Prerequisite: INTR 145 or ASL 145 with a grade of "C" or higher Corequisites: (INTR 123 or ASL 123) and INTR 131 and (INTR 135 or ASL 135) and INTR 242 all with a grade of "C" or higher

This advanced course will provide students the opportunity to explore power and oppression issues experienced by d/Deaf people. Specific attention will be given to society's views of the d/Deaf community and the influence of various media on these views. 3 hrs. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $25.

INTR 250
Interpreting I (6 CR)

Prerequisite: INTR 131 with a grade of "C" or higher Corequisites: INTR 181 and INTR 223 and INTR 226 all with a grade of "C" or higher

In this introduction to interpreting principles, emphasis will be on English-to-ASL and ASL-to-English skills. Students will participate in sequential drills and apply these skills in class. 2 hrs. lecture, 8 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $50.

INTR 251

Interpreting II (2 CR)

Prerequisite: INTR 250 with a grade of "C" or higher Corequisites: INTR 262 and INTR 282 and AAC 150 all with a grade of "C" or higher

A description is not available for this course.

Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $50.

INTR 262
Seminar on Interpreting (3 CR)

Prerequisite: INTR 250 with a grade of "C" or higher Corequisites: INTR 251 and INTR 282 and AAC 150 all with a grade of "C" or higher

This course provides students with knowledge of stress management as applied to both the physical demands and mental conditions of sign language interpreting. Students will learn and apply decision-making techniques in regard to the Interpreter (RID) Code of Ethics. Additionally, the course provides students with knowledge of career development theory, career decision-making and the job-search process. 3 hrs. lecture/wk.

INTR 282
Interpreting Practicum II (6 CR)

Prerequisite: INTR 181 with a grade of "C" or higher Corequisites: INTR 251 and INTR 262 and AAC 150 all with a grade of "C" or higher

This course provides students with an opportunity to observe and interpret in an off-site setting with the supervision of an experienced interpreter. Students will actively engage in discussions relating to the difficulties and rewards of working in a realistic interpreting environment. The fieldwork totals 270 hours a semester.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $50.

Journalism/Media Communication (JOUR)

JOUR 120
Mass Media and Society (3 CR)

Via books, newspapers, magazines, recordings, movies, radio, television, new technologies and the related areas of advertising and public relations, each of us is exposed to and affected by the mass media on a daily basis. This course will increase student awareness of the various media and help them understand the influence of the media on their daily activities, beliefs, decisions and goals. As a result, the student will become a more astute critic of the messages delivered by the mass media. 3 hrs./wk.

JOUR 122
Reporting for the Media (3 CR)

Reporting for the Media is structured for students interested in the basics of writing and reporting. Writing for print, broadcast, and online media are included. Information gathering and story writing are conducted under strict deadlines to prepare students for a professional position. Basic news writing and style principles will be gained by writing stories for JCCC student media, including the student newspaper, The Campus Ledger. 3 hrs./wk.

JOUR 125
Fundamentals of Advertising (3 CR)

Fundamentals of Advertising introduces the student to the contemporary

advertising process. Research, planning, creativity, production, media placement and sales are discussed, along with individual mediums and their forms, functions and roles in society. Major emphasis is placed on the areas of advertising/marketing research, planning and creativity, including integrated marketing communications. 3 hrs./wk.

JOUR 127
Introduction to Broadcasting (3 CR)

This course serves as a general introduction to students interested in pursuing knowledge of or a career in radio and television broadcasting. The course includes a study of the industry's development, its form and function, job responsibilities, basic production techniques, audience measurement, FCC regulations and ethics. Class time will include discussion of current trends and issues in the field, with students developing an understanding of broadcast media. Productions in the college's audio booth and TV facilities offer an opportunity to experience the field of broadcasting. These experiences will allow students to evaluate broadcasting as a possible career choice. 3 hrs./wk.

JOUR 130
Principles of Public Relations (3 CR)

This course is intended to provide the student with an overview of the history, principles and real-life functions of public relations. Public relations is a rapidly growing field. The ability to work with the public is essential in business, education, health care and numerous other fields. This course is designed to give students the background to develop their PR skills, both verbally and in writing. 3 hrs./wk.

JOUR 202
Broadcast Performance (3 CR)

Students will learn how to improve their speaking voices and body language as well as the techniques necessary to effectively communicate messages through basic announcing skills. Interviewing, radio and television news, and commercial announcing are some of the topics covered in this course, which will allow students to polish their skills through performances in the college's television studio and audio booth. 3 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $15.

JOUR 222
Advanced Reporting (3 CR)
Prerequisite: JOUR 122

This is an advanced newsgathering and reporting course designed to sharpen the discernment, critical thinking and writing skills of student journalists. Specific English language rules and principles plus AP news writing style will be emphasized in the production of incisive, well-defined news stories, features, profiles, editorials and personal columns. Professional writings in various media will be examined and critiqued, and class members will have the opportunity to participate in hands-on editing and layout. Students will gain additional experience by preparing for and participating in news conferences and events, as well as interacting with area media writers. 3 hrs./wk.

JOUR 225
Promotional Writing (3 CR)
Prerequisite: JOUR 125 or JOUR 130

Students will study the elements of layout and copywriting for promotional purposes, with emphasis on advertising, direct mail and public relations writing. 3

hrs./wk.

JOUR 227
Basic Video Production (3 CR)

This course provides students with the fundamentals of video production. The goal is to teach students basic video techniques. Topics covered include technology, lighting, camera operations, audio and editing. Students will gain hands-on experience in the college's Media Production Services Department. 3 hrs. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $20.

JOUR 242
Advanced Broadcast Performance: TV (3 CR)

Prerequisite: JOUR 202

Students will produce news, feature, sports, and interview programming for airing on the college's cable station. The development of news packages, event reporting, breaking news, and extended coverage of news events will be included. Learning composure, focus, and detail in a team information-gathering operation will be emphasized. 3 hrs. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $10 to $15.

JOUR 247
Advanced Video Production (3 CR)

Prerequisite: JOUR 227

Students will direct, produce, and edit programming for distribution via the college's media outlets. Students will develop the technical skills involved in both studio production and field production as well as advanced skills in camera operations, multi-camera directing, lighting, audio production, and graphics. 3 hrs. lecture/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $20 to $30.

JOUR 271
Journalism Internship (3 CR)

Prerequisites: Instructor approval; completion of six credit hours in journalism/media communications at JCCC or another college with a minimum grade of "C" in those 6 hours.

A journalism/media internship allows students to gain work experience at an approved training center under staff supervision. Emphasis is on learning new skills related to a particular program or department at a media facility. Students may learn the application of writing techniques needed to produce and broadcast news, and produce advertising or public relations promotional copy. On-the-job training involves approximately 15-20 hrs./wk. by arrangement.

Land Surveying (KSRV)

KSRV 120

Introduction to Geographic Information Systems (3 CR)

Fundamental concepts of Geographic Information Systems (GIS), elements of GIS, analysis of spatial information real-world applications, map creation and analysis. Primary objective is to investigate interactive GIS applications rather than develop expert users. 3 hrs. lecture/wk.

KSRV 137

Subdivision Planning and Layout (3 CR)

Prerequisites: ENGR 180 MCC's and DRAF 152

Physical elements of designing land subdivisions including traffic circulation, sewer and drainage systems, soils and earthwork, grading considerations, erosion control, lot and block arrangement, topography and existing land use factors, geometric analysis, laws and codes affecting land subdivisions, environmental considerations, site analysis procedures. 3 hrs. lecture/wk. Courses taught at MCC-Longview Community College, 500 SW Longview Rd., Lee's Summit, MO. Students should contact the Longview coordinator of land surveying about the class meeting times and beginning and ending dates of classes. Call 816-672-2510.

KSRV 152

Engineering Graphics & CADD I (5 CR)

Prerequisite: MATH test

Introduction to engineering communications and basic computer-aided drafting/design (CADD). Emphasis on sketching, orthographic projections, drawing layout, drafting and CADD standards and conventions, dimensioning, sectioning, annotation and basic design principles. Foundation for computer aided drafting/design including file management, basic drawing commands, basic editing commands, layering conventions, blocks, dimensioning, polylines, sectioning, and drawing layout, hatching and plotting. 3 hrs. lecture, 4 hrs lab.

KSRV 220

GIS Database and Design (3 CR)

Prerequisite: KSRV 120

Concepts of Geo-database design and management in Geographic Information Systems (GIS), SQL statements, geographic data types and functions, data entry, techniques of geographic information structure and indexing, querying techniques, searches, and spatial analysis, creation and use of metadata real-world applications. 3 hrs. lecture

KSRV 235

Advanced Surveying (3 CR)

Prerequisite: ENGR 180

This course is a continuation of surveying skills introduced in ENGR 180 with an emphasis on advanced techniques beyond plane surveying such as geodetic control networks, practical astronomy, state plane coordinates, photogrammetry and the US Public Land Surveys System. 3 hrs. lecture/wk. Course taught at MCC-Longview Community College, 500 SW Longview Rd., Lee's Summit, MO. Students should contact the Longview coordinator of land surveying about the class meeting times and beginning and ending dates of classes. Call 816-672-2510.

KSRV 236

Boundary Control & Legal Principles (3 CR)

Prerequisite: ENGR 180

A study of the legal principles of land boundaries, section corners, area; interpretations of land descriptions; identification of land parcels; legal principles of boundary locations; and the United States land survey system. 3 hrs. lecture/wk. Course taught at MCC-Longview Community College, 500 SW Longview Rd., Lee's Summit, MO. Students should contact the Longview coordinator of land surveying about the class meeting times and beginning and ending dates of classes. Call 816-672-2510.

KSRV 237

Evidence and Procedures for Boundary Locations (3 CR)

Prerequisite: ENGR 180

A study of the land survey practice of retracement and creation of new parcels as it relates to the lot survey, the sectional survey, and the water boundary survey. Discussion of further standard business practice. 3 hrs. lecture/wk. Course taught at MCC-Longview Community College, 500 SW Longview Rd., Lee's Summit, MO. Students should contact the Longview coordinator of land surveying about the class meeting times and beginning and ending dates of classes. Call 816-672-2510.

KSRV 244

Fundamentals of GPS Surveying (3 CR)

Prerequisite: ENGR 180

The purpose of this course is to introduce the student and practitioner to the modern practices of satellite surveying with an emphasis on its origins in physical geodesy. 3 hrs. lecture

KSRV 269

Computer Aided Design II (4 CR)

Prerequisites: DRAF 152 or 169 (MCC)

Advanced Computer Aided Drafting and design (CADD). Advanced dimensioning and tolerancing techniques, attributes, advanced drawing aids, file management and basic customization. Effective use of model space, paper space and viewports. An introduction to three-dimensional wire frames, surface models, solid models and rendering tools. 2 hrs. lecture, 4 hs. lab/wk.

Leadership (LEAD)

LEAD 120
Leadership Development Seminar (3 CR)

This seminar course is designed for individuals who are interested in exploring the concepts of leadership using discussion, film, exercises and works of classic literature. The course will lead to the development of a personal leadership philosophy. 3 hrs./wk.

LEAD 130
Leadership & Civic Engagement (3 CR)

This course is designed to help students develop the capacity and confidence for leadership in their personal, professional, and civic activities. The course focuses on the study of essential components and concepts of leadership, examination of characteristics and skills of effective historic and contemporary leaders, analysis of leadership skills and responsibilities in community settings, identification of personal leadership goals and standards, and development of competencies needed to meet community and global challenges in an informed, innovative, and responsible manner. 3 hrs. lecture/wk.

Learning Communities (LCOM)

LCOM 125
Comp II/College Algebra (6 CR)

Prerequisite: ENGL 121 and` MATH 116 with a grade of "C" or better or appropriate score on the math assessment test - Note: College Algebra not available to students with a credit in MATH 173.

Students earn 6 transferable credit hours in general education requirements (3 for ENGL 122, Composition II, and 3 for MATH 171, College Algebra) WARM: Writing and Reading Mathematics is a learning community in which College Algebra and Composition II are integrated. Because most subjects are learned better when the learners write about them in their own language, in WARM, students write about math instead of taking tests. For instance, the first major paper involves defining a function and then describing and showing a number of ways of transforming the graph of the function. Students also read articles and book excerpts concerning language and math acquisition and innate math and language ability. In addition to their major papers on math topics, students write summaries, evaluations and syntheses of the readings and a research paper on a math-related topic.

LCOM 126
Composition II/U.S. Hist to 1877 - You MUST enroll in both 18393-ENGL 122 037 and 18768-HIST 140 007 (6 CR)

Prerequisite: ENGL 106 or appropriate placement score

Students earn 6 transferable credit hours in general education requirements (3 for ENGL 122, Composition II, and 3 for HIST 140, U.S. History to 1877). The philosophy behind joining these two courses together is to encourage students to think critically and write effectively with American history providing unifying themes. Writing instruction works best when students can focus sustained attention on one particular discipline. Writing in college and the workplace demands the ability to synthesize often conflicting information gathered from various sources. The discipline of American history provides ample opportunities for students to develop skills in composing various types of prose.

LCOM 127
Comp II/US Hist Since 1877 - You MUST enroll in both 85180 Engl 122 023 AND 85897 Hist 141 006 (6 CR)

Prerequisite: ENGL 106 or appropriate test score

Students earn 6 transferable credit hours in general education requirements (3 for ENGL 122, Composition II, and 3 for HIST 141, U.S. History Since 1877). The philosophy behind joining these two courses together is to encourage students to think critically and write effectively with American history providing unifying themes. Writing instruction works best when students can focus sustained attention on one particular discipline. Writing in college and the workplace demands the ability to synthesize often conflicting information gathered from various sources. The discipline of American history provides ample opportunities for students to develop skills in composing various types of prose.

LCOM 128
Art History: Renaissance to Modern/Furniture and Ornamentation: Renaissance to Modern (6 CR)

Students earn 6 credit hours (3 for ARTH 182, Art History: Renaissance/Modern, and 3 for ITMD 231, History of Furniture & Ornamentation/Renaissance-20th Century). NOTE: This learning community will meet on campus on Tuesdays and the Nelson-Atkins Museum of Art on Thursdays. In a traditional curriculum the history of the visual arts and architecture and the history of furniture and ornamentation are taught separately. In this learning community the two courses will be thoroughly integrated, thus providing students with a more accurate and meaningful way to learn. The class will meet once a week on the JCCC campus and once a week at the Nelson-Atkins Museum of Art in Kansas City, MO. Students, therefore will have the unique opportunity to study paintings, sculpture, furniture and the decorative arts from the Renaissance to the present using historically significant objects and art works. The class will involve such activities as oral presentations about art works in the museum and researching and writing about furniture and ornamentation. Students should have reliable transportation for the weekly drive to the Nelson-Atkins and should NOT enroll in an 11 a.m.-12:15 p.m. class.

LCOM 132
Composition II/Literature of Science Fiction (6 CR)

Prerequisite: ENGL 121

Students earn 6 credit hours (3 for ENGL 122, Composition II, and 3 for ENGL 243, Literature of Science Fiction). Students in this learning community will integrate their work in Composition II with their work in Literature of Science Fiction. Science fiction literature will be read and evaluated and will act as the subject matter for the writing inherent in the Composition II course objectives: we'll read and summarize science fiction stories and criticism; we'll critique and synthesize definitions of science fiction, its development, and its key concepts; and we'll explore the translation of text to screen.

LCOM 135
Social Issues:Appomattox-9/11 - You MUST enroll in both 11788 Soc 122 002 AND 14980 Hist 141 008 (6 CR)

Students earn 6 transferable credit hours in general education requirements (3 for SOC 122, Introduction to Sociology, and 3 for HIST 141, U.S. History Since 1877). Come explore American society in a learning community combining U.S. History since 1865 with Introduction to Sociology. Examine historical events with sociological eyes and understand how we created this society in which we live. We'll cover everything from A to Z: Appomattox to Z-Boys, Economics to Ecology, Family to Feminism, Media to the Moral Majority, Religions to Race, Social Class to Sexuality, Technology to Terrorism and Wealth to World War II.

LCOM 140
Selling Interior Products (6 CR)

Students earn 6 credit hours (3 for ITMD 132, Interior Products, and 3 for MKT 134, Professional Selling). In this learning community, students will learn in-depth product knowledge inclusive of specific features and benefits for numerous interior products. Additionally, students will learn how to utilize professional selling skills to sell interior products. Students will practice through role playing the steps of professional selling to illustrate the application of skill techniques in each step. 6 hrs. lecture/wk.

LCOM 142
Digital Literacies (6 CR)

Prerequisite: ENGL 106 or appropriate test score, Prerequisite for CWEB 105 is CWEB 101; Prerequisite for CWEB 115 is CWEB 105; Prerequisite for CWEB 130 CPCA 161 or CWEB 105 or CWEB 106

Students earn 6 credit hours (3 credit hours for ENGL 121, Composition I, 1 credit hour for CWEB 105, Intro to Web Pages: Dreamweaver; 1 credit hour for CWEB 115, Intermediate Web Pages: Dreamweaver and 1 credit hour for CWEB 130, Intro to Flash) (The CWEB courses would be taken in sequence throughout the semester.) This course combines the basic thinking skills and core competencies needed to thrive in the modern interactive environment. Students will enroll in ENGL 121 and CWEB 105, 115 and 130. Students will learn to transform "technobabble" into a language they can speak and understand. The course unlocks the power and potential of the Internet through a four-step inquiry process of awareness, analysis, reflection and action. This course helps students acquire an empowering set of "navigational" skills which include the ability to: 1) access information from a variety of sources; 2) analyze and explore how messages are "constructed" whether print, verbal, visual or multi-media; 3) evaluate media's explicit and implicit messages against one's own ethical, moral and/or democratic principles and 4) express or create their own messages using a variety of media tools.

LCOM 145
The Origins of Human Nature (6 CR)

Students earn 6 credit hours (3 for SOC 122 Intro to Sociology and 3 for PSYC 130 Intro to Psychology). Is it nature? Is it nurture? Are we who we are because of our genes or our environment, or both? Experience this Learning Community to learn what sociology and psychology have to say about human nature.

LCOM 147
Foundations of Modern Thought - You MUST enroll in both 16303-HIST 126 002 and 17765-SOC 122 011 (6 CR)

Students can earn 6 transferable credit hours in general education requirements (3 for HIST 126, Western Civilization: Readings and Discussions, and 3 for SOC 122, Intro to Sociology). Modern social issues and structures have their origins in classic thought and writings. This learning community connects the heritage of Western thought to our contemporary lives. Search for the connections to democratic thought, social inequalities, the creation and dissolution of community, and other foundational ideas of modern society.

LCOM 149
Interpersonal Commun/Navigation - You MUST enroll in both 13774-HPER 102 001 and 13772-SPD 120 014 (4 CR)

Students earn 4 transferable credit hours in general education requirements (3 for SPD 120, Interpersonal Communication, and 1 for HPER 102, Navigation 102). This 4-credit hour course combines principles of effective communication with helping students experience a successful transition to college life. Students will learn practical life management skills and how to enhance their academic skills, while navigating through the fundamental elements of the communication process. Students in this learning community class will learn principles of communication theory, terminology of human communication, and will apply communication skills in everyday life. Students will have an opportunity to learn about self, one's self-concept, and how we relate to our world through healthy interpersonal relationships. Students will participate in self-awareness and career exploration activities that involve campus and community resources. Through decision-making activities, conflict management role playing perception awareness drills, and mastering one's listening skills, students will view and appreciate communication in a new and improved way. Emphasis will be on interactive and participatory activities, that include journal writing, small and large group discussion, quizzes and self-assessment.

LCOM 151
America & Global Terrorism - You MUST enroll in both 82970-Admj 224 002 and 83199-Pols 124 351 (6 CR)

Students earn 6-credit hours (3 credit hours for POLS 124 American National Government and 3 for ADMJ 224 Introduction to Terrorism). This course gives an overall view of terrorism and the impact on the American political system. This is a Coordinated Studies Learning Community that includes three full hours of on-campus instruction plus online work. The American government course is a JCCC online offering of many years.

LCOM 153
Russian Literature/Russian Culture-You MUST enroll in both 18969-ENGL 130 006 and 17227-HUM 137 001 (6 CR)

Prerequisite: ENGL 121

Students earn 6-credit hours (3 credit hours for ENGL 130, Introduction to Literature and 3 credit hours for HUM 137, Introduction to Russian Culture). This course is an interdisciplinary survey of Russian culture and literature from the ninth century to the present day. Students examine representative examples of Russian fiction, poetry, drama, art, architecture, music, and dance within their cultural, historical and political context. Russian poetry, drama, and fiction do not stand in isolation from the culture that produced them and are most fruitfully studied and understood within that context.

LCOM 155

Intro to Algebra/Learn Strat Math - You MUST enroll in both 16087-MATH 115 013 and 19067-LS 174 002 (4 CR)

Prerequisite: MATH 111 with a minimum grade of "C" or appropriate score on the math assessment test

Students earn 4-credit hours (3 credit hours for MATH 115, Intro to Algebra and 1 credit hour for LS 174, Learning Strategies for MATH). This course facilitates mathematics learning by integrating thinking skills, study skills and mathematical content. The student will acquire life-long learning skills along with the basic skills of algebra. Students in this learning community class will learn problem solving, test taking and cognitive skills. They will apply these skills to their math textbook, homework assignments, class discussions and lectures. This course will also address emotions and attitudes which may block math learning and will offer strategies and techniques designed to overcome these feelings. MATH 115 may fulfill some certificate requirements, but will not fulfill degree requirements.

LCOM 157

Fund of Math/Learning Strat for Math-You MUST enroll in both 16074-MATH 111 004 and 19066-LS 174 001 (4 CR)

Prerequisite: Appropriate score on the math assessment test

Students earn 4-credit hours (3 credit hours for MATH 111 Fundamentals of Math and 1 credit hour for LS 174 Learning Strategies for Math). This course facilitates mathematics learning by integrating thinking skills, study skills and mathematical content. The student will acquire life-long learning skills along with fundamental math procedures and concepts. Students in this learning community class will learn problem solving, test taking and cognitive skills. They will apply these skills to their math textbook, homework assignments, class discussions and lectures. This course will also address emotions and attitudes which may block math learning and will offer strategies and techniques designed to overcome these feelings. Active learning will be encouraged through activities such as pair and share, journal writing, group discussions, self-assessments and collaborative learning.

LCOM 159

Intimate Relationships (6 CR)

Students earn 6-credit hours (3-credit hours for PSYC 130, Introduction to Psychology and 3-credit hours for SOC 131, Marriage and the Family). Does media imitate life or does life imitate media? Experience this learning community that combines Psychology and Marriage and the Family. Explore intimate relationships by applying sociological and psychological principles to episodes of classic shows such as "The Brady Bunch," and "Leave it to Beaver," as well as "Sex and the City," "Big Love," "Brokeback Mountain," and other popular shows. Find the keys to understanding the intimacies of contemporary relationships in this spicy course.

LCOM 161

Environmental Science/Comp II - You MUST enroll in both 19032-ENGL 122 042 and 19260-BIOL 130 009 (6 CR)

Prerequisite: ENGL 121

Students earn 6-credit hours (3 for ENGL 122, Composition II and 3 for BIOL 130, Environmental Science). Most Americans are only dimly aware of their immediate environment, and they know even less about how that place fits into, impacts, and is impacted by the global environment. Through reading, writing, and discussion, this course will raise students' awareness of where they are and help them become more conscious of their own place in and responsibility to the earth's ecology. This is a Coordinated Studies Learning Community that includes six full hours of on-campus instruction.

LCOM 163
Russia: Empire of East & West (5 CR)

Prerequisites: FL 141 or two years of high school Russian

Students earn 5-credit hours (2 for FL 246, Conversational Russian and 3 for HIST 160, Modern Russian History). This interdisciplinary Russian Conversation and Russian History course allows students to build their conversation skills with the vocabulary and grammar appropriate to describe and discuss the events, personalities and forces that shaped Russia as an Eurasian empire. The course requires 2-credit-hours weekly time and 3-credit-hours of online work.

LCOM 165
American Histories/Family Hist (6 CR)

Prerequisite: ENGL 106 or appropriate placement score or EAP 113 and EAP 117

Students can earn 6-credit hours (3-credit hours for ENGL 121, Composition I and 3-credit hours for HIST 141, U.S. Since 1877). U.S. History comes alive and makes more sense to people when they can see the big and little events in light of their own family's stories and memories. Not only will students study the expected topics (World War II, Viet Nam, the Great Depression), they will also explore the history of private life: what people ate, wore, worked and played at in any given era. At the same time, students will work on writing their own family's history. Instead of approaching Composition I as a series of unrelated essays, students will learn to write by focusing on how class readings and discussions related directly to their own and their family's lives. Through narrative, analysis, and research, they will create a document that their family can rely on and refer to over the course of generations to come.

LCOM 167
Society: From Cells to People (6 CR)

Students each 6 credit hours (3 for SOC 122 Intro to Sociology and 3 for BIOL 122 Principles of Biology) What is the difference between the society in the ant hill in your backyard and the society of a human megalopolis? Do bacteria have a society? Enroll in this Learning Community to study the parallels between biological and sociological structures. Learn how the processes of life evolve, function, change, and interact in the biological and social worlds. Examin the diversity within the unity of life.

LCOM 169
Intermediate Algebra/Learning Strategies for Math (4 CR)

Prerequisite: MATH 115 with a grade of "C" or higher or appropriate score on the math assessment test

This course is a combination of Intermediate Algebra (MATH 116 - 3 credit hours) and Learning Strategies for Mathematics (LS 174 - 1 credit hour). This course should be strongly considered for any student who has taken Intermediate Algebra repeated times without success. The student will acquire life-long learning skills along with fundamental math procedures and concepts. Students in this learning community class will learn problem solving, test taking and cognitive skills. They will apply these skills to their math textbook, homework assignments, class discussions and lectures. This course will also address emotions and attitudes which may block math learning and will offer strategies and techniques designed to overcome these feelings. Active learning will be encouraged through activities such as pair and share, journal writing, group discussions, self-assessments and collaborative learning. The course meets for approximately one hour more per week than a regular course.

Learning Strategies (LS)

LS 174
Learning Strategies for Math (1 CR)

Corequisite: Concurrent enrollment in a math course

This course teaches thinking and study skills specifically geared toward the learning of math. Students practice these skills on their math textbooks and homework assignments as well as in their math class discussions and lectures. This course also addresses feelings and attitudes that may block math learning and offers strategies and techniques designed to overcome these feelings. 1 hr./wk. Learning Strategies courses offer students opportunities to acquire the thinking and learning skills needed to be a successful learner, including reading textbooks, taking notes, organizing information and preparing for tests. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.

LS 176
Strategic Learning System (1 CR)

Corequisite: Concurrent enrollment in a college lecture course

In this course, students will learn a series of strategies for processing information from textbooks and lectures and strategies for studying for and taking tests. As the strategies are introduced, students apply them to the content of courses in which they are concurrently enrolled. Upon successful completion of the course, students will have developed a system for learning that can be adapted for use in any learning situation. 1 hr./wk. Learning Strategies courses offer students opportunities to acquire the thinking and learning skills needed to be a successful learner, including reading textbooks, taking notes, organizing information and preparing for tests.

LS 178
Memory Strategies (1 CR)

Corequisite: Concurrent enrollment in another college course

In this course, students learn a series of techniques to help them improve their retention and recall of information needed for success in college courses. These techniques provide a systematic approach to learning and remembering. Students immediately use the techniques to learn information from their other college courses. 1 hr./wk. Learning Strategies courses offer students opportunities to acquire the thinking and learning skills needed to be a successful learner, including reading textbooks, taking notes, organizing information and preparing for tests.

LS 186
Exam Strategies (1 CR)

Corequisite: Concurrent enrollment in at least one other college course in which exams are taken

This course offers students an opportunity to explore their own learning styles and to develop appropriate strategies for improving test performance through improved learning procedures. Emphasis will be on practical application of the learned strategies to courses in which the students are concurrently enrolled. 1 hr./wk. Learning Strategies courses offer students opportunities to acquire the thinking and learning skills needed to be a successful learner, including reading textbooks, taking notes, organizing information and preparing for tests.

LS 200
College Learning Methods (3 CR)

Corequisite: Concurrent enrollment in at least one academic college course

This course provides students with opportunities to develop skills and habits that will help them establish and maintain effective learning systems. Students first

learn and practice the learning methods in class and then apply these methods to appropriate situations in their other college coursework. The methods, which are based on valid learning and thinking principles, will help students meet the higher-level demands of the subjects encountered in college courses. 3 hrs./wk. Learning Strategies courses offer students opportunities to acquire the thinking and learning skills needed to be a successful learner, including reading textbooks, taking notes, organizing information and preparing for tests.

Legal Studies (LAW)

LAW 121
Introduction to Law (3 CR)

Upon successful completion of this course, the student should be able to explain the major substantive and procedural aspects of law. This course provides an overview of the legal system and knowledge of specific legal topics, including torts, criminal law, contracts, family law, business law, real estate and probate. This course is a requirement for applying to the paralegal program and for completion of the legal nurse consultant program. 3 hrs. lecture/wk.

LAW 123
Paralegal Professional Studies (1 CR)

Upon successful completion of this course, the student should be able to explain the legal assistant profession. Topics will include paralegal licensing, certification, education, employment and professional ethics. The course is required for students seeking admission to the paralegal program. 1 hr. lecture/wk.

LAW 131
Legal Research (3 CR)

Prerequisite or corequisite: Legal nurse consultant students- LAW 225 and LAW 121 Paralegal program students - Admission to the program or division administrator approval

This course will familiarize the student with library organization and the types of informational resources used for performing legal research. The student will become acquainted with the major characteristics of these resources and usage techniques and will learn a systematic method for researching legal issues. Numerous opportunities will be provided for skill development in the use of these resources. 3 hrs. lecture/wk.

LAW 132
Civil Litigation (3 CR)

Prerequisites: Admission to the paralegal program or division administrator approval. Legal nurse consultant students - LAW 225 and LAW 121

This course will acquaint the student with the major characteristics of the civil litigation process. Students will become familiar with the various types of procedural rules regulating the civil litigation process and their application. Emphasis will be on the role of the legal assistant in a civil litigation practice and will include the drafting of pleadings. 3 hrs. lecture/wk.

LAW 140
Alternative Dispute Resolution (3 CR)

Prerequisites: Legal nurse consultant students and paralegal program students - LAW 132 and selective admission approval

This course examines the various methods used by our legal system for dispute resolution and the role of the legal assistant in those methods. Upon successful

completion of this course, the students should be able to explore the nature of conflict and the principles of negotiation and review the traditional litigation system. The course will concentrate on the major alternatives to litigation, including mediation and arbitration. 3 hrs. lecture/wk.

LAW 142
Torts (3 CR)

Prerequisites: Legal nurse consultant students and paralegal program students - LAW 132 and selective admission approval

Upon successful completion of this course, the student should be able to explain the major principles of tort law and personal injury litigation. The student should be able to discuss and compare the elements of negligence torts, intentional torts and strict liability torts, as well as the types of damages available and defenses to each of these torts. 3 hrs. lecture/wk.

LAW 148
Criminal Litigation (3 CR)

Prerequisite: Legal nurse consultant students and paralegal program students - LAW 132

Upon successful completion of this course, the student should be able to explain the objectives, substantive principles and procedural rules of the criminal process. The student will be able to explain the role of the paralegal in criminal litigation practice and draft documents used in the criminal litigation process. 3 hrs. lecture/wk.

LAW 152
Real Estate Law (3 CR)

Prerequisites: Paralegal program students - Admission to the paralegal program or division administrator approval. Legal nurse consultant students - LAW 225 and LAW 121

Upon successful completion of this course, the student should be able to describe common types of real estate transactions and conveyances. The preparation of legal instruments, namely deeds, contracts, leases and mortgages will be studied. 3 hrs. lecture/wk.

LAW 162
Family Law (3 CR)

Prerequisites: Paralegal program students - admission to paralegal program or assistant dean's approval. Legal nurse consultant students - LAW 225 and LAW 121

Upon successful completion of this course, the student should be able to describe the substantive and procedural principles of family law, including issues related to adoption, divorce, custody, support and visitation. The student will also be able to draft pleadings including petition for divorce, petition for adoption, decrees, settlement agreements and motions for modification. 3 hrs. lecture/wk.

LAW 171
Law Office Management (3 CR)

Prerequisites: Paralegal program students - admission to the paralegal program or division administrator approval. Legal nurse consultant students - LAW 225 and LAW 121

This course will acquaint the student with the general principles of law office management and will emphasize the unique characteristics of organizing and managing the law office or legal department. Projects will provide students with

opportunities for practical application of law office management concepts. 3 hrs. lecture/wk.

LAW 205
Legal Writing (3 CR)

Prerequisite: Paralegal program students - LAW 131 or division administrator approval. Legal nurse consultant students: LAW 131 or division administrator approval

Upon successful completion of this course, the student should be able to research complex legal problems, communicate the results of this research and other law-related information clearly and effectively and analyze legal problems using the skills of logic and reasoning. 3 hrs. lecture/wk.

LAW 212
Business Organizations (3 CR)

Prerequisites: Paralegal program students - admission to the paralegal program or division administrator approval. Legal nurse consultant students - LAW 225 and LAW 121

Upon successful completion of this course, the student should be able to describe the various forms of business ownership, including corporations, partnerships and sole proprietorships. The emphasis in the course is on the role of the legal assistant in a business law practice and on the preparation of related documents. 3 hrs. lecture/wk.

LAW 220
Computer-Assisted Legal Research (2 CR)

Prerequisite: Paralegal program students - LAW 131. Legal nurse consultant students - LAW 131

Upon successful completion of this course, the student should be able to access general and legal resources on the Internet and conduct electronic legal research using online and CD-ROM databases.

LAW 223
Law Office Computing (3 CR)

Prerequisites: Paralegal program students - admission to the paralegal program and either CIS 124 or CPCA 128 or three hours of CPCA 108 and CPCA 110 and CPCA 114

Upon successful completion of this course, the student should be able to evaluate and use legal software to perform customary law office procedures including computer litigation support, drafting and editing of specific legal documents, document and file management, time-keeping and billing, docket control, and forms generation. 3 hrs. lecture/wk. LAW 223 and CIS 223 are the same course.

LAW 225
Legal Nurse Consultant Profession (1 CR)

Prerequisite: Admission to the legal nurse consultant program or assistant dean's approval

In this course, students will examine the functions of legal nurse consultants and available career opportunities, including relevant issues regarding employment and independent contracting. 1 hr. lecture/wk.

LAW 241

Wills, Trusts and Probate Administration (3 CR)

Prerequisites: Paralegal program students - admission to the paralegal program or division administrator approval. Legal nurse consultant students -- LAW 225 and LAW 121

Upon successful completion of this course, the student should be able to draft a will with testamentary powers. The use of trusts, probate procedures, techniques for fact gathering and mastery of estate tax principles are emphasized in this course. 3 hrs. lecture/wk.

LAW 245
Elder Law (3 CR)

Prerequisites: Paralegal program students - admission to the paralegal program or division administrator approval. Legal nurse consultant students - LAW 225 and LAW 121

Upon successful completion of this course, the student should be able to explain the legal aspects of aging. Topics include financial and estate planning, health care, personal planning and protection, taxation, housing and other legal matters affecting the elderly and people with special legal needs. 3 hrs. lecture/wk.

LAW 247
Intellectual Property Law (3 CR)

Prerequisites: Paralegal program students - admission to the paralegal program or division administrator approval. Legal nurse consultant students - LAW 225 and LAW 121

In this course, students will learn the various forms of intellectual property. The emphasis in the course is on the functions of the paralegal in an intellectual law practice and on the preparation of related documents. 3 hrs. lecture/wk.

LAW 250
Medicolegal Research and Writing (3 CR)

Prerequisites: Admission to the legal nurse consultant program and LAW 131

This course emphasizes the role of the legal nurse consultant in the preparation of, and contribution to, various documents used in the context of a medicolegal-related law practice. Topics include the use of medical and science-related information resources and the preparation of such documents as legal memoranda; legal-related correspondence; summaries of medical/science literature; summaries of health-care records; and summaries of health-care expenses and settlement brochures, particularly in the context of intentional torts, negligence, product liability, strict liability, and medical-malpractice litigation. 3 hrs. lecture/wk.

LAW 266
Employment Law (3 CR)

Prerequisites: Paralegal program students - admission to the paralegal program or division administrator approval. Legal nurse consultant students - LAW 121 and LAW 225

This course examines the relationship between employer and employee. Major federal and state employment laws will be examined, including Title VII of the Civil Rights Act of 1964, the Age Discrimination Employment Act and the Americans with Disabilities Act. 3 hrs. lecture/wk.

LAW 268
Bankruptcy (2 CR)

Prerequisite: Paralegal program students - admission to the paralegal program or

division administrator approval. Legal nurse consultant students - LAW 121 or LAW 225

This course will familiarize the student with the purpose and application of the federal Bankruptcy Code. Topics will include Bankruptcy Court procedures and the preparation of bankruptcy forms and documents. Emphasis will be on the role of the legal assistant in a bankruptcy practice. 2 hrs. lecture/wk.

LAW 270
Administrative Law (3 CR)

Prerequisite: Admission to the legal nurse consultant program and LAW 225 and LAW 121 or admission to the paralegal program

Upon successful completion of the course, the student will be able to explain and apply substantive and procedural principles of administrative agencies. The course will concentrate on the basic principles of workers' compensation law, Social Security law; the Americans with Disabilities Act and the Occupational Safety Health Administration. 3 hrs. lecture/wk.

LAW 271
Legal Ethics, Interviewing and Investigation (3 CR)

Prerequisite: Paralegal program students - LAW 132. Legal nurse consultant students - LAW 132 or LAW 260 Corequisite: Paralegal program students - LAW 205. Legal nurse consultant students: LAW 205 or LAW 250

Upon successful completion of this course, the student should be able to explain ethical rules and standards governing the legal profession, interview clients and witnesses, and perform factual investigation pursuant to legal proceedings. The emphasis will be on recognition of ethical problems commonly encountered, as well as the development of interviewing and investigating skills. 3 hrs. lecture/wk.

LAW 275
Paralegal Internship I (1 CR)

Prerequisite or Corequisite: Paralegal program students - LAW 271

This course provides the student with an opportunity to gain practical work experience under the supervision of an attorney in day-to-day, on-site office work. The student must complete 120 hours of work at the internship site. In addition to on-site work, the student will meet with the internship instructor during the internship period four times and complete all requirements; keep an eight-week log; interview a practicing paralegal; draft a cover letter and resume; and submit final evaluations by the employer and student. Obtaining an internship is the responsibility of the individual student. 120 internship hours

LAW 276
Paralegal Internship II (1 CR)

Prerequisite: LAW 275

This course provides the student with an opportunity to gain practical work experience under the supervision of an attorney in day-to-day, on-site office work. The student must complete 120 hours of work at the internship site. In addition to on-site work, the student will meet with the internship instructor during the internship period four times and complete all requirements; keep an eight-week log; interview a practicing paralegal manager; participate in a mock job interview; and submit final evaluations by the employer and the student. Obtaining an internship is the responsibility of the individual student.

Library (LIBR)

LIBR 125
Introduction to Library Research (1 CR)

This course provides an introduction to the methods and technologies of library research. Included will be a study of the various information resources available for research and techniques for retrieving information from both print and electronic sources. The resources of Billington Library will be featured, although the emphasis will be on building information retrieval skills that will be useful in many settings.

Marketing Management (MKT)

MKT 121
Retail Management (3 CR)

Upon successful completion of this course, the student should be able to describe and analyze retail store organization and operation including customer markets, store location and design, human resource management, merchandise planning and control, and retail promotion. 3 hrs. lecture/wk.

MKT 133
Salesmanship (3 CR)

Upon successful completion of this course, the student should be able to define and contrast the three main areas of selling -- direct, wholesale and retail -- and explain the selling process. In addition, the student should be able to define the steps of selling and identify their appropriate application. The student should also be able to demonstrate selling skills through role play and presentations. Students who have received credit for MKT 134 may not receive credit for MKT 133. 3 hrs. lecture/wk.

MKT 134
Professional Selling (3 CR)

Upon successful completion of this course, the student should be able to describe the process of successful selling in the retail environment. In addition, the student should be able to define the steps of selling and identify appropriate application. The student should also be able to apply selling principles through role-play. Students who have received credit for MKT 133 may not receive credit for MKT 134. 3 hrs. lecture/wk. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.

MKT 140
Teleservice Communication Skills (3 CR)

Upon successful completion of this course, the student should be able to describe the process of successful communication in the teleservice field. In addition, the student should be able to define the principles of teleclient service and identify their appropriate application. The student should also be able to demonstrate effective telecommunication and client services skills through role-playing. Students who have received credit for MKT 133 or MKT 134 may not receive credit for MKT 140. 3 hrs. lecture/wk.

MKT 202
Consumer Behavior (3 CR)

Upon successful completion of this course, the student should be able to analyze the elements and influences that affect consumer behavior. In addition, the student should be able to apply the basic principles of consumer behavior and insight to the application of consumer-research findings used in the professional

practice of marketing. 3 hrs. lecture/wk.

MKT 221
Sales Management (3 CR)

Prerequisite: MKT 134 or MKT 133

Upon successful completion of this course, the student should be able to identify skills necessary to manage a sales force and develop a plan for recruitment selection, training, motivation and evaluation. In addition, the student should be able to describe and analyze techniques to forecast and plan sales and audit results. 3 hrs. lecture/wk.

MKT 234
Services Marketing (3 CR)

Corequisite: BUS 230

Upon successful completion of this course, the student should be able to describe the functioning of a services economy. In addition, students should be able to describe and define the nature and characteristics of services and the way services are required to be marketed because of their intangible core. Additionally, students should be able to describe service quality, the foundation of services marketing and the success factors in services marketing. 3 hrs. lecture/wk.

MKT 240
Advertising and Promotion (3 CR)

In this course, the student will understand and recognize the importance of an integrated marketing communications planning model in order to coordinate all of the promotional mix elements for today's businesses. Topics of study include advertising, direct marketing, sales promotion, public relations and interactive media. The course integrates theory with planning, management and strategy. Upon completion, the student will be able to develop an effective marketing communications program. 3 hrs. lecture/wk.

MKT 284
Marketing and Management Internship I (1 CR)

Upon successful completion of this course, the student should be able to apply classroom knowledge to an actual work situation. This course offers work experience under instructional supervision in an approved training situation designed to provide practical experience in marketing and management. A minimum of 15 hrs./wk. on-the-job training is required.

MKT 286
Marketing and Management Internship II (1 CR)

Prerequisite: MKT 284

Upon successful completion of this course, the student should be able to apply classroom knowledge to an actual work situation. This course offers work experience under instructional supervision in an approved training situation designed to provide practical experience in marketing and management. A minimum of 15 hrs./wk. on-the-job training is required.

MKT 288
Marketing and Management Internship III (1 CR)

Prerequisite: MKT 286

Upon successful completion of this course, the student should be able to apply classroom knowledge to an actual work situation. This course offers work experience under instructional supervision in an approved training situation designed to provide practical experience in marketing and management. A minimum of 15 hrs./wk. on-the-job training is required.

MKT 289
Marketing and Management Internship IV (1 CR)

Prerequisite: MKT 288

Upon successful completion of this course, the student should be able to apply classroom knowledge to an actual work situation. This course offers work experience under instructional supervision in an approved training situation designed to provide practical experience in marketing and management. A minimum of 15 hrs./wk. on-the-job training is required.

MKT 290
Capstone: Marketing and Management Case Studies (3 CR)

Prerequisites: BUS 141 and BUS 230 and MKT 284 and MKT 286 or assistant dean's approval

Upon successful completion of this course, the student should be able to identify problems, develop and describe the situational analysis, formulate alternative solutions, and reach and explain a decision for each issue. In addition, the student should be able to apply the knowledge of marketing and management concepts and techniques in the analysis of cases and actual business situations. 3 hrs. lecture/wk.

Mathematics (MATH)

MATH 098
Fundamentals of Mathematics and Elementary Algebra (6 CR)

Prerequisite: An appropriate score on an assessment test

This 16-week course is an integration of the content of both Fundamentals of Mathematics and Elementary Algebra and graded as if taken as two separate courses. You will earn 3 credit hours in Fundamentals of Mathematics and 3 credit hours in Elementary Algebra that will transfer as if they were being taught in the traditional format. Students will receive credit on their transcript for MATH 111 and MATH 115. NOTE: MATH 115 may fulfill some certificate requirements, but will not fulfill degree requirements.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $100.

MATH 099
Elementary Algebra and Intermediate Algebra (6 CR)

Prerequisite: MATH 111 with a grade of "C" or higher or an appropriate score on an assessment test.

This 16-week course is an integration of the content of both Elementary Algebra and Intermediate Algebra and graded as if taken as two separate courses. You will earn 3 credit hours in Elementary Algebra and 3 credit hours in Intermediate Algebra that will transfer as if they were being taught in the traditional format. Students will receive credit on their transcript for MATH 115 and MATH 116. NOTE: the prerequisite of MATH 111 requires a grade of "C" or greater. MATH 115 may fulfill some certificate requirements, but will not fulfill degree requirements.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $100.

MATH 111
Fundamentals of Mathematics (3 CR)

Prerequisite: Appropriate score on the math assessment test

Fundamentals of Mathematics is designed for the student who needs to improve or review basic math skills and concepts. This course includes computation using integers, fractions, decimals, proportions and percents along with an overview of percents, measurement, geometry, statistics and linear equations. Fundamentals of Math provides the mathematical foundation upon which subsequent studies in mathematics and other areas depend. 3 or 5 hrs. lecture / wk. This course does not fulfill degree requirements. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $100.

MATH 115
Elementary Algebra (3 CR)

Prerequisite: MATH 111 with a grade of "C" or higher or appropriate score on the math assessment test

This is a beginning course in algebra, designed to help students acquire a solid foundation in the basic skills of algebra. Students will learn to simplify arithmetic and algebraic expressions, including exponential expressions, polynomials, rational expressions and radical expressions; solve equations and inequalities, including linear equations and quadratic equations; graph linear equations; and analyze linear equations. 3 or 5 hrs. lecture/wk. MATH 115 may fulfill some certificate requirements, but will not fulfill degree requirements. NOTE: The prerequisite of MATH 111 requires a grade of "C" or higher. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $100.

MATH 116
Intermediate Algebra (3 CR)

Prerequisite: MATH 115 with a grade of "C" or higher or appropriate score on the math assessment test

This course focuses on arithmetic and algebraic manipulation, equations and inequalities, graphs, and analysis of equations and graphs. Students will simplify arithmetic and algebraic expressions, including those containing rational expressions, rational exponents, radicals and complex numbers; solve equations and inequalities including linear, quadratic, quadratic in form, as well as those containing rational expressions, radicals or absolute value; graph linear inequalities and basic conics; and analyze functions and nonfunctions. 3 or 5 hrs.lecture/wk. NOTE: the prerequisite of MATH 115 requires a grade of "C" or higher. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $100.

MATH 118
Geometry (3 CR)

Prerequisite: MATH 115 with a grade of "C" or higher or appropriate score on the math assessment test

This course is an informal approach to geometry. Topics will include lines, polygons, area, volume, circles, similarity, congruence and coordinate geometry. 3 hrs. lecture/wk. NOTE: the prerequisite of MATH 115 requires a grade of "C" or higher.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $100.

MATH 120
Business Mathematics (3 CR)

Prerequisite: MATH 111 with a grade of "C" or higher or appropriate score on the math assessment test

This is a course for the student who needs specific skills in mathematics to address business problems and business applications. Students will learn the mathematics involved in payroll, retailing, asset valuation, interest, finance, and the time value of money. Students will use a calculator and computer to solve a variety of applications. 3 hrs./wk. NOTE: the prerequisite of MATH 111 requires a grade of "C" or higher.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $25.

MATH 122
Mathematics in Our Culture (3 CR)

Prerequisite: MATH 111 with a grade of "C" or higher or appropriate score on the math assessment test

This is a course about the extent, power and history of many interesting areas of mathematics. Topics will include mathematical reasoning and recreation, calculator activities, computer literacy, mathematics in art and music, probability, statistics and topology. 3 hrs./wk. NOTE: the prerequisite of MATH 111 requires a grade of "C" or higher.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $100.

MATH 133
Technical Mathematics I (4 CR)

Prerequisite: MATH 111 with a grade of "C" or higher or appropriate score on the math assessment test

This course is the first of a two-semester sequence that will introduce the mathematical skills and concepts necessary in technical work. It will focus on the basics of algebra, geometry and trigonometry and their applications. Topics will include operations with polynomials, linear equations, systems of equations, right triangle trigonometry and basic statistical concepts. 4 hrs./wk. NOTE: the prerequisite of MATH 111 requires a grade of "C" or higher.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $100.

MATH 134
Technical Mathematics II (5 CR)

Prerequisite: MATH 133 or an equivalent course with a grade of "C" or higher

This course is the second of a two-semester sequence on technical applications of algebra and trigonometry. Topics will include factoring, algebraic fractions, quadratic equations, exponents, radicals, an introduction to coordinate geometry, logarithmic and exponential functions, trigonometric graphs and identities. 5 hrs. /wk. NOTE: the prerequisite of MATH 133 requires a grade of "C" or higher.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $100.

MATH 165
Finite Mathematics (3 CR)

Prerequisite: MATH 116 with a grade of "C" or higher or appropriate score on the math assessment test

This course will emphasize the beauty, scope, practical applications and relevance of mathematics. It is designed to involve the students with the concepts as well as quantitative skills. Topics include inductive and deductive reasoning,

mathematical patterns, sets, introduction to trigonometry, Euclidean geometry, probability, statistics and matrices. The common themes throughout the course are innovation in computers, related mathematical and cultural history and reasoning ability. 3 hrs./wk. MATH 165 is only offered during the spring term. NOTE: the prerequisite of MATH 116 requires a grade of "C" or higher.
<u>Associated Costs</u>: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $100.

MATH 171
College Algebra (3 CR)

Prerequisite: MATH 116 with a grade of "C" or higher or MATH 134 with a grade of "C" or higher or appropriate score on the math assessment test Note: Not available to students with credit in MATH 173

This course focuses on the study of functions and their graphs, techniques of solving equations and the recognition and creation of patterns. Students will analyze and graph functions, including constant, linear, absolute value, square root, polynomial, rational, exponential and logarithmic functions and non-functions; solve equations and inequalities, including polynomial equations, exponential equations, logarithmic equations, systems of linear equations and systems of linear inequalities; and analyze and create algebraic and numerical patterns. 3 or 5 hrs./wk. Not available for credit for students with credit in MATH 173. NOTE: the prerequisites of MATH 116 or MATH 134 require a grade of "C" or higher. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.
<u>Associated Costs</u>: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $100.

MATH 172
Trigonometry (3 CR)

Prerequisite: MATH 171 with a grade of "C" or higher or appropriate score on the math assessment test Note: Not available to students with credit in MATH 173

This is a course in trigonometric functions and graphs. Emphasis will be on understanding function notation, definitions, algebraic relations, real-world applications, graphing in the real and complex plane, inverse functions, polar functions and vectors. Students who take Math 172 and Math 173 will receive at most five hours of credit toward graduation. 3 hrs./wk. Not available for credit for students with credit in MATH 173. NOTE: the prerequisite of MATH 171 requires a grade of "C" or higher.
<u>Associated Costs</u>: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $100.

MATH 173
Precalculus (5 CR)

Prerequisite: MATH 116 with a grade of "C" or higher or appropriate score on the math assessment test Note:Not available for credit for students with credit in MATH 171 and/or MATH 172

Note: MATH 173 is an accelerated course recommended for students with a strong high school math background (three to four years) who plan to take calculus. This course focuses on the study of functions and their graphs, trigonometry, techniques of solving equations and the recognition and creation of patterns. Students will analyze and graph functions, including constant, linear, absolute value, square root, polynomial, rational, exponential, logarithmic and trigonometric functions and nonfunctions; solve equations and inequalities, including polynomial equations, exponential equations, logarithmic equations, trigonometric equations, systems of linear and nonlinear equations and systems of linear and nonlinear inequalities; and analyze and create algebraic and numerical patterns. 5 hrs./wk. Not available for credit for students with credit in MATH 171 and/or MATH 172. NOTE: the prerequisite of MATH 116 requires a grade of "C" or higher.
<u>Associated Costs</u>: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks.

$0 to $100.

MATH 175
Discrete Mathematics and its Applications (3 CR)

Prerequisite: MATH 171 or MATH 173 with a grade of "C" or higher or appropriate score on the math assessment test

This course is designed to present the beauty, scope, practical applications and relevance of mathematics. It will focus on applications of general interest drawn primarily from the social and biological sciences and business. Topics will be placed in a historical context, and mathematical reasoning will be stressed. Many of the applications will be computer-oriented. 3 hrs./wk. NOTE: the prerequisites of MATH 171 or MATH 173 require a grade of "C" or higher.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $100.

MATH 181
Statistics (3 CR)

Prerequisite: MATH 171 or MATH 173 or an equivalent course with a grade of "C" or higher or appropriate score on the math assessment test

This is a beginning course in statistical analysis, the skill of making sense of raw data - constructing graphical representations of data, developing models for making predictions, performing tests to determine significant change and finding intervals for population values. Students will learn the basics of descriptive statistics, probability, sampling, confidence intervals, distributions, hypothesis testing, regression and correlation. Computer applications will be incorporated into course topics. 3 hrs./wk. NOTE: the prerequisites of MATH 171 or MATH 173 require a grade of "C" or higher.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $100.

MATH 191
Math & Physics for Games I (4 CR)

Prerequisites: MATH 171 or MATH 173 with a grade of "C" or higher or appropriate score on math assessment test and CS 200

This introductory course focuses on the mathematics and physics concepts needed to program a variety of video game scenarios. Student will learn to use vectors and matrix transformations to model the motion of physical objects in two and three dimensions. Students will also learn various computer programming methods in order to model these mathematical and physical concepts. 3 hrs. lecture and 2 hrs. lab/wk. NOTE: the prerequisites of MATH 171 or MATH 173 require a grade of "C" or higher.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $100.

MATH 210
Mathematics for Elementary Teachers I (3 CR)

Prerequisite: MATH 171 or MATH 173 with a grade of "C" or higher or appropriate score on math assessment test

This is the first of a two-course sequence for prospective teachers of elementary and middle school mathematics. The focus of this course is an in-depth investigation of the mathematical principles and concepts encountered in grades K-8. Topics include set theory, numeration systems, number sense, critical thinking, and problem-solving strategies. The use of appropriate techniques and tools, such as calculators, computers and manipulatives, will be integrated throughout the course in order to enhance the depth of understanding. 3 hrs. lecture/wk. NOTE: the prerequisites of MATH 171 or MATH 173 require a grade of "C" or higher.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks.

$0 to $100.

MATH 212
Math for Elementary Teachers II (3 CR)

Prerequisite: MATH 210 with a grade of "C" or higher or consent of the assistant dean

This is the second of a two-course sequence for prospective teachers of elementary/middle school mathematics. The focus of this course is an in-depth investigation of the mathematical principles and concepts encountered in grades K-8. Topics include probability, statistics, measurement, and shapes including congruency, similarity, and transformations. The use of appropriate techniques and tools, such as calculators, computers, and manipulatives, will be integrated throughout the course in order to enhance the depth of understanding. 3 hrs. lecture/wk. NOTE: the prerequisite of MATH 210 requires a grade of "C" or higher.
<u>Associated Costs</u>: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $100.

MATH 225
Mathematics as a Decision Making Tool (3 CR)

Prerequisite: MATH 171 or MATH 173 with a grade of "C" or higher or appropriate score on the math assessment test

The focus of this course is to develop the quantitative skills and reasoning ability necessary to help students read critically and make decisions in our technical information society. A project tying this course to the student's own interest is a course requirement. Major topics include collecting and describing data, inferential statistics and probability, geometric similarity, geometric growth, symmetry and patterns. 3 hrs. lecture/wk. NOTE: the prerequisites of MATH 171 or MATH 173 require a grade of "C" or higher.
<u>Associated Costs</u>: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $100.

MATH 231
Business and Applied Calculus I (3 CR)

Prerequisite: MATH 171 or MATH 173 with a grade of "C" or higher or appropriate score on the math assessment test

This is the first course in calculus as it applies to business, psychology and the physical sciences. Concepts include measuring the slope of a curve, writing equations of tangent lines, finding maximum and minimum points, determining the rate of change of a function, and measuring the area under a curve. Algebraic skills and application problems are stressed. Specific calculus topics include finding limits, differentiation of algebraic, exponential and logarithmic functions, and integration of algebraic and exponential functions. Trigonometry (MATH 172) can be taken concurrently with MATH 231 for those students planning to enroll in MATH 232 in subsequent semesters. 3 hrs./wk. NOTE: the prerequisites of MATH 171 or MATH 173 require a grade of "C" or higher.
<u>Associated Costs</u>: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $$100.

MATH 232
Business and Applied Calculus II (3 CR)

Prerequisites: MATH 231 and either MATH 172 or MATH 173 with a grade of "C" or higher or appropriate score on the math assessment test

This is the second course in a two-semester series on calculus that covers five techniques of integration, differentiation and integration of trigonometric functions, differential equations, and functions of several variables as applied to business, statistics, biology and the social sciences. 3 hrs./wk. NOTE: the prerequisites of MATH 231, MATH 172 and MATH 173 require a grade of "C" or higher.
<u>Associated Costs</u>: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks.

$0 to $100.

MATH 237
Calculus for Biology and Medicine (5 CR)

Prerequisite: MATH 172 or MATH 173 or an equivalent course with a grade of "C" or higher or an appropriate score on an assessment test

This course focuses on the study and mathematical modeling of biological systems. Through a host of biological and medical applications, the rudiments of calculus are developed. Concepts include measuring the slope of a curve, writing equations of tangent lines, maximizing and minimizing a function, determining the rate of change of a function, and measuring the area under a curve. Solution techniques, both analytic and numeric, for difference and differential equations are used. Modeling activities are heavily emphasized. Qualitative analysis of solutions of differential equations is incorporated in modeling activities. Application areas include mathematical physiology, pharmacology, cell biology and populations biology. 5 hrs. lecture/wk. NOTE: the prerequisites of MATH 172 or MATH 173 require a grade of "C" or higher.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $100.

MATH 241
Calculus I (5 CR)

Prerequisite: MATH 172 or MATH 173 or an equivalent course with a grade of "C" or higher or an appropriate score on an assessment test

This is the first of a three-semester sequence on calculus designed for engineering, physics and math majors. Rates of change, areas and volumes will be studied. To accomplish this, the students will study and apply limits and continuity. Differentiation and integration of algebraic, trigonometric and transcendental functions will also be a major focus of this course. 5 hrs./wk. NOTE: the prerequisite of MATH 172 or MATH 173 require a grade of "C" or higher.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $100.

MATH 242
Calculus II (5 CR)

Prerequisite: MATH 237 or MATH 241 or an equivalent course with a grade of "C" or higher

This is the second course of a three-semester sequence on calculus. The emphasis will be an analytic, numerical and graphical approach to techniques of integration, infinite series and vectors in the plane including scientific applications. 5 hrs./wk. NOTE: the prerequisites of MATH 237 and MATH 241 require a grade of "C" or higher.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $100.

MATH 243
Calculus III (5 CR)

Prerequisite: MATH 242 or an equivalent course with a grade of "C" or higher

This is the third course in a three-semester sequence on analytic geometry and calculus. Topics include vector-valued functions, functions of several variables, multiple integration, vector analysis and linear algebra. 5 hrs./wk. NOTE: the prerequisite of MATH 242 requires a grade of "C" or higher.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $100.

MATH 244
Differential Equations (3 CR)

Prerequisite: MATH 243 or an equivalent course with a grade of "C" or higher

This course will cover standard types of equations that involve rates of change. In particular, this is an introductory course in equations that involve ordinary derivatives. Both qualitative and quantitative approaches will be used. Standard types and methods will be covered, including Laplace transforms and numerical methods. 3 hrs./wk. NOTE: the prerequisite of MATH 243 requires a grade of "C" or higher.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $100.

MATH 246
Elementary Linear Algebra (3 CR)

Prerequisite: MATH 242 or an equivalent course with a grade of "C" or higher

This sophomore-level introduction to linear algebra uses a matrix-oriented approach, with an emphasis on problem solving and applications. The course focus is on matrix arithmetic, systems of linear equations, properties of Euclidean n-space, eigenvalues and eigenvectors, orthogonality and vector spaces. The use of technology is a major feature of the course. 3 hrs. lecture/wk. MATH 246 is only offered during the spring term. NOTE: the prerequisite of MATH 242 requires a grade of "C" or higher.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $100.

MATH 285
Statistics for Business (4 CR)

Prerequisite: MATH 232 or MATH 242 or an equivalent course with a grade of "C" or higher Note: Students transferring MATH 285 to the University of Kansas must have CIS 201 as a corequisite.

This is a beginning course in calculus-based statistical analysis, the skill of making sense of raw data -- constructing graphical representations of data, developing models for making predictions, performing tests to determine significant change and finding intervals for population values. Students must have an understanding of calculus concepts in order to successfully complete this course. Students will learn the basics of descriptive statistics, probability, sampling, confidence intervals, hypothesis testing and linear regression. The course will stress the applications to business with emphasis on quality control. 4 hrs./wk. Students transferring MATH 285 to KU must have CIS 201 as a corequisite. NOTE: the prerequisites of MATH 232 or MATH 242 require a grade of "C" or higher.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $100.

Metal Fabrication and Welding (MFAB)

MFAB 120
MFAB Tools and Equipment (2 CR)

Upon completion of this course the student should be able to identify, operate, maintain, and explain the   proper use of power equipment and the operation of several selected metal fabrication hand tools common to a welding fabrication shop. Instructors will demonstrate the safe use of primary and secondary tools and equipment. The student will be required to provide ANSI-Z-87 safety glasses and other basic personal protective equipment (PPE). This course is recommended for students who have never had an industrial arts or shop class. 1 hr lecture, 1.5 hr lab/wk.

MFAB 121
Introduction to Welding (4 CR)

Prerequisite or Corequisite: MFAB 120 or program facilitator approval or contact testing office for Prior Learning Assessment

Upon successful completion of this course, the student should be able to perform oxy-fuel cutting (OFC), oxy-fuel welding (OFW) and brazing, shielded metal arc welding (SMAW). The SMAW portion of the course will cover positions but will be limited to AWS U-bend tests with backing and fillet welds. All welds will be tested according to industry standards. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 1 hr. lecture, 6 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $30 to $150.

MFAB 125
Advanced Gas and Arc Welding (4 CR)

Prerequisite: MFAB 121

This course is a continuation of Introduction to Welding. The course will cover more advanced projects in oxyacetylene, cutting, shielded metal arc welding (SMAW) and carbon arc cutting with air (CAC-A). The SMAW process will be used to weld v-groove butt joints in the flat, horizontal, vertical up and overhead positions, with root and face AWS U-bend test being performed on AWS open root joints without backing weld made in the vertical and overhead positions. AWS welder qualification/certification will be awarded to students successfully performing U-bend tests to code. The student will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 1 hr. lecture, 6 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $30 to $150.

MFAB 127
Welding Processes (2 CR)

Prerequisite or Corequisite: MFAB 120 or program facilitator approval or contact testing office for Prior Learning Assessment

Upon successful completion of this course, the student should be able to identify various welding processes used by industries. Standard shop and maintenance welding processes will be taught and demonstrated. Welds will be tested and inspected according to industry standards. This course can be used by an individual company to train or upgrade train employees and can be customized to fit individual needs. Artists, hobbyist, automotive students or first-time welders will benefit from this class. 1 hr. lecture, 1.5 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $30 to $150.

MFAB 130
Gas Metal Arc Welding I (4 CR)

Prerequisite or Corequisite: MFAB 120 or program facilitator approval or testing office for Prior Learning Assessment

Upon successful completion of this course, the student should be able to identify the theory of gas metal arc welding (GMAW) and flux-cored arc welding (FCAW). The welding of mild steel plate will occur in all positions on both fillet and groove welds with the GMAW process. Standard AWS terms and definitions will be used. The Plasma Arc Cutting (PAC) metal cutting process will be used to conserve material use and plant preparation. A root and face guide U-bend test will be performed on selected weld test coupons. Students successfully completing U-bends will be awarded a document of standards of acceptability. The student will be required to provide ANSI Z87 safety glasses, and may be expected to provide other basic hand tools and/or equipment. 1 hr. lecture, 6 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations

that students should expect in addition to the course tuition, fees, and textbooks. $30 to $150.

MFAB 140
Maintenance Repair Welding (3 CR)
Prerequisite: MFAB 121 or MFAB 130

Upon successful completion of this course, the student should be able to perform oxyfuel cutting (OFC), shielded metal arc welding (SMAW), gas metal arc welding (GMAW) and plasma arc cutting (PAC). Basic blueprint and standard AWS welding symbols will be introduced. Selected welds and assignments will be tested according to industry and AWS standards. The student will be required to provide ANSI Z-87.1 approved safety glasses and may be expected to provide other basic hand tools and/or equipment as required by employers. This course is designed for individuals who have welding experience or who are employed by a company that requires welding skills. This course can be customized for advanced training. 1 hr. lecture, 2 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $30 to $150.

MFAB 152
Manufacturing Materials and Processes (3 CR)

This is a beginning course in metal fabrication technology that is appropriate for the metal fabrication major and other interested students. Upon successful completion of this course, the student should be able to identify various manufacturing materials and processes currently used in industry. The capabilities and applications of machine tool, general fabrication, welding processes, robotics, cut-off equipment and other manufacturing processes and equipment will be studied. Lectures will be supplemented by class tours and demonstrations of various processes and equipment. Students are required to wear safety glasses during demonstrations. 3 hrs. lecture-demonstrations/wk.

MFAB 160
Gas Tungsten Arc Welding (4 CR)
Prerequisite: MFAB 121 or MFAB 130

This course will cover the basic theory of gas tungsten arc welding (GTAW). The student will weld on mild steel, stainless steel and aluminum in a variety of positions on both fillet and groove welds using the GTAW process, with guided AWS U-bend test being performed on mild steel. AWS qualification/certification will be awarded to successful students who qualify weld to code standards. Students will also use the plasma arc cutting system (PAC) on selected assignments. The students will be required to provide ANSI Z87 safety glasses and may be expected to provide other basic hand tools and/or equipment. 1 hrs. lecture, 6 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $30 to $150.

MFAB 170
Basic Machine Tool Processes (4 CR)

Upon successful completion of this course, the student should be able to practice the basic principles of machining as well as the setup and operation of machines. This course is a hands-on course that will include the use of lathes, mills, drills, saws, grainders, cut-off and other types of equipment. Machine tool safety will be emphasized throughout the course. 2 hrs. lecture, 4 hrs. lab/wk.

MFAB 180
Blueprint and Symbols Reading for Welders (2 CR)

Upon successful completion of this course, the student should be able to identify

basic welding positions and explain, list, sketch, draw, use or describe current American Welding Society (AWS) welding symbols and weld joint configurations. The student will be introduced to several methods of producing welding blueprints, object representatives, and specific meanings of selected lines, surface features, sectional views and basic math formulas used in the welding industry. The student will be able to identify the symbols used for fillet welds and groove welds made with and without backing. Topics such as pipe welding representations, pipe welding connections, pipe welding classifications, welder certification, metallurgical effects of heat on metals and the importance of weld quality and welding safety will be studied. 4 hrs. lecture/wk.

MFAB 230
Gas Metal Arc Welding II (4 CR)

Prerequisite: MFAB 130

Upon successful completion of this course, the student should be able to identify the theory of gas metal arc welding (GMAW). The student will weld with the GMAW process in the flat, horizontal, vertical up and overhead positions on both fillet and groove welds. The GMAW welds will be made on aluminum and stainless steel AWS U-bend test will be made on overhead and horizontal weldments. 1 hr. lecture, 6 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $30 to $150.

MFAB 240
Metallurgy (2 CR)

Metallurgy is the study of the science and technology of metals. This course covers the extractive, mechanical and physical phases of metallurgy. Topics include the identification of metals, types and classification of metals, heat treatment procedures and common steel manufacturing processes. AWS terms and definitions will be emphasized throughout the course. 2 hrs. lecture-demonstration/wk.

MFAB 260
Fabrication Practices I (4 CR)

Prerequisite: Metal Fabrication Combination Welder Certificates I and II or have earned the Metal Fabrication Vocational Certificate or equivalent advanced welder training course work to be approved by program administrator/facilitator

Upon completion of this class, the student should be able to work from discipline specific drawings to manufacture and assemble a mock building section using already acquired skills. This class is a capstone course and is intended to serve all MFAB graduate students who have completed the fundamental skills coursework within the metal fabrication certificate or degree programs. The Fabrication Practices I class is part one of an advanced comprehensive class intended to put to practical use the skills obtained throughout the existing Metal Fabrication and Welding Technology Career program. This class will put emphasis on structural steel, its erection and assembly. The coursework will focus on modern welding fabrication techniques and practices used in the manufacturing and installation of structural steel, piping systems, and miscellaneous welded mechanical items. Students will work in teams from discipline specific drawings to manufacture and assemble a mock building section using already acquired skills. Completers of this class may elect to test to the AWS Entry Level I Welder program and the National Center for Construction Education and Research (NCCER) accreditation and national registry. 1 hr lecture, 6 hrs lab/wk.

MFAB 261
Fabrication Practices II (4 CR)

Prerequisite: Metal Fabrication Welder Certificates I and II, or have earned the

Metal Fabrication Vocational Certificate or equivalent advanced welders training coursework to be approved by program administrator/facilitator

Upon completion of this class, the student should be able to work from discipline specific drawings to manufacture and assemble a mock building section using already acquired skills. This class is intended to serve all MFAB graduate students and current MFAB students who have completed the fundamental skills coursework within the metal fabrication certificate or degree programs. The Fabrication Practices II class is part two of an advanced comprehensive class intended to put to practical use the skills obtained throughout the existing Metal Fabrication and Welding Technology Career program. This class will put emphasis on pressure holding tanks and pressure vessels. Coursework will focus on modern welded fabrication techniques and practices used in the manufacturing and installation of steel pipe, tank and vessel systems, and miscellaneous welded mechanical structural items. Students will work in teams of three or four persons. Teams will work from discipline specific drawings to manufacture and assemble a mock tank/vessel section using skills already acquired. Completers of this class may elect to test to the AWS Entry Level II Welder program and the National Center for Construction Education and Research (NCCER) accreditation and national registry. 1 hr. lecture, 6 hrs lab/wk.

MFAB 271
Metal Fabrication Internship (3 CR)
Prerequisite: Program facilitator approval

Upon successful completion of this course, the student should be able to apply classroom knowledge to an actual work situation. The internship will provide advanced students with on-the-job experience under the supervision of professionals in the industry. The work will be developed cooperatively with area employers, college staff and each student to provide a variety of actual job experiences directly related to the student's career goals. 1 hrs. lecture, 15 hrs. minimum on-the-job training/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $30 to $150.

Music (MUS)

MUS 121
Introduction to Music Listening (3 CR)

This course is designed to enhance student music listening. Students will learn to identify changes in the elements of music through the different stylistic periods of classical music. Factual and historical information will be presented to broaden the student's cultural and music appreciation. Students will hear recorded examples of music from the Medieval, Renaissance, Baroque, Classical, Romantic and 20th-century eras, as well as popular American forms and music from non-Western cultures. 3 hrs./wk.

MUS 123
Introduction to Music Fundamentals (2 CR)

This course is designed to present the fundamentals of music theory to students who have no previous background or training in that subject. Students will receive detailed instruction in naming notes; scales and chords; building intervals; and correlating these skills to the keyboard. 2 hrs./wk.

MUS 125
Introduction to Jazz Listening (3 CR)

This is an entry-level course for the student with little or no prior knowledge of the American art form of jazz music. Through reading and listening, the student will learn the basic structure of the elements of music and how these are organized to

create jazz. Topics to be covered will include rhythm, harmony, and form; Dixieland style; swing style; bop; and contemporary jazz. 3 hrs./wk.

MUS 126
Introduction to World Music (3 CR)

This course provides students with an introduction to the musical heritage of the world. Through an interdisciplinary approach targeting the arts, humanities and social sciences, the course fosters skills necessary to gain a deeper appreciation of both familiar and unfamiliar musical traditions. The course will survey a representative cross section of the major musical traditions of the world, which may include Native American, Black American, sub-Saharan African, Eastern European/Bosnian, Indian, Indonesian, Japanese and Latin American/Brazilian traditions. Note: The course does not require the ability to read music. 3 hrs. lecture/wk.

MUS 131
Sight-Singing and Ear Training I (2 CR)

This course is an introduction to sight singing and ear training. Basic methods of reading music are presented and practiced. Students are also trained to recognize aurally and notate the basic elements of music: intervals, diatonic melodies, simple rhythms, chord qualities, and basic harmonic progressions. The content is designed to complement the Harmony I course, though it is not necessary they be taken in the same semester. 2 hrs./wk.

MUS 132
Sight-Singing and Ear Training II (2 CR)
Prerequisite: MUS 131

This course is a continuation of the class Sight-singing and Ear Training I. The content is designed to complement the Harmony II course though it is not necessary they be taken in the same semester. 2 hrs./wk. This course is typically taught in the spring semester.

MUS 133
Sight-Singing and Ear Training III (2 CR)
Prerequisite: MUS 132

This course is a continuation of the classes Sight-singing and Ear Training I and II. The content is designed to complement the Harmony III course, though it is not necessary they be taken in the same semester. 2 hrs./wk.

MUS 134
Sight-Singing and Ear Training IV (2 CR)
Prerequisite: MUS 133

This course is a continuation of the first three courses in sight-singing and ear training. Students are trained to produce and hear the most complex aspects of music theory in the common practice era (1650-1920). The content is designed to complement the Harmony IV course, though it is not necessary they be taken in the same semester. 2 hrs./wk.

MUS 141
Music Theory: Harmony I (3 CR)

This course is a basic study of the harmonic system sited in Western music composed from 1650 to 1900 and still in use in areas of music composition.

Students will learn the basic skills involved in writing and analyzing music of this nature as well as play simple chord progressions on the piano. 3 hrs./wk.

MUS 142
Music Theory: Harmony II (3 CR)
Prerequisite: MUS 141 or passing equivalency test

Harmony II is a continuation of the study of the harmonic system used in music composed from 1650 to 1900 and still in use in certain areas of music composition. The course covers use of non-harmonic tones, supertonic and dominant sevenths, functions of the submediant and mediant triads, advanced melodic writing and secondary dominant chords. Student will learn to harmonize melodies at the keyboard and play simple chord progressions on the piano. Music of the period will be analyzed. Selected software programs will enhance student skills and understanding. 3 hrs./wk. This course is typically taught in the spring semester.

MUS 143
Music Theory: Harmony III (3 CR)
Prerequisite: MUS 142 or passing equivalency test

This is a continuation of the study of the harmonic system used in all music composed from 1650 to 1900 and still in use in many areas of music composition today. Important topics include devices of modulation, binary and ternary, and 12 bar blues musical forms and application of part writing procedures to instrumental music. Particular attention will be paid to the nature and functions of diatonic seventh chords, secondary dominants, borrowed chords and Neopolitan chords. Students will work with keyboard harmony exercises of increasing difficulty. Selected software programs will enhance student skills and understanding. 3 hrs./wk.

MUS 144
Music Theory: Harmony IV (3 CR)
Prerequisite: MUS 143 or passing equivalency test

Harmony IV is a continuation of the study of the harmonic practices of tonal music and introduction to 20th-century harmony. Topics include augmented sixth chords, enharmonic modulation, and advanced chromatic harmonies. An introduction to 20th-Century harmonic organization includes extended tertian harmony, modal harmony, parallelism, pandiatonicism, atonality, serialism, and aleatory music. Students will work with keyboard harmony exercises of increasing difficulty. Selected software programs will enhance student skills and understanding. 3 hrs./wk.

MUS 151
Mixed Vocal Ensemble I (1 CR)
Prerequisite: Audition required

Choral ensembles are open to participation by the student body. Choral experience or skill is desired in some ensembles but not in others. The ensemble will learn a varied body of choral materials from the choral traditions of both past and present, performing at student and community activities. The literature will be specific to the nature of the group and the skills of the students involved. 3 hrs./wk.

MUS 152
Mixed Vocal Ensemble II (1 CR)
Prerequisites: MUS 151 and audition required

Choral ensembles are open to participation by the student body. Choral experience or skill is desired in some ensembles but not in others. The ensemble will learn a varied body of choral materials from the choral traditions of both past and present, performing at student and community activities. The literature will be specific to the nature of the group and the skills of the students involved. 3 hrs./wk.

MUS 153
Mixed Vocal Ensemble III (1 CR)

Prerequisites: MUS 152 and audition required

Choral ensembles are open to participation by the student body. Choral experience or skill is desired in some ensembles but not in others. The ensemble will learn a varied body of choral materials from the choral traditions of both past and present, performing at student and community activities. The literature will be specific to the nature of the group and the skills of the students involved. 3 hrs./wk.

MUS 154
Mixed Vocal Ensemble IV (1 CR)

Prerequisites: MUS 153 and audition required

Choral ensembles are open to participation by the student body. Choral experience or skill is desired in some ensembles but not in others. The ensemble will learn a varied body of choral materials from the choral traditions of both past and present, performing at student and community activities. The literature will be specific to the nature of the group and the skills of the students involved. 3 hrs./wk.

MUS 156
MIDI Music Composition (3 CR)

MIDI Music Composition I is designed to create a technical and conceptual foundation for further studies in electronic music. Students will learn and demonstrate basic compositional techniques, including form, melody, rhythm and harmony. Also, the student will demonstrate the ability to use computers and software to create and perform music. Emphasis will be on developing skills appropriate to the beginning student for the purpose of creative and technical expression. 2 hrs. lecture, 2 hrs. lab/wk.

MUS 157
Introduction to Digital Audio (3 CR)

Prerequisite: MUS 156

Introduction to Digital Audio is designed to further develop skills acquired in MIDI Music Composition I. Students will practice using ProTools digital audio software, combined with a digital audio interface to record, edit and play back music. Students will be introduced to basic concepts of sound, and common audio effects, including reverb, delay and compression. Students will also further develop their compositional skills through demonstration and practice, and create audio recordings of their music. 2 hrs. lecture, 2 hrs. lab/wk.

MUS 158
Digital Audio Techniques I (4 CR)

Prerequisite: MUS 157

This course is designed to develop both the creative abilities and technical skills needed to produce music using modern digital recording techniques and equipment. Students will acquire an increased proficiency with the operation of ProTools, the industry standard digital audio software, and the corresponding

digital audio hardware. Students will demonstrate knowledge of microphone types and techniques by conducting simple recording sessions, from set-up to final mix. 3 hrs. lecture, 2 hrs. lab/wk.

MUS 159
Digital Audio Techniques II (4 CR)

Prerequisites: MUS 158

This course is designed for the student interested in the continued development of the creative abilities and technical skills needed to produce music using modern digital recording techniques and equipment. Students will understand simple copyright types and procedures, and create an itemized budget to establish a digital project studio. Students will demonstrate advanced knowledge of ProTools, and apply final mastering techniques in order to compile a portfolio of original music for personal, academic or professional purposes. 3 lecture, 2 hrs. lab/wk.

MUS 161
Chamber Choir I (1 CR)

Prerequisite: Audition required

This auditioned choral ensemble is open to participation by the student body. Prior choral experience or a reasonable level of music reading and vocal technique is necessary. The choir will learn a varied body of choral materials from the choral traditions of both past and present, performing at student and community activities. 3 hrs./wk.

MUS 162
Chamber Choir II (1 CR)

Prerequisites: MUS 161 and audition

This auditioned choral ensemble is open to participation by the student body. Prior choral experience or a reasonable level of music reading and vocal technique is necessary. The choir will learn a varied body of choral materials from the choral traditions of both past and present, performing at student and community activities. 3 hrs./wk.

MUS 163
Chamber Choir III (1 CR)

Prerequisites: MUS 162 and audition

This auditioned choral ensemble is open to participation by the student body. Prior choral experience or a reasonable level of music reading and vocal technique is necessary. The choir will learn a varied body of choral materials from the choral traditions of both past and present, performing at student and community activities. 3 hrs./wk.

MUS 164
Chamber Choir IV (1 CR)

Prerequisites: MUS 163 and audition

This auditioned choral ensemble is open to participation by the student body. Prior choral experience or a reasonable level of music reading and vocal technique is necessary. The choir will learn a varied body of choral materials from the choral traditions of both past and present, performing at student and community activities. 3 hrs./wk.

MUS 165

Music Composition I (1 CR)

Prerequisite: MUS 141 or consent of instructor

This entry-level course provides instruction in the craft of musical composition. Traditional compositional techniques and concepts will be studied through demonstration and practice. Students will learn correct notational procedures and compose melodies and short pieces for one or two live performers. 1 hr. lecture/wk.

MUS 166
Music Composition II (1 CR)

Prerequisite: MUS 165

This is an intermediate-level course for students seeking instruction in the craft of musical composition. Traditional compositional techniques and concepts will be studied through demonstration and practice. Students will learn to use a computer to notate their compositions, will begin to work with tonal harmony, will write music for a trio and/or quartet, and will have a piece performed during a music department recital. 1 hr. lecture/wk.

MUS 167
Music Composition III (1 CR)

Prerequisite: MUS 166

This class is an intermediate-level course for the student seeking instruction in the craft of musical composition. Traditional compositional techniques and concepts will be studied through demonstration and practice. Students will enhance their ability to use a computer to notate their compositions, will begin to work with nonfunctional tonal harmony, will write music for SATB choir or for vocal soloist, and will have a piece performed during a music department recital. 1 hr. lecture/wk.

MUS 168
Music Composition IV (1 CR)

Prerequisite: MUS 167

This course is an advanced-level class for students seeking further instruction in the craft of musical composition. Traditional compositional techniques and concepts will be studied through demonstration and practice. Students will refine their ability to use a computer to notate their compositions, will continue to work with nonfunctional tonal harmony, will write music for larger ensembles, will have a piece performed in a music department recital, and will compile a portfolio of their work. 1 hr. lecture/wk.

MUS 171
Voice Class I (1 CR)

This course is designed to introduce the student to beginning vocal technique, vocal vocabulary, performance experience and solo vocal repertoire. 1 hr./wk.

MUS 172
Voice Class II (1 CR)

Prerequisite: MUS 171

This course is designed to continue instruction in proper vocal technique, vocal vocabulary, performance experience and solo vocal repertoire.

MUS 173
Voice Class III (1 CR)

Prerequisite: MUS 172

This course is designed to continue instruction in proper vocal technique, vocal vocabulary, performance experience and solo vocal repertoire.

MUS 174
Voice Class IV (1 CR)

Prerequisite: MUS 173

This course is designed to continue instruction in proper vocal technique, vocal vocabulary, performance experience and solo vocal repertoire.

MUS 176
Jazz Band I (1 CR)

Prerequisite: Audition required

This is an entry-level course in the jazz band performing format for the student with little or no experience in this course of study. The student will learn, through rehearsal and performance, the basic elements of music and how these are utilized in the jazz band. Topics will include simple rhythms, basic melodic construction and major scale construction. 3 hrs./wk.

MUS 177
Jazz Band II (1 CR)

Prerequisite: MUS 176 or audition required

This is a beginning-level course for the student with at least one semester of prior jazz band experience. Through rehearsal and performance, the student will learn beginning elements of music as applied to the jazz band performing format. Topics covered will include syncopated rhythm, Dorian minor scales and blues form. 3 hrs./wk.

MUS 178
Jazz Band III (1 CR)

Prerequisites: MUS 177 and audition required

This is an intermediate-level course for the student with at least two semesters of prior jazz band experience. Through rehearsal and performance, the intermediate levels of jazz band performance will be learned. Topics covered will include Latin style, Mixolydian scales and the 32-bar song form. 3 hrs./wk.

MUS 179
Jazz Band IV (1 CR)

Prerequisites: MUS 178 and audition required

This is an advanced-level course for the student with at least three semesters of prior jazz band experience. Advanced elements of jazz music will be learned through rehearsal and performance. Topics covered will include Lydian scales and ensemble performance techniques. 3 hrs./wk.

MUS 187
Jazz Improvisation I (2 CR)

Prerequisite: Audition

This is an entry-level course for the student with little or no jazz improvisation

experience. Through written work and performance on the instrument of choice, the student will learn the basic elements of jazz improvisation. Topics to be covered will include identification and performance of basic intervals, major scales, Dorian modes, Mixolydian modes, major seventh chords, minor seventh chords, dominant seventh chords and the basic blues form. 2 hrs./wk.

MUS 188
Jazz Improvisation II (2 CR)

Prerequisites: MUS 187 and audition required

This is an advanced-level course for the student with at least one semester of jazz improvisation. Through performance on the chosen instrument and written studies, the student will learn advanced concepts of jazz improvisation. Topics to be covered include jazz performance style, construction of the improvised solo and 32-bar song form. 2 hrs./wk.

MUS 191
Concert Band I (1 CR)

Prerequisite: Audition required

This is an entry-level course in the concert band format for the student with little or no concert band experience. Students will learn the basic elements of music as related to the concert band through rehearsal and performance. Topics include counting and subdividing motifs into melodies; and differentiating between major and minor tonalities. 3 hrs./wk.

MUS 192
Concert Band II (1 CR)

Prerequisites: MUS 191 and audition required

This is a beginning-level course in the concert band format for the student with at least one semester of prior concert band experience. Students will learn the beginning-level elements of music as related to the concert band through rehearsal and performance. Topics to be covered include odd meters, minor scales and homophonic texture. 3 hrs./wk.

MUS 193
Concert Band III (1 CR)

Prerequisite: MUS 192 or audition required

This is an intermediate course for the student with at least two semesters of prior concert band experience. Through rehearsal and performance, the student will learn intermediate levels of the elements of music in the concert band format. Topics will include parade march style, concert march style and concert overture style. 3 hrs./wk.

MUS 194
Concert Band IV (1 CR)

Prerequisite: MUS 193 or audition required

This is an advanced course for the student with at least three semesters of prior concert band performing experience. Through rehearsal and performance, the student will learn the advanced concepts of concert band performance. Topics will include polyphonic texture, concert suite style and medley style. 3 hrs./wk.

MUS 195
Vocal Jazz Ensemble I (1 CR)

Prerequisite: Audition required

This is an entry-level course in the vocal jazz performing format. Through rehearsal and public performance, the student will learn the basic elements of music as applied to vocal jazz. Topics will include 8th note swing, jazz syncopation and 32-bar song form. 3 hrs./wk.

MUS 196
Vocal Jazz Ensemble II (1 CR)

Prerequisites: MUS 195 and audition required

This is a beginning-level course in the vocal jazz performing format. Through rehearsal and public performance, the student will learn the basic elements of music as applied to vocal jazz. Topics will include Dorian minor scales, Mixolydian scales and 12-bar blues form. 3 hrs./wk.

MUS 197
Vocal Jazz Ensemble III (1 CR)

Prerequisites: MUS 196 and audition required

This is an intermediate-level course in the vocal jazz performing format. Through rehearsal and public performance, the student will learn the basic elements of music as applied to vocal jazz. Topics will include beginning improvisation, Latin rhythm and major scales. 3 hrs./wk.

MUS 198
Vocal Jazz Ensemble IV (1 CR)

Prerequisites: MUS 197 and audition required

This is an advanced-level course in the vocal jazz performing format. Through rehearsal and public performance, the student will learn the basic elements of music as applied to vocal jazz. Topics will include scat, improvisation in 32-bar song form, Lydian scales and ballad style. 3 hrs./wk.

MUS 201
Chamber Ensemble I (1 CR)

Prerequisite: Audition required

This is an entry-level course for the student with little or no experience in the chamber ensemble performing format. Through written work and performance on the chosen instrument, the student will learn the basic fundamentals of this performing medium. Topics to be covered will include tone quality, intervals and rhythmic patterns. 2 hrs./wk.

MUS 202
Chamber Ensemble II (1 CR)

Prerequisite: MUS 201 or placement by instructor

This is a beginning-level course for the student with at least one semester of experience in the chamber ensemble performing format. Through written work and performance on the chosen instrument the student will learn the basic fundamental of this performing medium. Topics to be covered will include minor scales, chord construction and compound rhythms. 2 hrs./wk.

MUS 203
Chamber Ensemble III (1 CR)

Prerequisite: MUS 202 or placement by instructor

This is an intermediate-level course for the student with at least two semesters of chamber ensemble experience. Through written work and performance on the chosen instrument, the student will learn intermediate-advanced concepts of chamber ensemble performance. Topics to be covered include sight reading, intonation and style. 2 hrs./wk.

MUS 204
Chamber Ensemble IV (1 CR)

Prerequisite: MUS 203 or placement by instructor

This is an advanced-level course for the student with at least three semesters of prior ensemble experience. Through performance on the chosen instrument, the student will learn the advanced concepts of chamber ensemble performance. Topics to be covered will include balance and cooperative expression. 2 hrs./wk.

MUS 211
Orchestra I (1 CR)

Prerequisite: Audition required

This is an entry-level course in the orchestra format for the student with little or no orchestra experience. Students will learn the basic elements of music as related to the orchestra through rehearsal and performance. Topics include counting and subdividing duple, triple and quadruple rhythm; assembling melodic motifs into melodies; and differentiating between major and minor tonalities. Students will rehearse and perform with the Overland Park Civic Orchestra. 2 hrs. (1 evening)/wk.

MUS 212
Orchestra II (1 CR)

Prerequisites: MUS 211 and audition required

This is a beginning-level course in the orchestra format for the student with at least one semester of prior orchestra experience. Students will learn the beginning-level elements of music as related to the orchestra through rehearsal and performance. Topics to be covered include odd meters, minor scales and homophonic texture. 2 hrs. (1 evening)/wk.

MUS 213
Orchestra III (1 CR)

Prerequisites: MUS 212 and audition required

This is an intermediate course for the student with at least two semesters of prior orchestra experience. Through rehearsal and performance, the student will learn intermediate levels of the elements of music in the orchestra format. Topics will include parade march style, concert march style and concert overture style. (1 evening)/wk.

MUS 214
Orchestra IV (1 CR)

Prerequisites: MUS 213 and audition required

This is an advanced course for the student with at least three semesters of prior orchestra performing experience. Through rehearsal and performance, the student will learn advanced concepts in orchestral performance. Topics will include polyphonic texture, concert suite style and medley style. 2 hrs. (1 evening)/wk.

MUS 221
Piano Class I (2 CR)

This course provides a basic knowledge of music and the essential techniques required to play the piano. Students will learn essential musical terminology, including musical notation and symbols, major and minor key signatures, and the harmonization of melodies using tonic and dominant triads. Specific piano-related terminology will include finger exercises, basic keyboard repertoire using major and minor five-finger patterns, major and minor scales, major and minor triads in root position, ensemble playing of two to four parts, and the formation of good practice habits. Group Piano II should follow the successful completion of this course. Private piano lessons are encouraged for students who successfully complete both courses. 2 hrs./wk.

MUS 222
Piano Class II (2 CR)

Prerequisites: MUS 221 and instructor approval required

This is a beginning-level course that provides a basic knowledge of keyboard instruments. Students will learn and review musical terminology, musical notation and symbols, and specific piano-related terminology. Topics covered will include major and minor key signatures; exercises and repertoire using major and minor scales; exercises and repertoire using major, minor, diminished and augmented triads in root position and inversions; chord progressions; ensemble playing of two to four parts; and use of the damper pedal. This course is the continuation of MUS 221. Completion of this course should precede Applied Piano I. This course is for beginners able to progress at a fast pace, students with minimal previous experience or students who have completed MUS 221. 2 hrs./wk.

MUS 223
Piano Class III (2 CR)

Prerequisite: MUS 222 or permission of the instructor

This is an intermediate course that provides a basic knowledge of keyboard instruments. Students will learn and review musical terminology, musical notation and symbols, and specific piano-related terminology. Topics covered will include major and minor key signatures; exercises and repertoire using major and minor scales and modes; exercises and repertoire using major, minor, diminished and augmented triads in root position and inversions; chord progressions; ensemble playing of two to four parts; and use of the damper pedal. This course is the continuation of MUS 222. Completion of this course should precede Applied Piano I. This course is designed for students who have completed one year of study or who have completed MUS 222. 2 hrs./wk.

MUS 224
Piano Class IV (2 CR)

Prerequisite: MUS 223 or permission of the instructor

This is an advanced-level course for the student with at least three semesters of prior piano class instruction. Students will learn the advanced concepts of piano playing. Topics to be covered will include basic music notation, major and minor key signatures, tempo indications, major and minor arpeggios, finger patterns, practice method chord progressions, and the use of the damper pedal. 2 hrs./wk.

MUS 226
Applied Guitar I (Class) (1 CR)

Students will be provided with a foundation in guitar technique upon which to base further study of the instrument. The course consists of an introduction to the use of the guitar as a solo, accompaniment and ensemble instrument. 1 hr./wk.

MUS 227
Applied Guitar II (Class) (1 CR)

Prerequisite: MUS 226 or instructor permission

This continuation of MUS 226 builds a foundation in guitar technique upon which to base further study of the instrument. The course continues to teach techniques that enable students to use the guitar as a solo, accompaniment and ensemble instrument. 1 hr./wk.

MUS 228
Applied Guitar III (Class) (1 CR)

Prerequisite: MUS 227 or instructor permission

This continuation of MUS 227 is designed to move students from the basic skill level to the intermediate skill level. The course continues to teach techniques that enable students to use the guitar as a solo, accompaniment and ensemble instrument. 1 hr./wk.

MUS 229
Applied Guitar IV (Class) (1 CR)

Prerequisite: MUS 228 or instructor permission

This is a continuation of MUS 228 at an intermediate level of guitar playing skills. The course continues to teach techniques that enable students to use the guitar as a solo, accompaniment and ensemble instrument. 1 hr./wk.

MUS 231
Applied Voice I (Private) (1 CR)

This course is designed to introduce the student to beginning vocal technique, vocal vocabulary, performance experience and solo vocal repertoire.

MUS 232
Applied Voice II (Private) (1 CR)

Prerequisite: MUS 231

This course uses private lessons to continue instruction in beginning vocal technique, vocal vocabulary, performance experience and solo vocal repertoire.

MUS 233
Applied Voice III (Private) (1 CR)

Prerequisite: MUS 232

This course uses private lessons to continue instruction in beginning intermediate vocal technique, vocal vocabulary, performance experience and solo vocal repertoire.

MUS 234
Applied Voice IV (Private) (1 CR)

Prerequisite: MUS 233

This course uses private lessons to continue instruction in intermediate vocal technique, vocal vocabulary, performance experience and solo vocal repertoire.

MUS 236

Applied Piano I (Private) (1 CR)

This is an entry-level course for the student with little or no prior piano training. This course provides a basic knowledge of keyboard instruments. Students will learn essential musical terminology, musical notation and symbols, and specific piano-related terminology. Topics covered will include major and minor key signatures; exercises and repertoire using major and minor five-finger patterns; and exercises and repertoire using major and minor scales.

MUS 237
Applied Piano II (Private) (1 CR)

Prerequisite: MUS 236

This is a beginning-level course for the student with at least one semester of prior applied piano study. Students will learn the intermediate-level concepts of piano performance. Topics to be covered will include major scales and the natural and harmonic forms of the minor scales, rhythmic patterns and subdivisions of duple and triple meter and the basic keyboard literature of the intermediate level.

MUS 238
Applied Piano III (Private) (1 CR)

Prerequisite: MUS 237

This is an intermediate-level course for the student with at least two semesters of prior applied piano study. Students will learn the intermediate-level concepts of piano performance. Topics to be covered will include scale, the melodic form of the minor scale, rhythmic patterns and subdivisions of compound meter, and the basic keyboard literature of the intermediate level.

MUS 239
Applied Piano IV (Private) (1 CR)

Prerequisite: MUS 238

This is an advanced-level course for the student with at least two semesters of prior applied piano study. Students will learn the intermediate level concepts of piano performance. Topics to be covered will include Dorian and Mixolydian modes, pentatonic scales and performance of a Chopin etude.

MUS 241
Applied Guitar I (Private) (1 CR)

In this private study in basic guitar technique, emphasis will be upon playing position, posture, tone production and basic music reading skills. Students will begin with studies and short pieces.

MUS 242
Applied Guitar II (Private) (1 CR)

Prerequisite: MUS 241 or instructor approval

This is a continuation of private study in basic guitar technique. Emphasis will be upon playing position, posture, tone production and basic music-reading skills. Students will begin with studies and short pieces.

MUS 243
Applied Guitar III (Private) (1 CR)

Prerequisite: MUS 242 or instructor approval

In this private study in intermediate guitar technique, emphasis will be on playing

position, posture, tone production and intermediate music reading skills. Students will progress toward playing literature requiring intermediate skill levels.

MUS 244
Applied Guitar IV (Private) (1 CR)
Prerequisite: MUS 243 or instructor approval

In this continuation of private study in intermediate guitar technique, emphasis will be on playing position, posture, tone production and intermediate music reading skills. Students will progress toward playing literature requiring intermediate skill levels.

MUS 246
Applied Classical Guitar I (Private) (1 CR)

Private study in basic classical guitar technique and repertoire. Emphasis will be upon classical left- and right-hand technique, playing position, posture, tone production and standard classical guitar literature. Students will begin with studies and short pieces.

MUS 247
Applied Classical Guitar II (Private) (1 CR)
Prerequisite: MUS 246 or instructor approval

This continuation of private study in basic classical guitar technique and repertoire will emphasize classical left- and right-hand technique, playing position, posture, tone production and standard classical guitar literature. Students will continue with studies and short pieces, then progress toward longer pieces with the intent of performing these in a recital situation.

MUS 248
Applied Classical Guitar III (Private) (1 CR)
Prerequisite: MUS 247 or instructor approval

In this private study in intermediate classical guitar technique and repertoire, emphasis will be on classical left- and right-hand technique, playing position, posture, tone production and standard classical guitar literature. Students will progress toward playing and performing more advanced pieces and guitar studies.

MUS 249
Applied Classical Guitar IV (Private) (1 CR)
Prerequisite: MUS 248 or instructor approval

This continuation of private study in intermediate classical guitar technique and repertoire will emphasize classical left- and right-hand technique, playing position, posture, tone production and standard classical guitar literature. Students will progress toward playing and performing more advanced pieces and guitar studies.

MUS 251
Applied Brass I (Private) (1 CR)

This is an entry-level course for the student with little or no experience in performing on a brass instrument. Through written exercises and performance on the instrument of choice, the student will learn the basic concepts of brass performance. Topics to be covered include tone production, basic musical intervals and major scales.

MUS 252
Applied Brass II (Private) (1 CR)

Prerequisite: MUS 251 or placement by instructor

This is a beginning-level course for the student with at least one semester of prior brass instrument study. Through written exercises and performance on the instrument of choice, the student will learn the beginning concepts of brass performance. Topics to be covered include embouchure development, minor scales and duple and triple rhythmic patterns.

MUS 253
Applied Brass III (Private) (1 CR)

Prerequisite: MUS 252 or placement by instructor

This is an intermediate-level course for the student with at least two semesters of prior brass instrument study. Through written exercises and performance on the instrument of choice, the student will learn the intermediate concepts of brass performance. Topics to be covered include the chromatic scale, quadruple rhythmic patterns and chord construction.

MUS 254
Applied Brass IV (Private) (1 CR)

Prerequisite: MUS 253 or placement by instructor

This is an advanced-level course for the student with at least three semesters of prior brass instrument study. Through written exercises and performance on the instrument of choice, the student will learn the advanced concepts of brass performance. Topics to be covered include the pentatonic scale, whole tone scale and melodic contours.

MUS 256
Applied Percussion I (Private) (1 CR)

This is an entry-level course for the student with little or no training in percussion instruments. The student will learn the beginning concepts of percussion performance. Topics to be covered include basic duple and triple rhythm, snare drum rudiments and basic snare drum performance patterns.

MUS 257
Applied Percussion II(Private) (1 CR)

Prerequisite: MUS 256 or placement by instructor

This is a beginning-level course for the student with at least one semester of prior instruction in percussion instruments. The student will learn beginning concepts of percussion performance. Topics to be covered include compound rhythm, snare drum rudiments and basic timpani skills.

MUS 258
Applied Percussion III (Private) (1 CR)

Prerequisite: MUS 257 or placement by instructor

This is an intermediate-level course for the student with at least two semesters of prior instruction in percussion instruments. The student will learn beginning concepts of percussion performance. Topics to be covered include snare drum rudiments, basic mallet percussion skills and suspended cymbal skills.

MUS 259

Applied Percussion IV (Private) (1 CR)

Prerequisite: MUS 258 or placement by instructor

This is an advanced-level course for the student with at least three semesters of prior instruction in percussion instruments. The student will learn advanced concepts of percussion performance. Topics to be covered include snare drum rudiments, crash cymbal techniques and drum set skills.

MUS 261
Applied Woodwind I (Private) (1 CR)

This is an entry-level course for the student with little or no experience performing on a woodwind instrument. Through written exercises and performance on the instrument of choice, the student will learn the basic elements of woodwind performance. Topics to be covered include tone production, basic intervals and major scales.

MUS 262
Applied Woodwind II (Private) (1 CR)

Prerequisite: MUS 261 or placement by instructor

This is a beginning-level course for the student with at least one semester of prior woodwind study. The student will learn beginning concepts of woodwind performance on the chosen instrument through written exercises and performance. Topics to be covered include embouchure development, minor scales and duple and triple meters.

MUS 263
Applied Woodwind III (Private) (1 CR)

Prerequisite: MUS 262 or placement by instructor

This is an intermediate-level course for the student with at least two semesters of prior woodwind study. The student will learn the intermediate concepts of woodwind performance through written exercises and performance. Topics to be covered include chromatic scale, quadruple rhythmic patterns and chord construction.

MUS 264
Applied Woodwind IV (Private) (1 CR)

Prerequisite: MUS 263 or placement by instructor

This is an advanced-level course for the student with at least three semesters of prior woodwind study. Through written exercises and performance, the student will learn the advanced concepts of woodwind performance. Topics to be covered include pentatonic scale, whole tone scale and melodic contour.

MUS 266
Applied Harp I (Private) (1 CR)

This course is the first college level course for harp students. The student will work in a studio setting with an instructor. Assignments will be based on the individual student's readiness, but work will emphasize growth in areas of technical development, understanding musical styles, developing music vocabulary and building a performance repertoire. 1/2 hr./wk.

MUS 267
Applied Harp II (Private) (1 CR)

Prerequisite: MUS 266

This course continues the work in Applied Harp I. The student will work in a studio setting with an instructor. Assignments will be based on the individual student's readiness. Work will emphasize further growth in areas of technical development, understanding musical styles, developing music vocabulary and building a performance repertoire. 1/2 hr./wk.

MUS 268
Applied Harp III (Private) (1 CR)
Prerequisite: MUS 267

This course continues the work in Applied Harp II. The student will work in a studio setting with an instructor. Assignments will be based on the individual student's readiness. Work will emphasize further growth in areas of technical development, understanding musical styles, developing music vocabulary and building a performance repertoire. 1/2 hr/wk.

MUS 269
Applied Harp IV (Private) (1 CR)
Prerequisite: MUS 268

This course continues the work in Applied Harp III. The student will work in a studio setting with an instructor. Assignments will be based on the individual student's readiness. Work will emphasize further growth in areas of technical development, understanding musical styles, developing music vocabulary and building a performance repertoire. 1/2 hr./wk.

Nursing (NURS)

NURS 124
Foundations of Nursing (9 CR)
Prerequisites: Admission to the Nursing Program and current certification in Kansas as Certified Nursing Assistant (CNA) and Cardiopulmonary Resuscitation Certification (CPR) for Health Care Providers and CHEM 122 and MATH 116 or higher level MATH course and corequisite: BIOL 144 and PSYC 130

This course is the first in a sequence of five nursing courses. Students will acquire nursing knowledge and skills necessary to care for patients across the health care continuum. Students will use a critical thinking approach to apply fundamental principles of nursing to patient care. In the clinical component, students will apply theoretical content and therapeutic interventions to patients with health alterations. Course instruction will occur in the classroom, online, in the health resource center and healthcare agencies. 4 hrs. lecture, 1 hr. lab, 15 hr. clinical/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $540 to $565.

NURS 126
Nursing Care of the Adult: Health Alterations (9 CR)
Prerequisites: BIOL 144 and PSYC 130 and NURS 124 corequisite: PSYC 218

This course is the second in a sequence of five nursing courses. Students will build on fundamental nursing knowledge and skills acquired in the first nursing course to care for adult patients across the health care continuum. The content will emphasize nursing care of older adults experiencing complex multi-system conditions. The content will also include nursing care for young, middle-aged, and older adults experiencing alterations in mental health. The student will use a critical thinking approach to apply concepts of adaptation, nursing process, therapeutic interactions, communication, and teaching/learning in the care of the culturally diverse patient. In the critical component, students will apply theoretical

content and therapeutic nursing interventions to patients with acute and chronic health alterations. Course instruction will occur in the classroom, online, in the health resource center and health care agencies. 4 hrs. lecture, 1 hr. lab, 15 hr. clinical/wk.

NURS 136
LPN-RN Transition Course (6 CR)

Prerequisites: Completion of LPN program, Current Cardiopulmonary Resuscitation Certificate (CPR) for Health Care Providers and CHEM 122 and MATH 116 or higher and either BIOL 144 or BIOL 140 and BIOL 225 and ENGL 121 and PSYC 130 and PSYC 218

This course is an introduction to the second year of the associate degree nurse (ADN) program for graduates of licensed practical nurse (LPN) programs. The content will emphasize nursing care for patients experiencing alterations in mental health and complex multi-system conditions. The student will use a critical thinking approach to apply concepts of adaptation, nursing process, therapeutic interactions, and teaching learning in the care of the patient. An in-depth examination of physical assessment and psychomotor/communication skills will prepare the student for transition to the associate degree nursing program. Course instruction will occur in the classroom, online, in the health resource center, and health care agencies. 15 hrs. lecture, 1 hr. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $320.

NURS 228
Nursing Care of the Childbearing Family (5 CR)

Prerequisites: ENGL 121 and PSYC 218 and NURS 126 Corequisites: BIOL 230 and either SOC 122 or SOC 125 and NURS 230

This course is the third or fourth in a sequence of five nursing courses. Students will acquire nursing knowledge and skills necessary to care for the childbearing family. Common alterations, stressors in the family, cultural sensitivity and the art of nursing will be emphasized during the antepartum, intrapartum, postpartum and newborn periods. Students will use principles of therapeutic communication, critical thinking, and teaching/learning to apply nursing process to both normal and high-risk mothers and newborns. In the clinical component, students will apply theoretical content and therapeutic nursing interventions with a caring approach to a culturally diverse population. Course instruction will occur in the classroom, online, in the health resource center and health care agencies. This course will be taken in the same semester with NURS 230, Nursing Care of Children. 4 hrs. lecture, 1 hr. lab, 15 hrs. clinical/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $160.

NURS 230
Nursing Care of Children (5 CR)

Prerequisites: ENGL 121 and PSYC 218 and NURS 126 Corequisites: BIOL 230 and SOC 122 or SOC 125 and NURS 228

This course is the third or fourth in a sequence of five nursing courses. Students will acquire nursing knowledge skills necessary to care for infants through adolescents on a continuum of health and adaptation that may result in acute or chronic illness. Students will use principles of therapeutic communication, psychosocial concepts, growth and development, critical thinking, and organization to apply the nursing process to culturally diverse populations. In the clinical component, students will apply theoretical content and therapeutic nursing interventions to infants/children/adolescents with acute and/or chronic health alterations. Course instruction will occur in the classroom, online, in the health resource center and health care agencies. 4 hrs. lecture, 1 hr. lab, 15 hrs. clinical/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $160.

NURS 232
Complex Patient Care Management (9 CR)

Prerequisites: NURS 228 and NURS 230

This course is the last in a sequence of five nursing courses that will enable students to care for patients experiencing complex multi-system health alterations across the health care continuum. Students will use a critical thinking approach to apply concepts of management to a group of patients in a health care setting. This course integrates knowledge and skills acquired in the previous four courses and facilitates student transition to professional nursing practice. In the clinical component, students will apply theoretical content and therapeutic nursing interventions to a group of patients/families with complex, acute and chronic health alterations. Course instruction will occur in the classroom, online, in the health resource center and health care agencies. 4 hrs. lecture, 1 hr. lab, 15 hrs. clinical/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $450 to $550.

NURS 234
Registered Nurse Refresher (9 CR)

Prerequisite: Previously licensed as a registered nurse. Corequisite: Current CPR certification for health care providers

The course will prepare the Registered Nurse (RN) to reenter the acute health care setting for employment after an absence from the profession of 3-5 years. The course will review common health illnesses of the adult and provide a review of systems. 5 hrs lecture, 4 hrs. lab/wk. 80 hrs. theory and 180 hrs. clinical

NURS 236
Registered Nurse Perioperative Nursing (3 CR)

Prerequisites: Currently licensed as a Registered Nurse and current CPR certification for health care providers Corequisite: Could possibly complete CPR while taking this course

This course will prepare the novice perioperative registered nurse (RN) or the RN desiring to enhance employment opportunities in the perioperative setting with basic didactic perioperative content. The course will provide the rationale and theory needed to provide safe patient care in the perioperative setting as an operating room nurse. The course is designed to supplement clinical practice. 2 hrs lecture 1 hr. lab/wk.

NURS 238
Registered Nurse Perioperative Clinical (2 CR)

Prerequisites: Currently licensed as a Registered Nurse and current CPR certification for health care providers Corequisite: NURS 236

This course will prepare the novice registered nurse (RN) desiring to enhance employment opportunities in the perioperative setting with basic perioperative skill competencies. The clinical practice will be in the perioperative setting to provide a realistic experience for the student. 192 clinical hours

Occupational Therapy Assistant (KOT)

KOT 100

Introduction to Occupational Therapy (2 CR)

Introduction to the history, philosophy and practice of occupational therapy. Exploration of diversity and the role it plays in health care. 2 hrs. lecture/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of the occupational therapy assistant program about the class meeting times and beginning and ending dates of classes. Call

816-759-4000.

KOT 102

Documentation Guidelines (2 CR)

Prerequisite: Formal admission into the occupational therapy assistant program

Guidelines for documentation of occupational therapy services. 2 hrs. lecture/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of the occupational therapy assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KOT 103

Clinical Conditions (2 CR)

Prerequisite: Formal admission into the occupational therapy assistant program

Etiology, clinical process and prognosis of common diseases and illnesses. Effect of disease or illness on an individual's performance and the impact this has on the person, family and society. 2 hrs. lecture/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of the occupational therapy assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KOT 106

Therapeutic Interventions I (4 CR)

Prerequisite: Formal admission into the occupational therapy assistant program

Basic therapeutic interventions, techniques, applications and legislation pertinent to OT practice. Learn OT's role in promoting health and wellness. 2.5 hrs. lecture, 3 hrs. lab/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of the occupational therapy assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KOT 112

Basic Emergency Patient Care (1 CR)

This course introduces current cardiopulmonary resuscitation skills, including adult, child and infant resuscitation, according to American Heart Association standards. Medical and environmental emergencies are reviewed. 1 hr. lecture/wk. Course taught at Penn Valley Community College. Students should contact the Penn Valley coordinator of the occupational therapy assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KOT 116

Level I Fieldwork I (1 CR)

Prerequisite: Formal admission into the occupational therapy assistant program

Introduction to the role, policies and procedures of fieldwork. Directed experience in a specified community setting. 0.5 hr. lecture, 1 hr. lab/ wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of the occupational therapy assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KOT 118

Assistive Technology (2 CR)

Prerequisites: BIOL 144 and BIOL 145, KOT 112, KOT 100 102, 103, 106 and 116

Hands-on introduction to high-tech assistive technology and augmentative communication. 1 hr. lecture, 2 hrs. lab/wk. Course taught at MCC-Penn Valley

Community College. Students should contact the Penn Valley coordinator of the occupational therapy assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KOT 120

Pediatrics (3 CR)

Prerequisites: KOT 112, BIOL 144 and BIOL 145 and KOT 100 KOT 102, KOT 103, KOT 106 and KOT 116

Occupational therapy practice as it relates to individuals from birth to early adolescence. Study of normal growth and development. 3 hrs. lecture/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of occupational therapy assistant about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KOT 121

Level I Fieldwork II

Prerequisites: BIOL 144 and BIOL 145, KOT 112, and KOT 100, KOT 102, KOT 103, KOT 106 and KOT 116 and concurrent enrollment in KOT 120

Directed experience in a specified community setting. Course is .5 credit hour. 1 hr. clinical/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of the occupational therapy assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KOT 130

Analysis of Physical Performance (3 CR)

Prerequisites: KOT 112, BIOL 144 and BIOL 145, KOT 100, KOT 102 KOT 103 KOT 106 and KOT 116

Analysis and evaluation of the components of physical performance and their relationship to functional activities. 2 hrs. lecture, 2 hrs. lab/wk. Course taught at MCC-Penn Valley Community College.   Students should contact the Penn Valley coordinator of the occupational therapy assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KOT 154

Applied Neurology (2 CR)

Prerequisites: BIOL 144 and BIOL 145, MCC BIOL 210, and admission to OTHA or PTHA program.

Foundations of neuroscience necessary for practice as a rehabilitation professional. Correlation of Clinical problems with pathology of the nervous system. 2 hrs. lecture/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of the occupational therapy assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KOT 173

Special Topics (2 CR)

Prerequisite: Concurrent enrollment in physical therapy assistant or occupational therapy assistant programs or completion of an associate or advanced degree in physical therapy or occupational therapy

A study of advanced topics relevant to the current practice of rehabilitation. Cross listed as KPT 173. 2 hrs. lecture/wk. Course taught at Penn Valley Community College. Students should contact the Penn Valley coordinator of the occupational therapy assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KOT 201

Mental Health (2.5 CR)

Prerequisites: KOT 118 and KOT 120 and KOT 121 and KOT 130 and KOT 154

Occupational therapy assessment and treatment techniques in the mental health setting. 2 hrs. lecture, 1 hr. lab/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of the occupational therapy assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KOT 202

Physical Dysfunction (3 CR)

Prerequisites: KOT 118 and KOT 120 and KOT 121 and KOT 130 and KOT 154

Occupational therapy assessment and treatment used with the physically and cognitively challenged population. 3 hrs. lecture/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of the occupational therapy assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KOT 203

Gerontology (3 CR)

Prerequisites: KOT 118 and KOT 120 and KOT 121 and KOT 130 and KOT 154

Concepts and processing of aging. The role of occupational therapy with the elderly. 3 hr. lecture/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of the occupational therapy assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KOT 208

Therapeutic Interventions II (2 CR)

Prerequisites: KOT 118 and KOT 120 and KOT 121 and KOT 130 and KOT 154

Advanced therapeutic interventions and techniques used to enhance functional ability and independence in daily life tasks and occupations. 1 hr. lecture, 2 hrs. lab/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of the occupational therapy assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KOT 212

Level I Fieldwork III (2 CR)

Prequisites: KOT 118 and KOT 120 and KOT 121 and KOT 130 and KOT 154

Directed experience in specified community settings. 4 hrs. clinical/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of the occupational therapy assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KOT 217

Fieldwork Seminar (3 CR)

Prerequisites: KOT 118 and KOT 120 and KOT 121 and KOT 130 and KOT 154

Preparation for full-time clinical practice, the national certification process, state licensure, and future employment. 3 hrs. lecture/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of the occupational therapy assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KOT 222

Level II Fieldwork (12 CR)

Prerequisites: KOT 201, KOT 202, KOT 203, KOT 208 and KOT 212 and KOT 217

Directed clinical experience in different practice areas of occupational therapy. 40 hrs. field studies/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of the occupational therapy assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

Philosophy (PHIL)

PHIL 121
Introduction to Philosophy (3 CR)

Students will examine the basic questions of philosophical inquiry, such as the nature of being, and the ways humans acquire knowledge and moral, social, religious and political values. Emphasis is on the application of the study of traditional problems of philosophy to the study of contemporary society. 3 hrs./wk.

PHIL 124
Logic and Critical Thinking (3 CR)

This course is an inquiry into techniques of persuasion and the standards for interpretation and assessment that are the basis for critical thinking. Argumentative and non-argumentative forms of persuasion are examined, including propaganda, exaggeration, stereotyping, slanted news and common fallacies. In addition, the course offers standards for evidential warrants based on samples, probabilities and causal claims. Relations between categorical propositions and Venn diagrams are examined and, finally, the course suggests strategies for fresh attacks on conceptual problems. 3 hrs./wk.

PHIL 138
Business Ethics (1 CR)

This course applies classical and contemporary theories of morality to problems, questions and dilemmas arising in business. Using the major concepts and principles of deontological, consequentialist and perfectionist theories, it examines and analyzes cases involving such areas as employer/employee relations, corporate responsibility, truth telling in business and workplace diversity. Emphasis is on the development of moral reasoning skills that allow for meaningful analysis and evaluation of moral situations. 1 hr./wk.

PHIL 143
Ethics (3 CR)

This course provides a systematic and critical study of values related to human conduct. It focuses on both traditional standards of ethical conduct and qualities of personal character. What we hold to be right or wrong, the basis for believing so, and what we consider to be virtues or vices are examined with an eye to understanding our current ethical situation. 3 hrs./wk.

PHIL 154
History of Ancient Philosophy (3 CR)

This course provides a thorough exploration of ancient Greek and Roman philosophical thought from the original efforts of the Pre-Socratics to understand the fundamental operations of the natural world to concerns about the way a person might live successfully in nature and society. Also explored are the notable Athenians of the classical period, Protagoras, Socrates, Plato and Aristotle, and

the later schools of thought such as cynicism, skepticism, hedonism and stoicism. In the process, it provides a comprehensive understanding of the philosophical foundations of the Western world view. 3 hrs./wk.

PHIL 161
Elementary Symbolic Logic (3 CR)

This course is a beginning course in symbolic logic and should be of particular benefit to those students who will pursue more advanced studies in linguistics, philosophy of language, mathematics or computer science. Students will be introduced to modern analytical techniques of formal deductive logic. Students should gain the ability to use a formal language to translate English language arguments and the ability to demonstrate the validity or invalidity of symbolic arguments using the techniques of truth-table analysis and formal proof. Some attention will also be given to the historical development of symbolic logic. 3 hrs./wk.

PHIL 176
Philosophy of Religion (3 CR)

This course is an inquiry into the nature of religion, religious thought and religious language. It addresses philosophical topics such as the nature of religious belief, the apparent need of some people for religion, the arguments offered as proof for and against the existence of God, apparent contradictions between scientific and religious teachings, special problems raised by religious language, and the changes religion and philosophy of religion have made to accommodate a modern world view. 3 hrs./wk.

PHIL 210
History of Modern Philosophy (3 CR)
Prerequisite: PHIL 121 or PHIL 143 or HIST 125 or HIST 126

This course takes a historical approach to the development of modern philosophy and covers the period from the Renaissance to the 20th-century. The course will cover the epistemological, metaphysical and relevant axiological issues of the major philosophers and philosophical movements of this period. The course will also examine the influence of modern philosophy on contemporary thought. 3 hrs. lecture/wk.

Photography (PHOT)

PHOT 121
Fundamentals of Photography (3 CR)

This course provides an introduction to the tools, procedures, concepts and application of photographic imaging. Students will use cameras, light meters and darkroom equipment for film developing and printing to make images to meet the requirements of a series of assignments designed to develop specific skills, competencies and points of view and to stimulate the students' creative capacities for personal expression, communication and self-understanding. Students must provide their own camera with adjustable focus, shutter speeds and aperture. 6 hrs. lecture, lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100 to $150.

PHOT 122
Advanced Photography (3 CR)
Prerequisite: PHOT 121

This course provides an introduction to advanced techniques, tools, procedures and concepts of photographic imaging, with an emphasis on black-and-white photography as a fine art. Students will use Zone System tests and procedures to produce prints of maximum quality. Students will use advanced techniques, such as split-developers for contrast control, multiple-imaging and archival processing, and print presentation. Several "alternative" printing processes will be discussed and demonstrated. This course also includes a basic introduction to medium format (2 1/4) and large format (4 x 5) camera equipment and technique. Students will apply the above to make images for a series of conceptually advanced, project/series-oriented assignments to stimulate the student's creative capacities for personal expression, communication and self-understanding. 6 hrs. lecture, lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100 to $150.

PHOT 123
Studio Photography (3 CR)
Prerequisite: PHOT 121

This course provides an introduction to advanced techniques, tools, procedures and concepts of studio and commercial photography. Students will use professional camera and studio equipment, including studio electronic flash and hand-held light/flash meters. This course also includes an introduction to professional medium format (2 1/4) and large format (4"x5") equipment and advanced camera techniques for total image control. Students will use studio lighting for various portraiture styles and for small-product, table-top photography. Applications of digital photography as they apply to studio photographic processes will be introduced. Students will apply the above to make images for a series of advanced studio assignments. 6 hrs. lecture, lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $75 to $$150.

PHOT 125
Photography for Publication (3 CR)
Prerequisite: PHOT 121

This course provides an introduction to the concepts and application of photographic imaging for media publication. Students will use cameras, computers, software, scanners and image-output devices to master the issues, concepts and constraints involved in creating images for a broad range of publication needs. They will prepare and format digitized image files for storage, transmission and print-based and Web-based reproduction. This course is designed to meet the photographic imaging needs of journalism students. 6 hrs. lecture, lab/wk.

PHOT 128
Digital Photography (3 CR)

This course is an introduction to the concepts, tools and technology of digital imaging for photographers. Students will develop competence in the use of digital photographic equipment, software, storage devices and printers to produce digital photographic images satisfying the requirements of a series of assignments designed to develop specific skills and competencies. Students will "capture," manipulate, correct, transmit, store and output images. They will use digital technology to produce images for commercial and/or artistic applications. Ethics and cultural implications of the technology will be discussed. 6 hrs. lecture, lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $75 to $150.

PHOT 140
History of Photography (3 CR)

Physical Ed, Health & Rec (HPER)

HPER 100
Basketball (Beginning) (1 CR)
Students will have an opportunity to learn fundamental basketball skills through demonstration and discussion of strategies for team play. Emphasis is on individual participation. 2 hrs./wk.

HPER 101
Basketball (Intermediate) (1 CR)
Prerequisite: HPER 100

Students will have an opportunity to learn intermediate basketball skills through demonstration and discussion of strategies for team play. This course will advance the skills of the student who successfully completed the beginning basketball course. Emphasis is on individual participation and competition team play. 2 hrs./wk

HPER 102
Navigation 102: Orientation at JCCC (1 CR)
This course is designed to help students transition from past experiences to college life. The topics will focus on four key areas, including practical life skills, wellness-related presentations, working with diverse individuals and groups, and academic skills enhancement. Thus, the goal of this course is to provide students with a valuable living and learning experience that equips them with the tools necessary to be academically successful and remain in school. This course will help students "navigate" through their first semester at JCCC. 2 hrs. lecture/wk. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.

HPER 103
Touch/Flag Football (1 CR)
The fundamentals of touch and flag recreational football will be introduced as well as strategies necessary for team play. 2 hrs./wk.

HPER 104
Yoga (1 CR)
This class will utilize techniques from yoga which aim to provide mind/body benefits including better posture and increased body awareness. Muscular strength and flexibility will be developed through poses and positions. This class will be geared towards all students, both beginners as well as those who have previous training. 3 hrs. activity/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $12 to $15.

HPER 105
Bowling (Beginning) (1 CR)
The student will have the opportunity to learn and practice the fundamentals of bowling. The student will be introduced to the history of the game, rules, equipment and lane specifications, scoring, handicap calculations, and operation of automatic scoring equipment. 2 hrs./wk. HPER mini-courses meet an

additional 16 hours on a modular schedule.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $34.

HPER 107
Bowling (Intermediate) (1 CR)

Prerequisite: HPER 105

Students will demonstrate advanced fundamentals of bowling. The student will acquire advanced knowledge of the history of the game, rules, equipment and lane specifications. Intermediate to advanced bowling competition will be explored. 2 hrs./wk. HPER mini-courses meet an additional 16 hours on a modular schedule.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $34.

HPER 110
Racquetball (Beginning) (1 CR)

A brief history of rules and terminology of racquetball will be followed by instruction and actual practice and application of the fundamentals. 2 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $45 to $200.

HPER 112
Racquetball (Intermediate) (1 CR)

Prerequisite: HPER 110

Students will review the rules and terminology of racquetball, as well as demonstrate the basic skills. The student will demonstrate skills and strategies in a competitive format and use the mental preparation and conditioning aspects of the game of racquetball. The intermediate racquetball student will apply skills in a competitive format. 2 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $45 to $200.

HPER 115
Soccer (1 CR)

The fundamentals of soccer will be introduced as well as strategies necessary for team play. 2 hrs./wk.

HPER 117
Power Volleyball (Beginning) (1 CR)

The basic skills of volleyball taught in this class include the forearm pass, overhead set, serve, block and spike (attacking). Elementary offense and defense along with volleyball rules, scoring and officiating will be covered. 2 hrs./wk.

HPER 118
Power Volleyball (Intermediate) (1 CR)

Prerequisite: HPER 117

Students will have the opportunity to build upon the basic fundamentals of the Power Volleyball (Beginning) class. Intermediate skills, strategies, offensive and defensive systems and rules will be covered for six-player, four-player, three-player, and two-player volleyball. 2 hrs./wk.

HPER 130
Running Awareness and Exercise (1 CR)

The course will introduce the student to aerobic fitness through the activity of running. The training principles for running and competitive racing will be covered, and the individual will complete a personal running and/or racing training program. 2 hrs./wk.

HPER 134
Weight Training (Beginning) (1 CR)

In this class, muscular strength and endurance will be developed through weight training activity. A workout program will be implemented for each student. The muscular system, basic terminology of weight training and weight training theory will be discussed. 2 hrs./wk.

HPER 135
Weight Training (Intermediate) (1 CR)

Prerequisite: HPER 134

In this class, muscular strength and endurance will be developed. A self-designed and directed resistance workout program will be implemented. The proper use of a training log and personal fitness evaluation techniques will be discussed. 2 hrs./wk.

HPER 137
Tennis (Beginning) (1 CR)

Students will get individualized instruction in this course on the rules, terminology and history of tennis. The student will receive instruction on the basic strokes of tennis, as well as the strategies of singles and doubles play. 2 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $30 to $40.

HPER 138
Tennis (Intermediate) (1 CR)

Prerequisite: HPER 137

Students will review the rules, terminology and history of tennis. The student will receive instruction on the strokes of tennis, as well as the strategies of singles and doubles play in a competitive format. Emphasis will be on the mental and physical conditioning of the game. 2 hrs./wk. HPER mini-courses meet an additional 16 hours on a modular schedule.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $30 to $40.

HPER 140
Modern Dance (Beginning) (1 CR)

This course emphasizes the movement between positions rather than the picture-perfect poses of ballet and other dance styles. Moving through space off of and onto the floor, breathing and moving improvisationally will be explored. 2 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $12 to $40.

HPER 142
Modern Dance (Intermediate) (1 CR)

Prerequisite: HPER 140

A continuation of Modern Dance (Beginning), this course presents more difficult and longer movement combinations. Students further explore their creativity through elements of improvisations, choreography and performance while gaining greater muscular flexibility and strength. 2 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $12 to $40.

HPER 150
Aerobics (Beginning) (1 CR)

Motor skills, jogging and dance steps are combined in this exercise program to improve muscle tone and cardiovascular fitness. 2 hrs. wk. HPER mini-courses meet an additional 16 hours on a modular schedule.

HPER 152
Aerobics (Intermediate) (1 CR)

Prerequisite: HPER 150

The motor skills, jogging and dance steps are performed at faster pace for a longer period of time than in Aerobics (Beginning). The course will introduce the student to the fitness benefits from increased duration and intensity of aerobic activities. 2 hrs./wk. HPER mini-courses meet an additional 16 hours on a modular schedule.

HPER 155
Ballet (Beginning) (1 CR)

This progressive ballet system is designed to produce muscular strength and flexibility and a working knowledge of anatomy, plus the aesthetic satisfaction of expressing yourself through a classical art form. Offered to students of all ages and experience, both beginners as well as those who have had some training. 2 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $17 to $30.

HPER 157
Ballet (Intermediate) (1 CR)

Prerequisite: HPER 155

A continuation of Beginning Ballet, this progressive ballet system explores multilayered ballet movement in simple dance combinations. 2 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $17 to $30.

HPER 158
Jazz Dance (Beginning) (1 CR)

An introduction to the concepts and motor skills involved with jazz dance. Basic body position will be introduced as well as basic terminology, jazz history, various jazz styles and the basic techniques involved, isolations, combinations, choreography and rhythmic influences. 2 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $7 to $30.

HPER 159
Jazz Dance (Intermediate) (1 CR)

Prerequisite: HPER 158 or equivalent

A continuation of Beginning Jazz Dance, this course will require students to assimilate and execute more difficult isolated dance moves as well as use the basic skills acquired in Beginning Jazz Dance to perform complex dance sequences to a variety of music. 2 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $7 to $30.

HPER 163
Ballroom Dance (Beginning) (1 CR)

This is an introduction to ballroom dance with emphasis on basic patterns and fundamental steps of the waltz, fox trot, swing, polka and cha-cha. Common rules of dance courtesy and a brief overview of ballroom dance history will be included. Music or dance background is not necessary. 2 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $20 to $40.

HPER 165
Karate I (1 CR)

The student will receive instruction in the basic fundamentals of karate, including stances, blocks, kicks, strikes and self-defense techniques. 2 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $20 to $30.

HPER 166
Karate II (1 CR)

Prerequisite: HPER 165

The student will review the skills from the prerequisite course of Karate I. Students will demonstrate techniques that include the moving block, kicks and positions for karate. The course will also cover combination moves as well as the defensive technique.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $20 to $30.

HPER 167
Karate III (1 CR)

Prerequisite: HPER 166

Students will have the opportunity to achieve higher levels of proficiency, routines, kumite (sport/free fighting) and self-defense. 2 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $20 to $30.

HPER 168
Karate IV (1 CR)

Prerequisite: HPER 167 Note: Beginning Japanese is a suggested prerequisite

Students in this course will have the opportunity to achieve the advanced level of karate in the following: taiso (exercise), kata (forms), kumite (sport/free fighting) and self-defense application. 2 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $20 to $30.

HPER 172

Track and Field (Beginning) (1 CR)

This course will introduce the student to the sport of track and field. Through activity and discussion the student will improve his or her motor ability to perform track and field events. 2 hrs./wk.

HPER 174
Coaching and Officiating of Track and Field (2 CR)

Students will have the opportunity to learn the fundamentals of coaching and officiating track and field events. Upon successful completion of the course, students will be prepared for USATF Level 1 certification. 2 hrs./wk.

HPER 175
Fencing (1 CR)

Beginning foil fencing will provide the student with the fundamental rules and techniques of foil fencing. The student will utilize these skills in a fencing bout. The student will also be instructed in the rules and procedures of officiating foil fencing. 2 hrs./wk.

HPER 180
Fencing (Intermediate) (1 CR)

Prerequisite: HPER 175

Intermediate fencing will provide the student with advanced techniques and rules of foil fencing and with fundamental techniques and rules of epee fencing. The student will utilize these skills in a fencing competition. The student will also be instructed in the rules and procedures of refereeing foil fencing and organization of fencing competitions. 2 activity hrs./wk.

HPER 182
Swimming (Beginning) (1 CR)

Students in beginning swimming will learn basic swimming skills and safety information that are fundamental to safe swimming performance. 1 hr./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $25 to $70.

HPER 183
Swimming (Intermediate) (1 CR)

Prerequisite: HPER 182 or the equivalent

Students in intermediate swimming will learn more advanced swimming strokes, skills and safety information along with increasing personal fitness levels through continuous endurance swimming. 1 hr./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $25 to $70.

HPER 185
Archery (1 CR)

Students will receive individualized instruction in the basic skills of archery as a recreational sport lending itself as a lifetime leisure interest. Safety, fundamental care and usage of archery tackle and beginning archery skills will be taught along with a survey of the history of archery. 2 hrs./wk. HPER 185 Archery classes will meet in the lobby in the gym building by room 116.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks.

$10 to $20.

HPER 190
Golf (1 CR)

The beginning golfer will be given instruction in the rules of and basic swing fundamentals for the game of golf. Proper golf equipment, proper use of this equipment and golf etiquette will be reviewed. 2 hrs./wk. HPER mini-courses meet an additional 16 hours on a modular schedule.
<u>Associated Costs</u>: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $80 to $400.

HPER 192
Wellness for Life (1 CR)

This course introduces students to the theory and principles upon which the concepts of lifetime fitness and wellness are based. Students will examine the relationship that exists between wellness and lifestyle behaviors. Individual self-assessments will be used to establish current health and fitness levels. 1 hr./wk.

HPER 194
Sports Conditioning (Beginning) (1 CR)

Students will have the opportunity to learn the fundamentals of general and sports specific conditioning. All aspects of physical and psychological development are incorporated in this class. Strength, power, speed, acceleration, muscular hypertrophy and endurance, cardiovascular endurance, motor skills and agility drills are taught and practiced. The class will include general physical preparation sport fitness, plyometrics, agility drills and sport-related specific conditioning. The students will learn about the principle of year-round conditioning, including conditioning appropriate to the off-season, preparatory period, pre-competition period and competition period. 2 hrs./wk.

HPER 195
Introduction to Sports Medicine (3 CR)

The purpose of this class is to introduce the basic concepts of sports medicine, specifically Athletic Training. It will address the fundamentals of the human musculoskeletal system, sports related injuries, injury treatment, and other sports medicine related topics. This class is designed for beginning athletic training students and other students interested in the subject. 3 hrs. lecture/wk.

HPER 197
Sports Conditioning (Intermediate) (1 CR)

Prerequisite: HPER 194

Students will have the opportunity to build upon principles and practices of general and sports-specific conditioning learned in Beginning Sports Conditioning. All aspects of physical and psychological development are incorporated in this class. Strength, power, speed, acceleration, muscular hypertrophy and endurance, cardiovascular endurance, motor skills and agility drills are taught and practiced. The class will include general physical preparation, sport fitness and conditioning. Students will continue to learn about the principle of year-round conditioning, including conditioning appropriate to the off-season, preparatory period, pre-competition period and competition period. 2 hrs. lecture/wk.

HPER 198
Athletic Training Practicum I (1 CR)

Corequisite: HPER 195

At the conclusion of this practicum, the student will be able to explain and demonstrate a variety of basic principles and practices in athletic training, including the essentials of record keeping, athletic injury taping and strapping techniques, an introduction to the supervised use of and safety procedures for therapeutic modalities and therapeutic exercise equipment. Major anatomical landmarks and basic anatomy of the major joints of the human body will be identified and palpated. This practicum, intended for athletic training and other allied health students, will be hands-on and conducted under the direct supervision of a certified/licensed athletic trainer. 16 hrs. lecture, 112 hrs. practicum

HPER 200
First Aid and CPR (2 CR)

After completing this course, students should be able to perform the basic skills of first aid. The course will cover cause, prevention and first aid care of common emergencies. Certification may be earned in first aid and cardiopulmonary resuscitation. 2 hrs./wk.

HPER 202
Personal Community Health (3 CR)

This course is designed to provide the student with the knowledge and understanding to make positive, healthy lifestyle choices. In addition, students will learn about issues within the community that affect their daily health both directly and indirectly. 3 hrs./wk.

HPER 204
Care and Prevention of Athletic Injury (3 CR)

Care and Prevention of Athletic Injuries will focus on recognition, evaluation, treatment, and recording of common athletic injuries. Human anatomy will be emphasized through the understanding of athletic movements and physical testing. Additional topics include legal and ethical practices for the athletic trainer and the psychology of today?s competitive athlete. Care and Prevention of athletic Injuries is the basic sports medicine class required by most exercise science and coaching degree programs. 3 hrs./wk.

HPER 205
Individual Lifetime Sports (2 CR)

This course provides a basic knowledge of several individual lifetime sports including badminton, bowling, golf, racquetball and tennis. Students will learn fundamental skills for each sport as well as history, benefits, equipment, rules, etiquette, safety, scoring and strategy. 3 hrs./wk. Fall.

HPER 207
Athletic Training Practicum 2 (2 CR)
Prerequisites: HPER 195 and HPER 198 and BIOL 140 and BIOL 225 and Corequisite: HPER 204

At the conclusion of this practicum, the student will be able to explain and demonstrate the basic theories supporting the uses of therapeutic modalities and therapeutic exercise, and the evaluation/assessment of injuries to athletes. The student will demonstrate a functional understanding of the major muscle groups of the human body. The student will be able to discuss and explain the duties and responsibilities of a certified athletic trainer (ATC). Direct work with specific athletic teams will facilitate the practicum. This practicum will be hands-on, and conducted under the direct supervision of a certified/licensed athletic trainer. This class is intended for athletic training and other allied health students. 16 lecture

304 practicum hrs.

HPER 208
Introduction to Exercise Physiology (3 CR)

This introduction to exercise physiology will introduce the effects of exercise on the muscular system, the cardiovascular system and the metabolic system. The course will prepare the student in the design of and principles for an individual exercise program. 3 hrs./wk.

HPER 217
Coaching and Officiating Basketball (2 CR)

This course introduces students to the theory and principles of coaching basketball and the rules and mechanics of officiating. Students will have the opportunity to learn how to organize, coach and plan daily practice sessions. 2 hrs./wk.

HPER 220
Sports Officiating (3 CR)

The rules and practical application of officiating will be covered for the following sports: volleyball, football, basketball, baseball and softball. 3 hrs./wk.

HPER 224
Outdoor Recreation (3 CR)

This course introduces the student to activities that create interaction between the individual and/or individuals and elements of the outdoor recreational setting. Outdoor Recreation Students plan activity projects such as camping, hiking, nature observation and biking. 3 hrs./wk. or, may be taught online for 16 weeks.

HPER 240
Lifetime Fitness I (1 CR)

This course is designed to provide an effective exercise circuit system to help the student develop overall muscle tone and cardiovascular conditioning. Handouts emphasizing the value of developing a total lifetime fitness attitude and optional lectures are available to enhance the student's knowledge of the benefits of a lifetime fitness program. This course requires an initial orientation/assessment. After the assessment, the class becomes an open-lab format by arrangement. 2 hrs./wk.

HPER 241
Lifetime Fitness II (1 CR)

Prerequisite: HPER 240

This course is a continuation and expansion of Lifetime Fitness I. 2 hrs./wk., open-lab format by arrangement.

HPER 242
Lifetime Fitness III (1 CR)

Prerequisite: HPER 241

This course is a continuation and expansion of Lifetime Fitness II. 2 hrs./wk., open-lab format by arrangement.

HPER 243
Lifetime Fitness IV (1 CR)
Prerequisite: HPER 242
This course is a continuation and expansion of Lifetime Fitness III. 2 hrs./wk., open-lab format by arrangement.

HPER 245
Elementary Physical Education (3 CR)
This course is designed to meet the needs of students who wish to teach in the area of elementary physical education and/or elementary education. This course will provide the students with knowledge and background in planning, classroom management techniques, teaching methodology, legal liability, evaluation, wellness, special students, sports, and games related to elementary physical education. The course will include observation and teaching. 3 hrs./wk. Spring

HPER 255
Introduction to Physical Education (3 CR)
This course will introduce the student to the field of physical education and sport. This course will discuss the historical, biomechanical, physiological and psychological foundations of physical education and sport. It will examine the role of physical activity as a means to help individuals acquire the skills, fitness levels and knowledge that contribute to the arena of physical development and organized competition. It will also discuss the role physical education and sports play in our society. Each individual will develop a personal philosophy for physical education and sports. 3 hrs./wk. Spring.

Physical Science (PSCI)

PSCI 120
Physical Science (4 CR)
This course is an introduction to the fundamental concepts and principles of physics, chemistry, geology and astronomy. Topics include energy, electricity, magnetism, modern physics and chemical bonding. It is counted toward laboratory science requirements and is intended for non-science majors. It includes presentation of material using audiovisual, computer and other multimedia aids. Three hours of class and three hours of work in a scheduled lab are required each week. 3 hrs. lecture, 3 hrs. lab/wk.

Physical Therapist Assistant (KPT)

KPT 102

Basic Emergency Patient Care (1 CR)
Current cardiopulmonary resuscitation skills, including adult, child and infant resuscitation according to American Heart Association standards. Medical and environmental emergencies review. (Successful completion of the course qualifies the student for the Basic Life Support Course Certification.) 1 hr. lecture/wk. Course taught at Penn Valley Community College. Students should contact the Penn Valley coordinator of the physical therapist assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KPT 151

Introduction to Physical Therapy (2 CR)

Introduction to the basic concepts of the function of a physical therapist and physical therapist assistant as members of the health team and interaction of health care disciplines in the care of the patient. Medical terminology related to the specific discipline. 2 hrs. lecture/wk. Course taught at Penn Valley Community College. Students should contact the Penn Valley coordinator of the physical therapist assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KPT 152

Physical Therapy Fundamentals I (4 CR)

Prerequisite: Formal acceptance into the program.

Basic patient care skills utilized by the physical therapist assistant in carrying out the plan of care established by the physical therapist. Theory and application of treatment modalities used in physical therapy. Therapeutic measures and patient handling skills used in the physical treatment of various injuries and diseases. Field trips to observe the clinic and its modalities. 2.5 hrs. lecture, 3 hrs. lab/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of the physical therapist assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KPT 153

Kinesiology (4 CR)

Prerequisites: BIOL 144, BIOL 145, KPT 152 and KPT 160

Anatomy and function of the musculoskeletal system. Analysis of various daily activities. Application of physical therapy assessment procedures related to clinical kinesiology. 2 hrs. lecture, 4 hrs. lab/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of the physical therapist assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KPT 154

Applied Neurology (2 CR)

Prerequisites: BIOL 144 and BIOL 145, MCC BIOL 210 and admission to OTHA or PTHA program.

Foundations of neuroscience necessary for practice as a rehabilitation professional. Anatomy and function of the nervous system. Correlation of clinical problems with pathology of the nervous system. 2 hrs. lecture/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of the physical therapist assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KPT 155

Rehabilitation (4 CR)

Prerequisite: KPT 162

Introduction to the philosophy underlying rehabilitation theory and principles of treatment involved in normal and abnormal ambulation and mobility. Application of external supports and assistive devices, and teaching activities of daily living with attention to description, demonstration and practice. Field trips are required. 3 hrs. lecture, 2 hrs. lab/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of the physical therapist assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KPT 158

Therapeutic Exercise (4 CR)

Prerequisite: KPT 162

Introduction to the theory and principles of application of therapeutic exercise,

including patient instruction, manual techniques and equipment commonly used by the physical therapist assistant. Field trips to learn various specialized techniques. 2 hrs. lecture, 4 hrs. lab/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of the physical therapist assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KPT 159

Orthopedic Pathology (2 CR)

Prerequisites: BIOL 144, BIOL 145, KPT 152 and KPT 160

Orthopedic pathologies commonly seen in physical therapy practice, diagnosis, signs and symptoms, physiological factors and treatment. 2 hrs. lecture/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of the physical therapist assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KPT 160

Medical Diseases (2 CR)

Prerequisites: Formal acceptance into the program.

Medical diseases commonly seen in physical therapy practice; diagnosis, signs and symptoms, physiologic factors and common interventions associated with the physical therapy plan of care. 2 hrs. lecture/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of the physical therapist assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KPT 161

Physical Therapy Fundamentals II (4 CR)

Prerequisites: BIOL 144, BIOL 145, KPT 152, and KPT 160

Introduction to the theory and practical application of electrotherapy, patient documentation, patient care skills, and selected modalities, including indications and contraindications for use. 2.5 hrs. lecture, 3 hrs. lab/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of the physical therapist assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KPT 162

Clinical Experience I (2 CR)

Prerequisites: KPT 153, KPT 154, KPT 159, KPT 161, and KPT 102

Supervised clinical experience in the practical application of techniques and procedures covered in all previous physical therapist assistant courses. Assisting physical therapists and physical therapist assistants in treatment of patients in a variety of clinical settings. 5 hrs. clinical/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of the physical therapist assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KPT 164

Pediatrics and Gerontology (2 CR)

Prerequisite: KPT 162

Specialized information related to the treatment of pediatric and older adult populations. 2 hrs. lecture/ wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of the physical therapist assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KPT 170

Clinical Experience II (2 CR)

Prerequisites: KPT 162 and concurrent enrollment in KPT 155, KPT 158, KPT 164 and KPT 171

Supervised clinical experience in the practical application of techniques and procedures covered in all previous KPT courses. Assisting physical therapists and physical therapist assistants in the treatment of patients in a variety of clinical settings. 5 hrs. clinical/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of the physical therapist assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KPT 171

Clinical Seminar (2 CR)

Prerequisite: KPT 162

This course contains current professional and patient patient-care issues and values, administrative policies and procedures, and related clinical topics associated with the practice of physical therapy. Service learning projects required. 2 hrs. lecture/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of the physical therapist assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KPT 172

Clinical Experience III (12 CR)

Prerequisites: Completion of all other required courses in the KPT program

Practical application of principles learned in prior coursework. Experience rotation internships in selected hospitals and other clinical sites throughout the United States under the guidance of a physical therapist. 40 hrs. field studies/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of the physical therapist assistant program about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KPT 173

Special Topics (2 CR)

Prerequisites: Completion of all previous semesters of physical therapy and biology coursework with a minimum grade of "C"

This course presents specialized topics in physical therapy and the administration of health care. 1 hr. lecture/wk.

Physics (PHYS)

PHYS 130
General Physics I (5 CR)

Prerequisite: MATH 171 or assessment scores

In this introductory course for pre-professional and general education, students will learn the fundamentals of selected areas of classical physics. Using the tools of algebra and trigonometry, the course develops the topics of mechanics, heat and thermodynamics, and concludes with waves. The two-semester PHYS 130/131 sequence is designed to meet the requirements of area pre-professional programs. This is a transfer course that meets the college's requirements for associate's degree programs and also meets transfer requirements of area colleges and universities. The course includes an integrated laboratory component the completion of which is a necessary part of the total instructional package. 4 hrs. lecture, 3 hrs. lab/wk.

PHYS 131
General Physics II (5 CR)

Prerequisite: PHYS 130

In this introductory course for pre-professional and general education, students will learn the fundamentals of selected areas of classical physics. Using the tools of algebra and trigonometry, the course develops the topics of electricity and magnetism, light and optics and some elements of modern physics, such as relativity and quantum physics. The two-semester PHYS 130/131 sequence is designed to meet the requirements of area pre-professional programs. This is a transfer course that meets the college's requirements for associate's degree programs and also meets transfer requirements of area colleges and universities. The course includes an integrated laboratory component the completion of which is a necessary part of the total instructional package. 4 hrs. lecture, 3 hrs. lab/wk.

PHYS 133
Applied Physics (5 CR)

Prerequisite: MATH 133 or higher

This is a one-semester, comprehensive physics course intended for students enrolled in the biotechnology certificate program or an associate of applied science degree program. The course will cover all areas of applied physics, including mechanics, heat, thermodynamics, waves, electricity, magnetism, light, optics and some elements of modern physics. Emphasis will be placed on concepts and applications to real-life problems. This course includes an integrated laboratory component the completion of which is a necessary part of the total instructional package. 4 hrs. lecture, 3 hrs. lab/wk.

PHYS 191
Math & Physics for Games I (4 CR)

Prerequisite: MATH 171 or MATH 173 with grade of "C" or higher or appropriate score on math assessment test and CS 200

This introductory course focuses on the mathematics and physics concepts needed to program a variety of video game scenarios. Students will learn to use vectors and matrix transformations to model the motion of physical objects in two and three dimensions. Students will also learn various computer programming methods in order to model these mathematical and physical concepts. 3 hrs. lecture and 2 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $0 to $100.

PHYS 220
Engineering Physics I (5 CR)

Prerequisite or corequisite: MATH 242

This is an introduction to physics for engineering and science students. Included will be mathematical approaches to the study of mechanics, wave motion and thermodynamics. 4 hrs. lecture, 3 hrs. lab/wk.

PHYS 221
Engineering Physics II (5 CR)

Prerequisites: PHYS 220 and MATH 242

This is an introduction to physics for engineering and science students. Included are mathematical approaches to the study of electricity, magnetism, sound, optics and modern physics. 4 hrs. lecture, 3 hrs. lab/wk.

Political Science (POLS)

POLS 122
Political Science (3 CR)

This course provides students the opportunity to explore the discipline of political science and to discover how political scientists study politics in the contemporary world. 3 hrs. lecture/wk. and online

POLS 124
American National Government (3 CR)

This course examines the components of the public policy-making process. Topics of study include American political culture, constitutional principles, intergovernmental relations, public opinion, political parties, interest groups, media, the influence of the constant campaign of candidate-centered politics, budget construction, bureaucracy, and decision-making institutions. 3 hrs./wk. and online. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.

POLS 126
State and Local Government (3 CR)

This course examines the executive, legislative, judicial and service functions of state and local government in the United States in general and in Kansas in particular. The course includes guest lectures by elected officials, government personnel and community activists. 3 hrs./wk. This course is typically offered only once each academic year.

POLS 132
Introduction to Comparative Government (3 CR)

This course compares the different political structures of many of the world's most important countries, including economic development, patterns of government and administration, party structures and policy formation. 3 hrs. wk. or online.

POLS 135
International Relations (3 CR)

This course analyzes the conflict and cooperation among nation-states. Students will study contemporary problems and how they relate to power, war, terrorism, diplomacy, international organizations and the future of the nation-state system. 3 hrs./wk. and online

POLS 200
Model United Nations (3 CR)

This course is designed for students who are interested in learning and understanding international organizations and participating in competitive intercollegiate Model United Nations. This course orients students with the history, structure and function of the United Nations and those facets of an assigned country. This orientation will assist students in their preparation for the Model United Nations (MUN) conference during the spring semester. 3 hrs lecture/wk.

POLS 245
Introduction to Public Administration (3 CR)

This course provides students the opportunity to explore public administration and public policy including institutional arrangements for the provision of public services and the study of those arrangements. 3 hrs. lecture/wk.

POLS 270
Political Science Internship (3 CR)

Prerequisite and/or corequisite: By permission of the political science internship coordinator, completion of 6 credit hours in political science courses at JCCC or another college within the last two years, earning a minimum of a 3.0 on a 4.0 scale in those political science courses, and a written recommendation from your political science classroom instructor

Students augment their academic course work with an internship in an appropriate setting under instructional supervision. Internship projects are cooperative efforts between appropriate supervisors in state, local or national government settings or not-for-profit organizations and college staff and students. Internships give students the opportunity to participate in the real-world application of their academic studies. In addition, this synthesis of classroom study with practical experience provides students with skills and insights useful in selecting a career or avocation in community service. The student spends the equivalent of 10 hours per week performing internship duties over the course of the semester or a total of 150 hours.

Polysomnography/Sleep Tech (PSG)

PSG 125
Introduction to Sleep Medicine (4 CR)

Prerequisite: Admission to the polysmonography program Corequisite: Current AHA BLS Health Care Provider Certification

This course is an introduction to the history of sleep medicine. It also explores the role and the communication, time management, infection control, basic patient assessment, safety and professional expectations of the polysomnographic technologist. Students will have the opportunity to have direct observation in an associated sleep center or lab. 4 hrs. integrated lecture/lab each week and 48 clinical hrs./semester
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $50 to $150.

PSG 130
Physiology of Sleep Medicine (3 CR)

Prerequisite: Admission to the polysomnography program

This course will provide a comprehensive study of neuroanatomy and physiology and normal sleep mechanisms. It will also provide an overview of the cardiovascular and respiratory anatomy and physiology as it relates to sleep medicine. This includes ECG interpretation, oxygenation and ventilation assessment, and mechanisms and basic management of breathing and upper airway collapse. 3 hrs. lecture/wk.

PSG 140
Sleep Disorders (4 CR)

Prerequisites: PSG 125 with a grade of "C" or higher and PSG 130 with a grade of "C" or higher and Corequisite: Current AHA BLS for Health Care Providers

This course is designed to provide the basic information related to the disease processes and conditions which adversely effect sleep. The etiologies, clinical presentation, diagnosis and therapeutic interventions will be covered for each condition. 3 hrs. lecture and 48 clinical hrs./semester

PSG 145
Sleep Study Instrumentation (4 CR)

Prerequisites: PSG 125 with a grade of "C" or higher and PSG 130 with a grade of

"C" or higher

This course will introduce the bio-potential electrophysiologic, polysomnographic, and ancillary equipment involved in patient assessment and the conducting of sleep studies. The basic principles, set up, operation, maintenance, cleaning and troubleshooting will be emphasized. 6 hrs. integrated lecture lab./wk.

PSG 150
Polysomnography I (4 CR)

Prerequisites: PSG 125 with a grade of "C" or higher and PSG 130 with a grade of "C" or higher and Prerequisites or Corequisites: PSG 145 with a grade of "C" or higher and PSG 140 with a grade of "C" or higher

This course provides the didactic preparation that will be needed to supplement the clinical experiences of Polysomnography Clinical I. Students will develop new knowledge and skills related to patient and equipment preparation, monitoring and documentation and therapeutic interventions associated with polysomnographic procedures. 6 hrs. integrated lecture lab./wk.

PSG 245
Polysomnography Clinical I (6 CR)

Prerequisites: PSG 140 with a grade of "C" or higher and PSG 145 with a grade of "C" or higher and PSG 150 with a grade of "C" or higher and Corequisites: Current AHA BLS Health Care Provider Certification

This course is the clinical application of entry-level sleep related diagnosis and treatment. Students will have the opportunity to work with patients under close supervision to further develop their skill and understanding of basic polysomnographic procedures. 24 hrs. clinic/wk.

PSG 250
Polysomnography II (4 CR)

Prerequisite: PSG 150 with a grade of "C" or higher

This course provides the didactic preparation that will be needed to supplement the clinical experiences of Polysomnography Clinical II. Students will refine knowledge and skills related to patient and equipment preparation, monitoring and documentation and therapeutic interventions associated with polysomnographic procedures. 6 hrs. integrated lecture lab/wk.

PSG 255
Polysomnography Clinical II (6 CR)

Prerequisites: PSG 245 with a grade of "C" or higher and PSG 250 with a grade of "C" or higher and Corequisites: Current AHA BLS Health Care Provider Certification

This course is the clinical application of sleep related diagnosis and treatment. Students will have the opportunity to further refine their skills in obtaining and evaluating high quality sleep recordings and gaining clinical competence associated with advanced-level polysomnographic technology skills. 24 hrs. clinical/wk.

PSG 265
Polysomnography Capstone (3 CR)

Prerequisite or Corequisite: PSG 255 with a grade of "C" or higher

This course is designed as a capstone experience to facilitate final preparation for employment and the BRPT examination for the RPSGT credential. Students will demonstrate knowledge and skill competency attainment expected of a polysomnographic technologist. Students will also be required to pass a

comprehensive exam based on the current BRPT matrix. 5 hrs. integrated lecture lab./wk.

Power Plant Technology (PPT)

PPT 130
Basic Hydraulics, Mechanics and Pneumatics (3 CR)

This introductory course is designed to give a general overview of hydraulic, mechanic and pneumatic principles. Upon successful completion of this course, the student will be able to describe the concepts involved in industrial maintenance of hydraulic, mechanical and pneumatic equipment and identify the major components and their functions. Topics will include hydraulics, pneumatics, rigging, ladders, scaffolds, lubrication, drive belts, vibrations, mechanical drives, alignments, bearings and electricity. This course is appropriate for power plant technology majors or other interested students. 3 hrs. lecture/wk.

PPT 140
Generating Plant Fundamentals (3 CR)

This is an introductory course designed to give a general overview of power plant operations and functions. Upon successful completion of this course, the student will be able to describe the concepts involved in converting energy to electricity through a stream generation power plant and identify the major components and their functions. Topics will include fossil fuels, boilers, turbines, feedwater heaters, ash removal, condensate, power plant controls, and temperature and pressure relationships. This course is appropriate for power plant technology majors or other interested students. 3 hrs. lecture/wk.

PPT 150
Station Power Fundamentals (3 CR)

This course will give students the ability to describe the concepts involved in providing electricity to a power plant. Topics will include electrical concepts, the power grid, switchyards, transformers, critical services, essential services and black-out conditions. This course is appropriate for power plant technology majors or other interested students. 3 hrs. lecture/wk.

PPT 210
Reading Piping & Instrument Diagrams (3 CR)

This course will enable the student to be able to read a set of piping and instrument diagrams (P&IDs) and trace the flow paths of the major systems in a power plant. Topics will include symbols and terminology, the condensate system, the feedwater system, high pressure steam, extraction steam, fuel flow, auxiliary cooling, and lubrication systems. This course is appropriate for power plant technology (PPT) majors or other interested students. 3 hrs. lecture/wk.

PPT 230
Introduction to Water Chemistry & Water Treatment (3 CR)
Prerequisite or corequisite: MATH 171

This introductory course is designed to give a general overview of water chemistry and water treatment in power plants. Upon successful completion of this course, the student should be able to describe the concepts and solve the problems associated with water treatment in boiler operations. Topics will include hydrology, specific gravity of liquids, acids, bases, measurements, cooling towers, clarification, ion exchange and filtration. This course is appropriate for power plant technology majors and other interested students. 3 hrs. lecture/wk.

PPT 250
Intro to Power Plant Combustion and Exhaust (3 CR)

Prerequisite: PPT 140

Upon successful completion of this course, the student should be able to describe the concepts involved in the combustion of fuel for energy generation. Topics will include fuel handling, combustion requirements, combustion control and by-products of combustion. This course is appropriate for power plant technology majors and other interested students, with the permission of the instructor. 3 hrs. lecture/wk.

PPT 251
Introduction to Power Plant Steam and Water Cycle (3 CR)

Prerequisite: PPT 140

Upon successful completion of this course, the student will be able to describe the steam water cycle in a steam generation plant. Topics will include boilers, turbines, feedwater heaters, condensers, cooling towers and auxiliary equipment. Enrollment in the course is limited to power plant technology majors or by permission of the instructor. 3 hrs. lecture/wk.

PPT 271
Power Plant Technology Internship (3 CR)

Prerequisite: Career program facilitator approval required

The internship will provide advanced students with on-the-job experience under the supervision of professionals in the industry. The work will be developed cooperatively with area employees, college staff and each student to provide a variety of actual job experience directly related to the student's career goals. This course is only available to students who have declared a power plant technology major. 20 hrs. on-the-job training/wk., or a minimum of 40 hrs./wk. on the job for summer semester

PPT 280
Power Plant Operations and Process Controls (3 CR)

Prerequisites or corequisites: PPT 250 and PPT 251

Upon successful completion of this course, the student should be able to describe the concepts involved in operating a steam generation power plant and identify the major components and their functions. Topics will include cold start-up, warm start-up, shutdown, normal operations, load changes, safety checks, and power plant controls. This course is designed to integrate and build on previous power plant technology course work. This course is appropriate for power plant technology majors and other interested students with the permission of the instructor. 3 hrs. lecture/wk.

Practical Nursing (AVPN)

AVPN 115
Nursing I (22 CR)

Prerequisites: CNA certification and BIOL 144 and PSYC 130 and MATH 111 and admission to the practical nursing program

Using the nursing process, the student will promote adaptive responses in the client during health and illness. The student will develop a basic understanding of the role of the practical nurse in the health care system and demonstrate the fundamental skills essential to the nursing care of the client. The nursing process will be applied to the care of clients in long-term care, the medical office and the acute-care settings. Basic concepts of gerontology, professional vocational relationships, pharmacology, medical terminology and nutrition will be used in the

care of the clients. In-state tuition and fees $1,041 total. Out-of-state tuition and fees $4,451 total. 550 contact hrs. The credit reflected in this course is for transcript reporting, recording and transfer only.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $250 to $550.

AVPN 117
Nursing II (22 CR)

Prerequisite: AVPN 115

In Nursing II, the student will continue to explore the practical nurse's role in assisting clients to meet basic and more complex physiological needs using the nursing process in a variety of health care settings, including acute care, long-term care and mental health facilities. The student will apply concepts of leadership and change and demonstrate the roles of charge nurse, medication nurse, treatment nurse and patient-care nurse in long-term care. The student will promote adaptive responses in the child and family during the child's illness, pregnancy, labor and delivery, and postpartum and neonatal phases of reproductive processes. The student will explore the adaptive capacity of individuals with emotional stresses and diagnosed mental disorders across the life span. Basic concepts of gerontology, professional vocational relationships, pharmacology, medical terminology and nutrition will be applied in the care delivered. In-state tuition and fees $1075 total. Out-of-state tuition and fees $4,485 total. 550 contact hrs. The credit reflected in this course is for transcript reporting, recording and transfer only.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $250 to $550.

Psychology (PSYC)

PSYC 121
Applied Psychology (3 CR)

The course will focus on learning how to apply psychological principles in order to better understand one's own experience (cognitive, behavioral and emotional) and that of other people. This course is not a substitute for Introduction to Psychology and will not meet the prerequisite requirement for advanced psychology courses. 3 hrs./wk.

PSYC 130
Introduction to Psychology (3 CR)

This basic introduction to psychology includes the study of biological aspects of behavior, the brain, consciousness, sensation and perception, motivation and emotion, stress, maturation and development, learning and memory, normal and abnormal personality, and social psychology. This course is the prerequisite for all advanced-level psychology courses. 3 hrs./wk. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.

PSYC 200
Industrial and Organizational Psychology (3 CR)

Prerequisite: PSYC 130

The course will examine human behavior and psychological principles in an industrial/personnel context. It will also focus on how organizational factors contribute to individual behavior and how individuals affect groups and organizational functioning. Topics include recruiting, selecting and training personnel; evaluating job performance, work motivation, job satisfaction and other attitudes; leadership; and organization and job design. This course may not be offered every semester. 3 hrs./wk.

PSYC 205
Human Sexuality (3 CR)
Prerequisite: PSYC 130

PSYC 205, Human Sexuality, is a balanced and thoughtful account of what is known about sexuality from various perspectives. A broad and representative survey of research is presented in a number of topical areas. Psychobiology, sexual development during childhood and adolescence, sexual interactions, love relationships and behavior, gender issues, sexual orientation, health issues and diseases, and sexual problems and solutions will be studied. Primary emphasis will be placed on the individual and the couple as a unit of analysis. Class discussions of issues relating to human sexuality will be encouraged. 3 hrs. lecture/wk.

PSYC 210
Methodology in Social Sciences (3 CR)
Prerequisite: PSYC 130 or SOC 122 or ECON 230

This course deals with scientific research methods utilized in the social sciences, especially psychology, sociology, political science and anthropology. The course examines a wide range of data collection methodologies including observation, questionnaire construction, and controlled experimentation. The course will be beneficial for analyzing and evaluating the quality of research findings reported in both the popular and academic press. It will also be useful to those who plan to engage in occupations requiring the use of research methodology. This course may not be offered every semester. PSYC 210 and SOC 210 are the same course. This course is a required corequisite for PSYC 230 Personality Theory. 3 hrs./wk.

PSYC 215
Child Development (3 CR)
Prerequisite: PSYC 130

This course is a comprehensive account of human development from conception through adolescence. The course integrates genetic, biological, physical and anthropological influences with psychological processes and explores determinants of behavior from a genetic and environmental perspective. 3 hrs./wk.

PSYC 218
Human Development (3 CR)
Prerequisite: PSYC 130

This course is a comprehensive account of human psychological and physical development from conception through infancy, childhood, adolescence, adulthood and death. The course integrates genetic, biological, physiological and anthropological influences with the psychological process and explores determinants of development from both hereditary and environmental perspectives. 3 hrs./wk.

PSYC 220
Social Psychology (3 CR)
Prerequisite: PSYC 130

This course is designed to be an undergraduate-level introduction to the psychology of social behavior. It will provide a systematic attempt to understand how the "thought, feeling and behavior of individuals are influenced by the actual, imagined or implied presence of others." Consideration will be given to such concepts as methodology, attitude and attitude change, aggression, leadership, affiliation and obedience and will introduce conformity. The course is intended to introduce students to critical analysis, application and the mechanical and intellectual challenges of college work. 3 hrs./wk.

PSYC 225
Educational Psychology (3 CR)

Prerequisite: PSYC 130

This course addresses issues that apply theories of psychology to the educational environment. Topics included in the study of educational psychology include research methodology, theories of human development, principles of learning, the psychology of motivation, theories of intelligence, testing and assessment techniques, and career development. A 20-hour observation in an educational setting is required. This course may not be offered every semester. 3 hrs./wk.

PSYC 230
Personality Theory (3 CR)

Prerequisite: PSYC 130 and prerequisite or corequisite of either PSYC 210 or SOC 210

The general viewpoints of paradigms in psychology will be studied, with emphasis on each system's contribution to understanding human personality. The assumptions of each system will be critically analyzed using evidence from research and criticisms from philosophy. Usefulness of theories will be presented, and the systems will be compared and contrasted. General theories covered will include psychoanalysis, trait, biological, humanistic, behavioral/social and cognitive. This course is typically offered in the spring semester. 3 hrs./wk.

PSYC 250
Health Psychology (3 CR)

Prerequisite: PSYC 130

This course covers content, methods and theory regarding the interplay between psychological and biological determinants of health and illness and examines how these factors relate to health status. The course focus is on the application of psychological methods, principles of maintenance of health, prevention of disease, treatment of illness, and rehabilitation and recovery from impaired health. It follows an interdisciplinary approach to content and instruction. 3 hrs. lecture/wk.

Radiologic Technology (KRAD)

KRAD 150

Introduction to Radiologic Technology (2 CR)

Introduction to the profession of radiologic technology, including the duties of the radiologic technologist in the health care environment. 2 hr. lecture/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of radiologic technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KRAD 160

Survey of Radiologic Technology (6 CR)

Prerequisite: Admission to the radiologic technology program

Orientation to the program and clinical responsibilities. Topics related to basic patient interactions, body mechanics, patient transportation, radiographic terminology, radiographic examinations of the chest and abdomen, methods of radiation protection and types of radiographic equipment will be explored. 4.2 hrs. lecture, 6 hrs. clinical/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of radiologic technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KRAD 162

Image Processing (2 CR)

Prerequisites: KRAD 160, KRAD 172 and KRAD 173

Materials and factors relating to acquisition, processing, viewing, and storage of radiographs. 1.5 hrs. lecture, 1 hr. lab/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of radiologic technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KRAD 165

Patient Care (2 CR)

Prerequisite: KRAD 160

This course will explore patient-health professional interactions, basic patient care and management, medico-legal issues, and medical ethics. 2 hrs. lecture/ wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of radiologic technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KRAD 170

Radiation Biology and Protection (3 CR)

Prerequisite: KRAD 160 with concurrent enrollment in corresponding semester of clinical training

The principles of radiation biology and techniques used to protect the patient and personnel from the effects of exposure to ionizing radiation. 3 hrs. lecture/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of radiologic technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KRAD 171

Radiographic Exposures I (3 CR)

Prerequisite: Admission to the program

Factors that affect radiographic image formation and determine image quality. 2.5 hrs. lecture, 1 hr. lab/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of radiologic technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KRAD 172

Radiographic Positioning I (3 CR)

Prerequisite: KRAD 160 and concurrent enrollment in KRAD 165 and KRAD 173

Anatomy and positioning of the alimentary canal, urinary system, and upper and lower extremities. 2.5 hrs. lecture, 1 hr. lab/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of radiologic technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KRAD 173

Clinical Practice I (3 CR)

Prerequisite: KRAD 160 and concurrent enrollment in KRAD 165 and KRAD 172

Performance of patient examination in a clinical setting under the supervision of a radiologic technologist. 16 hrs. clinical/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of radiologic technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KRAD 174

Radiographic Exposures II (3 CR)

Prerequisites: KRAD 160, KRAD 171, KRAD 172 and KRAD 173

Quality control of radiographic images. Technic charts, calibration of equipment, standard exposure systems, and factors used for conversion of technics for variables in the exposure system. Special techniques used in producing radiographic images. 2.5 hrs. lecture, 1 hr. lab/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of radiologic technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KRAD 175

Clinical Practice II (4 CR)

Prerequisites: KRAD 165, KRAD 172 and KRAD 173 and concurrent enrollment in KRAD 176

Performance of patient examinations in a clinical setting under the supervision of a radiologic technologist. 24 hrs. field study/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of radiologic technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KRAD 176

Radiographic Positioning II (3 CR)

Prerequisites: BIOL 140 and KRAD 165, KRAD 172 and KRAD 173 and concurrent enrollment in KRAD 162 and KRAD 175

Anatomy, radiographic positioning, and film critique of pelvis, bony thorax, vertebral column, cranium, and facial bones. 2.5 hrs. lecture, 1 hr. lab/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of radiologic technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KRAD 178

Clinical Practice III (4 CR)

Prerequisites: KRAD 175 and KRAD 176

Performance of patient examinations in a clinical setting under the supervision of a radiologic technologist. 20 hrs. clinical/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of radiologic technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KRAD 278

Imaging Modalities and Pathology (3 CR)

Prerequisites: KRAD 279, KRAD 280, KRAD 281 and concurrent enrollment in KRAD 282

Human disease processes and their relationship to patient examination in the radiology department. Radiographic pathology and imaging modalities. 3 hrs. lecture/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of radiologic technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KRAD 279

Radiographic Positioning III (2 CR)

Prerequisites: KRAD 176 and KRAD 178 and concurrent enrollment in KRAD 280, KRAD 281 and KRAD 285

Anatomy and positioning of the biliary system, mammary glands and temporal bone. Advanced film critique of radiographs of all routine radiographic examinations. 2 hrs. lecture. Course taught at MCC-Penn Valley Community

College. Students should contact the Penn Valley coordinator of radiologic technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KRAD 280

Clinical Practice IV (4 CR)

Prerequisites: KRAD 162, KRAD 176 and KRAD 178, and concurrent enrollment in KRAD 279, KRAD 281 and KRAD 285

Performance of patient examinations in a clinical setting under the supervision of a radiological technologist. 24 hrs. clinical/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of radiologic technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KRAD 281

Radiation Physics (3 CR)

Prerequisite: PHYS 162 and KRAD 171

Application of fundamental physics principles relating to energy, electricity, and magnetism and their relevance to the study of x-rays and x-ray equipment. 2.5 hrs. lecture, 1 hr. lab/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of radiologic technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KRAD 282

Clinical Practice V (4 CR)

Prerequisites: KRAD 279, KRAD 280, KRAD 281 and KRAD 285 and concurrent enrollment in KRAD 278

Performance of patient examinations in a clinical setting under the supervision of a radiologic technologist. 24 hrs. clinical/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of radiologic technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KRAD 283

Final Seminar (2 CR)

Prerequisites: KRAD 174 and KRAD 279 and KRAD 280

Preparation for the National Registry examination. Simulation of American Registry of Radiologic Technologists examination. 2 hrs. lecture/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of radiologic technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KRAD 285

Special Procedures (2 CR)

Prerequisites: KRAD 170 and KRAD 171 and KRAD 178, and concurrent enrollment in KRAD 279 and KRAD 280 and KRAD 281

Anatomy, positioning, equipment and special tasks related to performance of special contrast media studies. Vascular, neurological, lymphatic, skeletal, and pulmonary systems. 2 hrs. lecture/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of radiologic technology about the class meeting times and beginning and ending dates of times and beginning and ending dates of classes. Call 816-759-4000.

Railroad Conductor (RRTC)

RRTC 123
Introduction to Conductor Service (4 CR)

Prerequisite: Admission to the JCCC railroad operations program, conductor option

This is an introductory course for the conductor service option within the railroad operations program. Upon successful completion of this course, the student should be able to describe railroad organization and general operations, policies and practices to ensure railroad safety, and the basic responsibilities of conductors. 5 hrs. lecture, demonstration/wk. Selective admission program - see a counselor about special requirements.

RRTC 175
Conductor Mechanical Operation (2 CR)

Prerequisites: Admission to the JCCC railroad operations program, conductor option, and successful completion of RRTC 123 with a grade of "C" or higher

This course covers mechanical operations that relate to conductor service. This is the second course in the conductor option of the railroad operations degree program. Upon successful completion of this course, the student should be able to describe the importance and application of freight care mechanical policies and practices to ensure safe railroad operations. 2.5 hrs. lecture/wk. Selective admission program - see a counselor about special requirements.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $36.

RRTC 261
Conductor Service (2 CR)

Prerequisite: Admission to the JCCC railroad operations program, conductor option, and successful completion of RRTC 175 with a grade of "C" or higher

Upon successful completion of this course, the student should be able to describe and apply railroad organization and general operations, policies and practices to ensure railroad safety and basic responsibilities of conductors. This course includes safety and the general rules with which conductors must comply and teaches the techniques and administrative procedures conductors use on the job to perform safely and effectively. 2.5 hrs. lecture/wk. Selective admission program - see a counselor about special requirements.

RRTC 263
General Code of Operating Rules (4 CR)

Prerequisite: Admission to the JCCC railroad operations program, conductor option, and successful completion of RRTC 261 with a grade of "C" or higher

This is the fourth course in the conductor option for the railroad operations degree program. Conductors must maintain a thorough understanding of the General Code of Operating Rules (GCOR). This course provides an in-depth study of the GCOR. Upon completion of this course, the student should be able to demonstrate abilities to apply the General Code of Operating Rules to safe and efficient train movement and operations. 5 hrs. lecture/wk. Selective admission program - see a counselor about special requirements.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $25.

RRTC 267
Conductor Field Application (4 CR)

Prerequisite: Admission to the JCCC railroad operations program, conductor option, and successful completion of RRTC 263 with a grade of "C" or higher

Upon successful completion of this course, the student will have observed actual operations and be able to apply skills learned in classroom-based instruction to

those operations. The student will observe and perform operations under the supervision of experienced conductor mentors in an actual field location. The student prepares a daily reflective journal of the hands-on (OJT) railyard experience. 1 hr. lecture, 8 hrs on-the-job training/day for 7 days.
<u>Associated Costs</u>: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100.

Railroad Dispatcher (RRTD)

RRTD 122
Introduction to Railroad Dispatching (2 CR)
Prerequisite: Admission to the JCCC railroad operations program, dispatcher option

Upon successful completion of this course, the student should be able to describe railroad organization and general operations, policies and practices to ensure railroad safety and basic dispatching functions. 2.5 hrs. lecture/wk. Class currently held at Tarrant County Junior College, Ft. Worth, Texas.

RRTD 271
Apprentice Railroad Dispatching Training I (6 CR)
Prerequisites: Admission to the JCCC railroad operations program, dispatcher option, and successful completion of RRTD 275 with a grade of "C" or higher

Upon successful completion of this course, the student should demonstrate abilities to apply the General Code of Operating Rules, maintenance of way operating rules and the train dispatcher's manual of policies and practices to safe and effective train movement and maintenance operations. This is an intensive course that prepares students to observe actual dispatching operations. 7.5 hrs. lecture/wk. Class currently held at Tarrant County Junior College, Ft. Worth, Texas.

RRTD 272
Apprentice Railroad Dispatching Training II (6 CR)
Prerequisites: Admission to the JCCC railroad operations program, dispatcher option, and successful completion of RRTD 271 with a grade of "C" or higher

Upon successful completion of this course, students should demonstrate their ability to use centralized traffic control equipment, computerized track warrant control equipment, and management information systems that record and report train movement. Students will also identify and resolve traffic conflicts safely and effectively. This is an intensive course in which students observe, practice and demonstrate rail traffic dispatching functions in a laboratory setting. In addition, the student will spend an additional week observing dispatching-related activities in the field in conjunction with this course. 4.5 hrs. lecture, 3 hrs. lab/wk. Class currently held at Tarrant County Junior College, Ft. Worth, Texas.

RRTD 275
Railroad Dispatching Field Observation (3 CR)
Prerequisites: Admission to the JCCC railroad operations program, dispatcher option, and RRTD 122 with a grade of "C" or higher

Upon successful completion of this course, the student will have observed actual dispatching operations and should be able to identify major responsibilities. Students will observe operations under the supervision of experienced dispatcher mentors in actual dispatching offices. 1 hr. lecture, minimum 15 hrs. on-the-job training/wk. Class currently held at Tarrant County Junior College, Ft. Worth, Texas.

RRTD 276
Railroad Dispatching Field Applications (5 CR)

Prerequisites: Admission to the JCCC railroad operations program, dispatcher option, and RRTD 272 with a grade of "C" or higher

Railroad Dispatching Field Applications is a 10-week period in which students will observe and practice operations under the supervision of experienced dispatcher mentors in actual dispatching offices. Upon successful completion of this course, students will be able to apply skills learned in classroom-based dispatching instruction to those operations. Minimum 15 hrs. on-the-job training/wk. Class currently held at Tarrant County Junior College, Ft. Worth, Texas.

Railroad Electronics (RREL)

RREL 110
Introduction to Railroad Signal Systems (4 CR)

Prerequisite: Approval of the railroad training administrator and the JCCC program assistant dean

This course is the first of a series of four designed to provide entry (apprentice) level training to new signal employees, or those seeking to enter this trade. Upon successful completion of this course, the student should be able to describe basic company organization, operating and safety rules pertaining to signalmen, basic principles of electricity and measurement as well as protective devices. Also he or she should have a basic understanding of signal systems, track circuits, and Federal Railroad Administration (FRA) rules. 44 hrs. lecture 16 hrs. instructional lab/total

RREL 112
Track Circuits and Systems (4 CR)

Prerequisites: Successful completion of RREL 110 and approval of the railroad training administrator and the JCCC program assistant dean

This course is the second of a series of four designed to provide entry (apprentice) level training to new signal employees, or those seeking to enter this trade. Upon successful completion of this course, the student should be able to describe and explain the operation of various track circuits, relay and control circuits, traffic control systems, locks, and applicable rules and standards. 44 hrs. lecture 16 hrs. instructional lab studio/total

RREL 114
Traffic Control, Switch Machines & Locks (4 CR)

Prerequisite: RREL 112 and approval of the railroad training administrator and the JCCC program assistant dean

This course is the third of a series of four designed to provide entry (apprentice) level training to new signal employees, or those seeking to enter this trade. Upon successful completion of this course the student should be able to describe and maintain automatic block signaling systems, centralized traffic systems, power switches and locks. He should also be familiar with ground testing and isolation, as well as applicable rules and standards. 44 hrs. lecture 16 hrs instructional lab studio/total

RREL 116
Interlocking, Classification, Crossings & Gates (4 CR)

Prerequisite: RREL 114 and approval of the railroad training administrator and the JCCC program assistant dean

This course is the last of a series of four designed to provide entry (apprentice) level training to new signal employees, or those seeking to enter this trade. Upon

successful completion of this course, the student should be able to perform interlocking plant and route plant analysis, explain classification yards, grade crossing warning systems, gates, and other devices, as well as applicable rules and standards. 44 hrs. lecture 16 hrs instructional lab/total

RREL 144
Introduction to Programmable Logic Controllers (2 CR)

Prerequisites: Approval of the railroad training director and the JCCC program assistant dean

This course is an introduction to programmable logic controllers using Allen Bradley PLC-5 processors and is designed for electricians and maintenance personnel. Upon successful completion of this course, the student should be able to identify the components of programmable controllers, configure and set up the controllers for specific operations, write and test basic programs, and apply troubleshooting procedures to locate problems. 1 hr. lecture, 1.5 hrs. lab/wk.

RREL 172
Programmable Logic Controllers Applications (2 CR)

Prerequisites: Approval of the railroad training director and the JCCC program assistant dean

This course is designed for electricians and maintenance personnel. It is intended as an advanced course for people with basic knowledge in programmable logic controllers operation. Allen Bradley PLC-5 family of processors is used for hands-on-training. Upon successful completion of this course, the student should be able to use advanced PLC instructions such as file, block transfer, stack concepts/operations and sequences, and configure and operate a network of processors. 1 hr. lecture, 1.5 hrs. lab/wk.

RREL 180
Introduction to Railroad Electronics (1 CR)

Prerequisites: Approval of the railroad training administrator and the JCCC program assistant dean

This course is designed to meet the needs of railroad electronic maintainers. Upon successful completion of this course, the student should be able to state basic safety procedures in electronics, explain basic principles of electronics, perform basic electronic calculations and use basic electronic tools. 2.5 hrs. lecture, 2.5 hrs. lab/wk.

RREL 181
Circuit Analysis DC/AC (6 CR)

Prerequisites: RREL 180 and the approval of the railroad training administrator and the JCCC program assistant dean

This course is designed to meet the needs of the railroad electronic maintainers. Upon successful completion of this course, the student should be able to identify and use fundamental DC circuit concepts such as Kirchhoff's laws, power and energy formulas, Ohm's Law, Thevenin's Theorem and Norton's Theorem as they apply to resistive circuits. Also upon successful completion of this course, the student should be able to analyze circuits involving resistors, capacitors and inductors driven by time-variant sources. This analysis will involve both time and frequency responses. 3 hrs. lecture, 2 hrs. lab, 3 hrs. alternate deliver/wk.

RREL 182
Semiconductor Devices and Circuits (6 CR)

Prerequisites: RREL 181 and the approval of the railroad training administrator and the JCCC program assistant dean

This course is designed to meet the needs of railroad electronic maintainers. Upon successful completion of this course, the student should be able to describe the characteristics of basic semiconductor devices, explain practical circuits using semiconductor devices and analyze these circuits for DC and AC quantities. 3 hrs. lecture, 2 hrs. lab., 3 hrs. alternate delivery/wk.

RREL 183
Digital Techniques (6 CR)

Prerequisites: RREL 182 and approval of the railroad training administrator and the JCCC program assistant dean

This course is designed to meet the needs of railroad electronic maintainers. Upon successful completion of this course, the student should be able to analyze basic digital circuitry consisting of arrangements of gates and flip-flops using TTL and CMOS integrated circuits, as well as relay logic. This analysis will include the application of elementary Boolean algebra, truth tables and timing diagrams. 3 hrs. lecture, 2 hrs. lab., 3 hrs. alternate delivery/wk.

RREL 284
Electronic Communications (6 CR)

Prerequisites: RREL 183 and approval of the railroad training director and the JCCC program assistant dean

This course is designed to meet the needs of railroad electronic maintainers. Upon successful completion of this course, the student should be able to state the principles of amplitude, frequency, phase and pulse modulation and describe the technologies of transmitters, receivers, antennas, local area networks, wide-area networks and telephone systems. 3 hrs. lecture, 2 hrs. lab, 3 hrs. activity/wk.

RREL 285
Microprocessor Techniques (6 CR)

Prerequisites: RREL 183 and approval of the railroad training director and the JCCC program assistant dean

This course is designed to meet the needs of railroad electronic maintainers. Upon successful completion of this course, the student should be able to analyze and troubleshoot 6800 family microprocessor circuitry as well as microprocessor interface circuitry. 3 hrs. lecture, 2 hrs. lab, 3 hrs. activity/wk.

RREL 286
Applied Microprocessors (2 CR)

Prerequisites: RREL 285 and approval of the railroad training director and the JCCC program assistant dean

This course is designed to provide an introduction to advanced microcomputer concepts and applications. This course is a continuation of topics introduced in the microprocessor course, with specific applications in general-purpose microcomputers (PCs) and dedicated microprocessor-based control systems. Included are hardware and software training in operating systems, peripherals, monitors, processors, storage media, maintenance, diagnostics and troubleshooting. Analog and digital data acquisition and processing, as well as voice digitization and playback, will be demonstrated. Presentations and labs will include incorporation of these functions into a PC, Harmon HLC and the Servo 9000 hot box detector. 1 hr. lecture, 2 hrs. lab/wk.

Railroad Industrial Technology (RRIT)

RRIT 122

Elements of Welding (3 CR)

Prerequisites: Approval of the BNSF manager of track and roadway maintenance training and the JCCC program assistant dean

Upon successful completion of this course, the student should be able to cut and weld using oxyfuel (OFC) and shielded metal arc welding (SMAW). OFC will cover straight-line cutting, beveling, piercing and gouging. The SMAW portion will cover flat position and will be limited to fillet welds. The student should be able to discuss electrical safety in shielded metal arc welding (SMAW), handle welding cables properly, understand eye hazards, list safe clothing requirements and discuss environmental safety. This knowledge will be evidenced by achieving the specified score on the unit test. 2 hrs. lecture, 3 hrs. lab/wk.

RRIT 123
Basic Welding (3 CR)

Prerequisites: RRIT 122 or approval of the BNSF manager of engineering and maintenance training and the JCCC program assistant dean

Upon successful completion of this course, the student should be able to properly use oxy-fuel cutting (OFC), shielded metal arc welding (SMAW) and air carbon arc cutting (CAC-A) equipment. The SMAW portion of the course will concentrate on 1G and 2F welds with bend tests being performed on selected weldments. 1 hr. lecture, 4 hrs. lab/wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $180 to $400.

RRIT 127
Welding Processes (2 CR)

Prerequisites: Approval of the BNSF training director and the JCCC program assistant dean

Upon successful completion of this course, the student should be able to identify various welding processes used by the railroad and other industries. Standard shop and maintenance welding processes will be taught and demonstrated. Welds will be tested and inspected according to industry standards. 1 hr. lecture, 1.5 hrs. lab/wk.

RRIT 132
Thermite Welding (3 CR)

Prerequisites: Approval of the BNSF manager of engineering and maintenance training and the JCCC program assistant dean

Upon successful completion of this course, the student should be able to produce in a safe manner high-quality, sound thermite welds on standard rail and mismatched rail. This course is intended for people who are employed in the railroad industry. It will include specific in-depth industrial training. Students will be required to make various rail alignments and to grind various new and worn rails. 1 hr. lecture, 4 hrs. lab/wk.

RRIT 136
Rail and Switch Point Repair Welding (3 CR)

Prerequisites: RRIT 123 and approval of the BNSF manager of engineering and maintenance training and the JCCC program assistant dean

Upon successful completion of this course, the student should be able to identify and/or produce in a safe manner high-quality welding repairs and correct welding techniques to railroad track components to include maintenance, grinding, welding and repairs of switches, track rail ends, track wheel burns, battered welds, rail transition ramp building methods, Pandrol weld on shoulders, proper placement of work piece connections, and approved switch point welding procedures, as specified by the Burlington Northern Santa Fe Railway. This course will involve the study of different welding processes, welding safety, proper grounding

techniques, rail heater and metallurgy. The effects of heat in relationship to specific rail steel components will be discussed. Students will be required to experience all appropriate methods and processes including welding, cutting, grinding, straight edging rail steel and preparing switch points for proper mating surface according to current industry standards. Evaluation will be a classroom and laboratory setting. 1 hr. lecture, 4 hrs. lab/wk.

RRIT 137
Structural Welding SMAW (3 CR)

Prerequisites: RRIT 123 and approval of the BNSF manager of engineering and maintenance training and the JCCC program assistant dean

Upon successful completion of this course, the student should be qualified to weld with SMAW according to AWS D1.1.96 code. All welds will be made in the vertical (3G) and overhead (4G) positions. Passing or failing will be determined by the student's ability to successfully produce welds according to prescribed standards in AWS D1.1.96. 1 hr. lecture, 4 hrs. lab/wk.

RRIT 138
Structural Welding FCAW (3 CR)

Prerequisites: RRIT 137 and approval of the BNSF manager of engineering and maintenance training and the JCCC program assistant dean

Upon successful completion of this course, the student should be qualified to weld with FCAW according to AWS D1.1.96 code. All welding will be made in the vertical (3G and 3F) and overhead (4G and 4F) positions. Passing or failing will be determined by the student's ability to successfully produce welds according to prescribed standards in AWS D1.1.96. 1 hr. lecture, 4 hrs. lab/wk.

RRIT 139
Structural Welding Pipe (3 CR)

Prerequisites: RRIT 137 and approval of the BNSF manager of engineering and maintenance training and the JCCC program assistant dean

Upon successful completion of this course, the student should be qualified to weld on pipe using the SMAW process. All welding will be made in the vertical uphill fixed position (5G). Passing or failing will be determined by the student's ability to successfully produce test welds. 1 hr. lecture, 4 hrs. lab/wk.

RRIT 140
Structural Quality SMAW (3 CR)

Prerequisites: RRIT 127 or approval of the BNSF training director and the JCCC program assistant dean

Upon successful completion of this course, the student should be qualified to weld with shielded metal arc welding (SMAW) according to industrial standards. Test welds will be made in the vertical up (3G) positions; limited thickness. Passing or failing will be determined by the student's ability to successfully produce welds according to prescribed American Welding Society (AWS) standards. The oxyfuel cutting (OFC) portion will include cutting metal to specific sizes and shapes. 1 hr. lecture, 4 hrs. lab/wk.

RRIT 141
Structural Quality GMAW (3 CR)

Prerequisites: RRIT 127 or approval of the BNSF training director and the JCCC program assistant dean

Upon successful completion of this course, the student should be able explain the theory of gas metal arc (GMAW) identify materials and use equipment related to

the processes. The student will weld on mild steel plate in all positions producing both fillet and groove welds with the GMAW process with a U-bend test being performed in selected positions according to industry standards. Selected welding codes and specifications will be used as a reference for this class. The oxy-fuel (OFC) will be used to prepare mild steel for welding. 1 hr. lecture, 4 hrs. lab/wk.

RRIT 142
Structural Pile Welding (3 CR)

Prerequisites: RRIT 137 and RRIT 138 and approval of the BNSF manager of engineering and maintenance training and the JCCC program assistant dean

Upon successful completion of this course, the student should be able to splice pipe and H-beam piling and install cap plate gussets according to Burlington Northern Santa Fe (BNSF) standard blueprints. This course shall make use of oxy-fuel cutting (OFC), grinding, shielded metal arc welding (SMAW), and flux cored arc welding (FCAW) to prepare, fit and weld piling. Selected welds will have test strips bent to check for soundness of welds. These strips should meet basic American Welding Society (AWS) test standards. Basic metallurgy will be discussed as it applies to the need for preheat and post heat in the building of railroad bridges. 1 hr. lecture, 4 hrs. lab/wk.

RRIT 143
Thermite Welding for Supervisors (2 CR)

Prerequisites: Approval of the BNSF manager of engineering and maintenance training and the JCCC program assistant dean

Upon successful completion of this course, the student should be able to produce in a safe manner high-quality, sound thermite welds on standard rail and mismatched rail. This course is intended for people who are employed in the railroad industry. This will be specific, in-depth, industrial training. Students will be required to make various rail alignments and grind various new and worn rails. The students should also be able to clean a used crucible, assemble a crucible and temper new and used crucibles. 1.5 hrs. lecture, 1 hr. lab/wk.

RRIT 145
Frog Welding (3 CR)

Prerequisites: RRIT 123 and approval of the BNSF manager of engineering and maintenance training and the JCCC program assistant dean

Upon successful completion of this course, the student should be able to repair by welding a manganese frog casting according to Burlington Northern Santa Fe Railway standards. This course will involve the study of different welding and cutting processes, with emphasis on the FCAW process. Metallurgy and the effects of heat in relationship to austenitic manganese steel will be discussed. Students will be required to cut, grind, straight edge, dye penetrant test, weld and monitor heat input during the repair process on austenitic steel frog casting for evaluation in an actual laboratory setting. 1 hr. lecture, 4 hrs. lab/wk.

RRIT 147
Component Welding for Supervisors (2 CR)

Prerequisites: Approval of the BNSF manager of engineering and maintenance training and the JCCC program assistant dean

Upon successful completion of this course, the student should be able to describe methods and processes used to weld railroad track components. This course will introduce the student to various types of welding and cutting processes. Metallurgy and the effects of heat on rail steel and manganese frog castings will be discussed. Instructor demonstration and student hands-on experience will be provided regarding welding, cutting and grinding on rail steel, frog castings, carbon arc cutting with air (CAC-A), straight edging, temperature monitoring and dye penetrants on both rail steel and frog castings in an actual laboratory setting.

1.5 hrs. lecture, 1 hr. lab/wk.

RRIT 155
Railroad Welding Review (2 CR)

Prerequisites: Approval of the BNSF manager of engineering and maintenance training and the JCCC program assistant dean

Upon successful completion of this course, the student should be able to identify currently used rail, frogs, switch points, crossings, Conley's and insulated joint plugs. The student should be able to locate operating procedures in an approved manual and apply them to the appropriate component. In addition, the student should be able to describe the proper application of OFC, OFW, heating, SMAW, FCAW, CAC-A and thermite welding procedures. 1.5 hrs. lecture, 1 hr. lab/wk.

RRIT 156
Rail and Frog Welding Review (3 CR)

Prerequisites: Approval of BNSF manager of engineering maintenance training and the JCCC program assistant dean

Upon successful completion of this course, the student should be able to identify currently used types and sizes of rail, frogs, switch points and insulated joints. The student should be able to locate operation procedures in an approved manual and apply them to the appropriate component. In addition, the student should be able to describe the proper application of oxygen fuel cutting (OFC), oxy-fuel heating, shielded metal arc welding (SMAW), flux core arch welding (FCAW), carbon arc cutting with air (CAC-A), thermite welding (TW) and grinding procedures. 3 hrs. lecture/wk.

RRIT 271
Railroad Welding Internship (6 CR)

Prerequisites: Admission to the JCCC railroad program, welding option, and successful completion of RRIT 122 and RRIT 123 and RRIT 136 and RRIT 145 and RRIT 132 with a grade of "C" or higher

Upon successful completion of this course, the student should be able to apply classroom knowledge to an actual work situation. The internship will provide advanced students with on-the-job experience under the supervision of professionals in the railroad industry. The work will be developed cooperatively with railroads, college staff and each student to provide a variety of actual job experiences directly related to the student's career goals. Minimum of 120 workdays required.

Railroad Maintenance of Way (RRMW)

RRMW 132
Railroad Structures Layout (3 CR)

Prerequisites: Approval of the railroad training administrator and the JCCC program assistant dean

This is a beginning course for railroad maintenance-of-way personnel working with bridge and building personnel working with bridge and building construction. Students will learn to read construction blueprints used in railroad projects and perform layout work for railroad construction. Also, students will learn how to use basic surveying principles and equipment typically used at railroad construction sites. 2 hrs. lecture, 3 hrs. lab/wk.

RRMW 135
Concrete Technology (2 CR)

Prerequisites: Approval of the railroad training administrator and the JCCC program assistant dean

This course contains information that will help experienced and inexperienced students understand the principles of quality concrete. The emphasis will be on allowing concrete to reach its highest level of durability through proper mix design, placing and finishing techniques, and curing methods. 1.5 hrs. lecture, 1 hr. lab/wk.

Railroad Operations (RRT)

RRT 120
History of Railroading (3 CR)

This course covers the history and traditions of railroading and the industry's role in North American economic development. Upon successful completion of this course, students will be able to list and explain the significance of major events in North American railroading. 3 hrs. lecture/wk.

RRT 121
Railroad Technical Careers (3 CR)

This course includes information about technical careers in railroading, enabling students to choose suitable career paths. This course includes field trips that will demonstrate the relationships among technical work groups in day-to-day railroad operations. Upon successful completion of this course, students should be able to describe basic technical job functions, requirements and characteristics. 3 hrs. lecture/wk.

RRT 150
Railroad Operations (3 CR)

This course includes information about the industry, its major assets, structure and typical operations. Upon successful completion of this course, students will be able to define the current North American railroading industry characteristics, basic operations components and processes, and industry structure and administrative processes. 3 hrs. lecture/wk.

RRT 165
Railroad Safety, Quality and Environment (3 CR)

This course covers the importance of safety, quality, personal health and environmental awareness to the railroad industry and emphasizes the basic tools and techniques for improving these conditions on the job. Upon successful completion of this course, students should be able to define and explain the need for improved safety, quality, health and environmental awareness; describe their basic principles; explain the elements of successful programs; and apply these elements to typical tasks on the job. 3 hrs. lecture/wk.

Railroad Operations-Mechanical (RRTM)

RRTM 124
Orientation to the Railroad Mechanical Craft (2 CR)

Prerequisite: Admission to the JCCC railroad operations program, mechanical option

This course is designed to familiarize the student with work in railroad mechanical crafts. Upon successful completion of the course, students should be able to

describe apprenticeship program structures, benefits, organizational goals, basic safety and quality principles, and other aspects of mechanical craftwork. 2.5 hrs. lecture/wk.

RRTM 130
Freight Car Yard Inspection (3 CR)

Prerequisites: Approval of the railroad training administrator and the JCCC program assistant dean

This course is the first of a series of three for freight car training. It is designed to introduce the student to the safe inspection, testing, and repairing of freight cars in a repair track environment in accordance with Federal Railroad Administration (FRA), Association of American Railroads (AAR), and BNSF Railway procedures and policies. 32 hrs. lecture, 8 hrs. instructional lab/total

RRTM 131
Railroad Car Repair Track Inspector (3 CR)

Prerequisites: RRTM 130 and approval of the railroad training administrator and the JCCC program assistant dean

This course is the second of a series of three for freight car training. It is designed to introduce the student to the safe inspection, testing, and repairing of freight cars in a repair track environment in accordance with Federal Railroad Administration (FRA), Association of American Railroads (AAR), and BNSF Railway procedures and policies. 32 hrs. lecture, 8 hrs. instructional lab/total

RRTM 135
Basic EMD Mechanical (3 CR)

Prerequisite: Approval of the railroad training administrator and the JCCC program assistant dean

This is the first in a series of four courses in Locomotive Mechanics. This course is designed to introduce the student to the basic operation, maintenance, repair requirements and trouble shooting for EMD diesel engines and support systems. 40 hrs. integrated lecture lab/total

RRTM 136
Basic GE Mechanical (3 CR)

Prerequisite: Approval of the railroad training administrator and the JCCC program assistant dean

This is the second in a series of four courses in Locomotive Mechanics. This course is designed to introduce the student to the basic operation, maintenance, repair requirements and trouble shooting for GE diesel engines and support systems. 40 hrs. integrated lecture lab/total

RRTM 137
Locomotive Air Brake (3 CR)

Prerequisite: Approval of the railroad training administrator and the JCCC program assistant dean

This course is the third in a series of four courses in Locomotive Mechanics. It is designed to provide the student an introduction to the operation, testing, maintenance, and troubleshooting for 26L and 30 ACDW locomotive air brake systems. This course also emphasizes FRA air brake requirements applicable to locomotives. 40 hrs. integrated lecture lab/total

RRTM 138
Locomotive FRA (3 CR)

Prerequisite: Approval of the railroad training administrator and the JCCC program assistant dean

This course is the fourth in a series of four courses in Locomotive Mechanics. This course is designed to introduce the student to the Federal Railway Administration and Department of Transportation Code of Federal Regulations Title 49, Parts 209, 218, 229, 231, and 232. 40 hrs. integrated lecture lab/total

RRTM 142
Locomotive Electricity (3 CR)

Prerequisite: Approval of the railroad training administrator and the JCCC program assistant dean

This is the first in a series of four courses in Locomotive Electrical. This course is designed to introduce the student to the basic electrical theory and concepts related to locomotive electrical systems. 40 hrs. integrated lecture lab/total

RRTM 143
Low Horsepower Electrical (3 CR)

Prerequisite: Approval of the railroad training administrator and the JCCC program assistant dean

This is the second in a series of four courses in locomotive electrical. This course is designed to introduce the student to the operation, maintenance, and troubleshooting of EMD Low Horsepower locomotive electrical systems. 40 hrs. integrated lecture lab/total

RRTM 144
EMD Basic Electrical (3 CR)

Prerequisite: Approval of the railroad training administrator and the JCCC program assistant dean

This is the third in a series of four courses in Locomotive Electrical, this course is designed to introduce the student to the basic operation, maintenance, repair requirements and trouble shooting of EMD diesel engines and support systems. 40 hrs. integrated lecture lab/total

RRTM 145
GE Dash 8/9 Electrical Systems (3 CR)

Prerequisite: Approval of the railroad training administrator and the JCCC program assistant dean

This is the last in a series of four courses in Locomotive Electrical. This course is designed to introduce the student to the basic operation, maintenance, repair requirements and trouble shooting of GE Dash 8/9 locomotive systems. 40 hrs. integrated lecture lab/total

RRTM 150
Freight Car Open Top Loading Rules (3 CR)

Prerequisite: Approval of the railroad training administrator and the JCCC program assistant

This course is designed to provide the student with a thorough knowledge of Freight Car Open Top Loading Rules as well as a firm understanding of other pertinent Association of American Railroads (AAR) and Federal Railroad Administration (FRA) requirements, with an emphasis on safe work practices. 40 hrs. integrated lecture lab/total

RRTM 152
Freight Car Air Brakes, Basic (2 CR)

Prerequisite: Approval of the railroad training administrator and the JCCC program assistant dean

This course is designed to provide the student with a basic working knowledge of Freight Car Air Brake Equipment as well as a firm understanding of both Association of American Railroads (AAR) and Federal Railroad Administration (FRA) rules and requirements with emphasis on safe work practices. 40 hrs. integrated lecture lab/total

RRTM 154
Freight Car Air Brakes, Adv (2 CR)

Prerequisite: RRTM 152 and approval of the railroad training administrator and the JCCC program assistant dean

This course is designed to provide the student with a thorough working knowledge and advanced diagnostic ability of Freight Car Air Brake Equipment as well as a firm understanding of both AAR and Federal rules and requirements with emphasis on safe work practices. 40 hrs. integrated lecture lab/total

RRTM 156
Freight Car AAR Billing (2 CR)

Prerequisite: Approval of the railroad training administrator and the JCCC program assistant dean

This course is designed to provide the student a thorough working knowledge of the Freight Car AAR Billing system (CRB), the use of Handheld Computers for billing purposes, preparation of Original Records of Repairs and a firm understanding of both AAR and Federal rules and requirements. 40 hrs. integrated lecture lab/total

RRTM 158
Freight Car Intermodal (2 CR)

Prerequisite: Approval of the railroad training administrator and the JCCC program assistant dean

This course is designed to provide the student a thorough working knowledge of Freight Car Intermodal Equipment as well as a firm understanding of both BNSF and Federal Railroad Administration (FRA) rules and requirements with emphasis on safe work practices. 40 hrs integrated lecture lab/total

RRTM 160
Freight Car Computer (Com C) (2 CR)

Prerequisite: Enrollment restricted to BNSF employees only. Approval of the railroad training administrator and the JCCC program assistant dean

This course is designed to provide a thorough working knowledge of computer programs used by BNSF Railway. Upon completion, the student should be able to navigate easily through both the TSS and MEMS computer programs used by BNSF Railway. 40 hrs. integrated lecture lab/total

RRTM 170
Railroad Mechanical Safety and Health (2 CR)

Prerequisites: Admission to the JCCC's railroad operations program, mechanical option, and completion of RRTM 124 with a grade of "C" or higher

This course is designed to teach the principles and policies governing railroad safety and health. Upon successful completion of this course, the student should

be able to describe safety and health rules and policies, including applying a team process to improving safety and health, use and care of personal protective equipment, back injury prevention, hazard communications, lockout/tagout procedures, and hearing conservation. Students will be qualified to perform first aid and CPR and will be able to conduct a job safety analysis. 2.5 hrs. lecture/wk.

RRTM 251
Locomotive Diesel Engine Fundamentals (2 CR)

Prerequisites: Admission to the JCCC railroad operations program, mechanical option, and completion of RRTM 124 and RRTM 170 with a grade of "C" or higher

This course teaches the principles of diesel engine operation. Upon successful completion of this course, students will be able to identify 2-cycle and 4-cycle diesel engine parts and describe how diesel engine lubricating, cooling and fuel systems operate. 1.5 hrs. lecture, 1 hr. lab/wk.

RRTM 253
Freight Car Fundamentals (2 CR)

Prerequisites: Admission to the JCCC's railroad operations program, mechanical option, and completion of RRTM 124 and RRTM 170 with a grade of "C" or higher

This course teaches the basic types and purposes of railroad freight cars. Upon successful completion of this course, students will be able to identify five types of railroad freight cars, explain their functions, describe their basic construction and explain purposes and references for AAR rules and regulations governing freight cars. 1.5 hrs. lecture, I hr. lab/wk.

RRTM 254
Basic Locomotive Electricity and Electronics (2 CR)

Prerequisites: Admission to the JCCC's railroad operations program, mechanical option and completion of RRTM 124 and RRTM 170 with a grade of "C" or higher

This course teaches the theory and operation of electrical and electronic circuitry on board modem locomotives and complements EMD and GE electrical systems classes. Upon successful completion of this course, students will be able to describe the theory and purpose of the processes and operation of locomotive electrical system components and maintenance techniques. 1.5 hrs. lecture, 1 hr. lab/wk.

Railroad Work Equipment (RRWE)

RRWE 136
Basic Electronics (2 CR)

Prerequisites: Approval of the railroad training director and the JCCC program assistant dean

This course is an introduction to electronics with a review of basic electrical concepts. Instruction is provided on the operation and use of an oscilloscope, function generator, DC power supply, digital multi-meter and watt-meter. The course also includes an introduction to electronic devices, schematics, basic electronic formulas and programmable logic controllers. 1 hr. lecture, 1.5 hrs. lab/wk.

RRWE 138
Work Equipment Symbols (2 CR)

Prerequisites: Approval of the railroad training administrator and the JCCC program assistant dean

This course is designed to introduce the mechanic to the different types of symbols found on railroad track equipment. Major symbols families that will be discussed include mechanical, hydraulic, pneumatic, ladder and logic devices. At the end of each major topic, several small projects will be assigned to ensure that understanding has been achieved. As a final project, students will be assigned a project that will test their ability to use correctly several different families of symbols in one complete working drawing. 1 1/2 hrs. lecture, 1 hr. lab/wk.

RRWE 146
Hydraulic Principles (2 CR)

Prerequisites: Approval of the railroad training administrator and the JCCC program assistant dean

This course is designed for operators and maintenance personnel who use hydraulic systems in their work. Upon successful completion of this course, the student should be able to apply hydraulic principles to improve operational availability of equipment. Students will learn to read hydraulic diagrams and perform preventive maintenance and troubleshooting. In order to explain component operation, there will be extensive use of cut-away components. 1 hr. lecture, 1.5 hrs. lab/wk.

RRWE 148
Electronic Principles (2 CR)

Prerequisites: Approval of the railroad training administrator and the JCCC program assistant dean

This introductory course is designed to familiarize the student with the basic principles of electricity/electronics, the proper usage of a VOM or DMM, the reading of electrical prints in performing basic troubleshooting and the ability to identify basic hardware found in electrical circuits on maintenance-of-way equipment. 1 hr. lecture, 1.5 hrs. lab/wk.

RRWE 157
Fluid Power Systems (2 CR)

Prerequisites: Approval of the railroad training administrator and the JCCC program assistant dean

This course is designed to introduce the field of fluid power. Major topics that will be discussed include the two types of fluid power systems, major parts in a fluid power system and their purpose, the calculations needed to size motors and cylinders, the proper preventive maintenance procedures needed to keep the system operating at peak efficiency, and the troubleshooting methods used to isolate the problem in a system that is not working correctly. 2 hrs. lecture/wk.

RRWE 190
Advanced Hydraulic Principles (2 CR)

Prerequisites: RRWE 146 and the approval of the railroad training administrator and the JCCC program assistant dean

This advanced course contains information on hydraulic components found on the more complex maintenance-of-way equipment. Upon successful completion of this course, the student should be able to understand symbols, describe the theory of operation of and perform basic troubleshooting tasks on these components. 1 hr. lecture, 1.5 hrs. lab/wk.

RRWE 192
Advanced Electronic Principles (2 CR)

Prerequisites: RRWE 146 and the approval of the railroad training administrator and the JCCC program assistant dean

This advanced course contains information on electronic components and circuits found on the more complex maintenance-of-way equipment. Upon successful completion of this course, the student should be able to understand symbols, describe the theory of operation of and perform basic troubleshooting tasks on these components. 1 hr. lecture, 1.5 hrs. lab/wk.

Reading (RDG)

RDG 125
Fundamentals of Reading (3 CR)

Prerequisite: Appropriate assessment score

This is a mandatory reading course based on JCCC assessment results, and successful completion of the course (defined as a "C" or better) is required for students to progress in the assessment mandated sequence of reading courses. It is designed for students who need to improve their understanding of written expression. The focus is on the development of vocabulary, dictionary usage, comprehension and written communication. The next course, RDG 126 Reading Skills Improvement, is also required to complete the mandatory reading program. This course does not fulfill degree requirements. 3 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $2 to $5.

RDG 126
Reading Skills Improvement (3 CR)

Prerequisites: Appropriate test score or either RDG 125 with a grade of C or higher or EAP 093 and EAP 115

This is the final mandatory reading course based on JCCC assessment scores, and successful completion of this course (defined as a grade of ?C? or better) is required to exit the assessment mandated sequence of reading courses. It is designed for students who need to improve their understanding of written expression. The focus of the course is on higher-level comprehension and vocabulary skills. Students use a weekly news magazine to apply and practice skills learned in the class and to provide a background for written assignments. 3 hrs./wk. This course does not fulfill degree requirements.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $2 to $5.

RDG 127
College Reading Skills (3 CR)

Prerequisite: RDG 126 or appropriate assessment score

In this advanced course, designed for students who wish to further improve their reading, students will develop critical reading skills, expand background knowledge through reading, increase vocabulary, develop flexible reading techniques, and improve study and writing skills. Students use selected periodicals to apply and practice skills learned in the class and to provide a background for written assignments and class discussions. 3 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $2 to $5.

Religion (REL)

REL 120
Exploring World Religions (3 CR)

This course is a comparative study of the world's major religious traditions. The basic beliefs of Hinduism, Buddhism, Confucianism, Daoism, Judaism,

Christianity and Islam will be explored. A comparative framework for religious studies will be provided, and essential differences between Eastern and Western religions will be noted. Literary texts and iconographic images will be studied as appropriate. 3 hrs. lecture/wk.

REL 125
Religions of the East (3 CR)

Religions of the East is a detailed examination of the rich and diverse religious traditions of India, Tibet, China and Japan. Students will explore the histories, mutual influences, beliefs, and practices of Hinduism, Buddhism, the Jain religion, the Sikh religion, Confucianism, Daoism, the Tibetan religions, and Shinto, stressing the characteristics they share, as well as those that differentiate them from each other and from Western religions. Primary and secondary texts, as well as the iconographic and artistic traditions of these religions, will be examined as appropriate. 3 hrs. lecture/wk.

REL 126
Religions of the West (3 CR)

Religions of the West is a detailed examination of the rich and diverse religious traditions that originated in the ancient Near East (Judaism, Christianity, Islam), examples of indigenous traditions of Africa and North America, and examples of "alternative religions" of modern/contemporary Western culture. The student will explore the histories, cultural influences, beliefs and practices of these religions, stressing the characteristics that they share and those that differentiate them, both from one another and from the religious traditions of South and East Asian cultures. The primary texts, as well as the iconographic and artistic traditions of these religions, will be examined as appropriate. 3 hrs. lecture/wk.

REL 150
Islam: Religion & Civilization (3 CR)

This course covers the context in which Islam arose; the career of the Prophet Muhammad; the main teachings and practices of the religion; the Qur'an and other early Islamic literature; subsequent political developments in the religion and its spread; its main religious branches; its history during the Middle Ages; the Christian crusades and their consequences; the major components of Islamic civilization including law, the arts, literature, philosophy, science, and mathematics; Sufi; the effects of Western imperialism upon Islamic states; major developments in Islamic thought and practice since the seventeenth century; the Islamic diaspora; and Islam today. REL 150 is the same course as HIST 150 and HUM 150; enroll in one only. 3 hrs. lecture/wk.

Respiratory Care (RC)

RC 125
Beginning Principles of Respiratory Care (4 CR)
Prerequisite: Admission to the respiratory care program

This is an introduction to the basic therapeutic modalities used in respiratory care, including patient safety and comfort considerations, infection control and standard precautions, medical gas delivery, humidity and aerosol therapy, basic respiratory pharmacology, secretion clearance techniques and lung expansion therapy. Emphasis is on patient assessment, clinical application of therapies, therapy evaluation and communication techniques. The roles of respiratory care in the health care system and basic respiratory care service scope, organization and operation are also introduced. Students will have the opportunity to work with patients after two to three weeks of introductory lecture and lab demonstration and practice. 6 hrs. lecture, 16 hrs. lab/wk. Summer.
Associated Costs: These are additional (out-of-pocket) expense considerations

that students should expect in addition to the course tuition, fees, and textbooks. $150 to $250.

RC 130
Respiratory Care Equipment (4 CR)

Prerequisite: Admission to the respiratory care program

This course is an introduction to basic respiratory care equipment. The operation, function, calibration, troubleshooting and maintenance for oxygen administration devices, aerosol generators, humidifiers and hyperinflation devices will be addressed. Medical gas production and storage will also be addressed. 6 hrs. lecture, 8 hrs. lab/wk. Summer

RC 135
Cardiopulmonary Medicine I (1 CR)

Prerequisite: Admission to the respiratory care program

This is the first of three courses that provide a detailed review of the respiratory and cardiac system anatomy and physiology and the clinical implications of normal and abnormal function. 2 hrs./wk. Summer.

RC 220
Cardiopulmonary Physiology (2 CR)

Prerequisite: Successful completion of the summer Prerequisite: Successful completion of the summer sequence of respiratory care courses sequence of respiratory care courses

This is a comprehensive study of the physiology and pathophysiology of the pulmonary, cardiovascular and renal systems as they relate to respiratory care. 2 hrs./wk. Fall.

RC 230
Clinical Topics and Procedures I (4 CR)

Prerequisite: Successful completion of the summer sequence of respiratory care courses

This course supplements the fall clinical experiences. Concepts, techniques and procedures learned in the summer semester are reinforced. The student will develop new understandings and skills in the acute care, basic emergency care and introductory-level critical care settings. Emphasis will be on arterial blood gas procurement and analysis, cardiac rhythm assessment and management, airway equipment and management procedures, patient management of obstructive lung disorders, perioperative care and chest trauma. In addition, basic mechanical ventilation concepts and techniques will be addressed as they relate to physiologic effects, ventilator commitment, management and basic troubleshooting. 3 hrs. lecture, 3 hrs. lab/wk. Fall

RC 231
Clinical Topics and Procedures II (4 CR)

Prerequisite: Successful completion of the fall sequence of respiratory care courses

This course supplements the spring clinical experiences. Concepts, techniques and procedures learned in the fall semester are reinforced. The student will refine understandings of and skills in the acute care, basic emergency care and critical care settings. Emphasis will be on ventilator management of patients with specific lung insults, neurological compromise and cardiac problems. Advanced mechanical ventilation concepts and techniques will be addressed as they relate to physiologic effects, management and troubleshooting. Home care, pulmonary rehabilitation, physician-assisted procedures, cardiopulmonary stress testing,

patient case management and department management will be addressed. 3 hrs. lecture, 3 hrs. lab/wk. Spring.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $200 to $600.

RC 233
Respiratory Care of Children (2 CR)

Prerequisite: RC 230

The focus will be on the respiratory care of neonatal and pediatric patients, with emphasis on the management of cardiopulmonary disease states unique to children. Information will be based on developmental anatomy and physiology, pathology, diagnostic/laboratory assessments, and associated patient management in the acute, critical, emergency care, transport and home care settings. 2 hrs./wk. Spring.

RC 235
Cardiopulmonary Medicine II (2 CR)

Prerequisite: Successful completion of the summer sequence of respiratory care courses

This is the second in a series of three courses that provide a detailed review of the physical and diagnostic assessments of the cardiopulmonary patient and the related clinical implications of the assessment finding. 2 hrs. lecture/wk. Fall

RC 236
Cardiopulmonary Medicine III (2 CR)

Prerequisite: Successful completion of the fall sequence of respiratory care courses

This is the third in a series of three courses that provide a detailed review of pulmonary disorders, their pathology and their management. 2 hrs. lecture/wk. Spring

RC 240
Cardiopulmonary Pharmacology (2 CR)

Prerequisite: Successful completion of the summer sequence of respiratory care courses

This course acquaints the student with general principles of pharmacology and provides a comprehensive review of all drugs and drug groups that are either administered by respiratory-care practitioners or play an integral part in the management of patients they may encounter. Emphasis is on the clinical application of pharmacological agents, their therapeutic effects, mechanism of action and adverse effects, rather than the biochemistry involved. 2 hrs. lecture/wk. Fall.

RC 271
Clinical Practice I (6 CR)

Prerequisite: Successful completion of the summer sequence of respiratory care courses

This course is the clinical application of respiratory care therapeutic and diagnostic procedures. Students will have the opportunity to work with patients under close supervision to further develop their skill and understanding of basic respiratory care procedures for adults and children. The course objectives progress throughout the semester to involve the student initially in basic care of the less critically ill patient. As their comfort level and exposures progress, students are allowed to work with the more critically ill patients. 24 hrs./wk. Fall.

Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $100 to $200.

RC 272
Clinical Practice II (6 CR)

Prerequisite: Successful completion of the fall sequence of respiratory care courses

This course is the clinical application of respiratory care therapeutic and diagnostic procedures. Students will have the opportunity to work with patients under close supervision to further develop their skill and understanding of critical respiratory care procedures for adults and children. Students will also be involved in specialty activities to include physician rounds, pulmonary rehabilitation, home care, pulmonary function and cardiopulmonary stress testing. 24 hrs./wk. Spring.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $200 to $600.

Sociology (SOC)

SOC 122
Introduction to Sociology (3 CR)

Introduction to Sociology introduces students to sociology, the "science of society," and its approach to human social life. The course shows students how sociologists conduct research, and it describes the basic concepts and theories sociologists use to explain the social world. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.

SOC 125
Social Problems (3 CR)

Selected social problems will be analyzed. Problems associated with race, gender, class, deviance, crime and ecology will be examined as perennial issues in contemporary society. In addition, other topics will be analyzed as they arise or as the instructor and students determine them to be significant. The history and development of each problem, as well as possible solutions, will be examined from a variety of perspectives. 3 hrs. lecture/wk.

SOC 127
Criminology (3 CR)

This class will explore various explanations for criminal behavior including choice, biosocial, psychological, social structure and social process theories. Society's responses to crime will also be examined. 3 hrs. lecture/wk. ADMJ 127 and SOC 127 are the same course. Do not enroll in both.

SOC 131
Marriage and the Family (3 CR)

This is a sociological examination of marriage and the family as a social institution. It will emphasize changing roles, family formation, socialization, domestic conflict, interaction among family members and marriage partners, and the role of marriage and the family in society. 3 hrs./wk. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.

SOC 146
Introduction to Social Work and Social Welfare (3 CR)

This course will introduce the student to the profession of social work and to the history and development of social welfare and social service systems in the United States. This is a required introductory course in the sequence of study leading to a professional degree (BSW, MSW or DSW) in social work. 3 hrs./wk.

SOC 147
Social Work and Social Justice (3 CR)

The history of social movements in the United States will be integrated into exploration of current economic, political, religious and psychosocial issues, at micro and macro practice levels, relevant to the professional practice of social work at the BSW or MSW level of practice. This course is designed to support the National Association of Social Workers (NASW) Code of Ethics and Council of Social Work Education (CSWE) requirements for culturally competent practice. 3 hrs./wk.

SOC 152
Perspectives on Aging (3 CR)

Social aspects of aging will be identified. Areas of special interest will include research themes and demographic trends; aging and its relationship to family, the economy, politics, religion and education; the effect of cultural values on behavior; and the future of the elderly. 3 hrs./wk.

SOC 165
Chinese Society: Past and Present (3 CR)

An introduction to Chinese society since 1949, this course examines Chinese society and culture and focuses on contemporary social change while tracing the historical roots of Chinese culture and institutions. Social processes such as social movements, institutional development, political change, social organization and conflict are examined and analyzed. 3 hrs. lecture/wk. This course is typically offered in the spring semester.

SOC 200
Intercultural Applications (3 CR)

Prerequisite or corequisite: SPD 180

This course will provide students with direct experience with people from other cultures and in community organizations. Through their work with international representatives and service agencies, students will gain experiential and reflective knowledge of various cultures, social institutions and social issues and will develop skills needed to successfully negotiate intercultural settings. Enrollment in the course requires participation in a weekend retreat and some additional hours in activities outside the classroom. 3 hrs. lecture/wk. This course is typically offered in the spring semester.

SOC 210
Methodology in Social Sciences (3 CR)

Prerequisite: PSYC 130 or SOC 122 or ECON 230

This course deals with scientific research methods utilized in the social sciences, especially psychology, sociology, political science, and anthropology. The course examines a wide range of data collection methodologies including observation, questionnaire construction, and controlled experimentation. The course will be beneficial for analyzing and evaluating the quality of research findings reported in both the popular and academic press. It will also be useful to those who plan to engage in occupations requiring the use of research methodology. 3 hrs.

lecture/wk. SOC 210 and PSYC 210 are the same course. Do not enroll in both.

Speech/Debate (SPD)

SPD 120
Interpersonal Communication (3 CR)
This course focuses on the principles of effective speech communication in small group and one-to-one relationships. Theory and practice of interpersonal communication are studied and applied to a variety of life situations. The course focuses on perception, self-concept, listening, conflict, language, nonverbal communication and culture as they relate to interpersonal relationships. 3 hrs./wk. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $1 to $5.

SPD 121
Public Speaking (3 CR)
This course is designed to meet the needs of people who wish to improve their ability to prepare and deliver effective oral presentations before an audience. This fundamental speech course emphasizes creation of ideas, research techniques, outlining, audience analysis, organization and delivery techniques. Students will deliver a variety of speech types including informative and persuasive. 3 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $1 to $5.

SPD 125
Personal Communication (3 CR)
This course is concerned with the most frequently used human communication skills, interpersonal communication and public speaking. The course demonstrates the natural relationships between communicating one-to-one and in public, showing that skills in one can be employed in the other and giving practice in both. Focus is on communication theory, listening, concepts of self, language, research techniques, perception and various types of public speaking, such as impromptu, group panel, informative and persuasive. 3 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $1 to $5.

SPD 128
Business and Professional Speech (3 CR)
Students will improve their verbal communication skills both formally and informally by studying interviewing, delivering effective presentations, working in groups, negotiating, practicing listening, and recognizing verbal and nonverbal messages. The course is designed for the student presently working in business or planning to pursue a business degree. 3 hrs./wk.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $1 to $5.

SPD 130
Elementary Debate (3 CR)
This course is designed for those students interested in participating in competitive intercollegiate debate. Through the course, students will learn debate theory, debate skills and techniques, and methods of becoming successful intercollegiate competitors. Students are expected to travel to tournaments in order to develop skills in research, argument construction, debate format,

intercollegiate debate speaking style and refutation. Students enrolling in this course will be required to participate as members of the intercollegiate debate team and will attend an appropriate number of weekend intercollegiate debate tournaments a semester. 3 hrs./wk.

SPD 132
Intermediate Debate I (3 CR)

Prerequisite: SPD 130 or the equivalent

This course is designed for those students interested in participating in competitive intercollegiate debate. Through the course, students will learn debate theory, debate skills and techniques, and methods of becoming successful intercollegiate competitors. Students are expected to travel to tournaments in order to develop skills in research, argument construction, debate format, intercollegiate debate speaking style and refutation. Students enrolling in this course will be required to participate as members of the intercollegiate debate team and will attend an appropriate number of weekend intercollegiate debate tournaments a semester. 3 hrs./wk.

SPD 140
Oral Interpretation of Literature (3 CR)

The student will develop techniques for effective spoken performance of literature. Using poetry, fiction and nonfiction, students will create literary interpretations and then master both the verbal and nonverbal methods necessary for effective spoken expression of those interpretations. This course includes topics such as selecting literary works for performance, interpretation of literary works, audience analysis and performance. Skills acquired in this course will be essential to actors, broadcast journalists, educators and other public speakers. 3 hrs./wk.

SPD 141
Voice and Speech (3 CR)

The student will develop techniques to expand breath support, vocal range and dynamics; develop precise articulation; and strengthen the connection between thought and sound. Through the use of exercises to free, develop and strengthen the voice, the student will be better able to communicate the full range of human emotion and all the nuances of thought. Skills acquired in this course are essential for actors, broadcast journalists, educators and other public speakers. 3 hrs./wk.

SPD 180
Intercultural Communication (3 CR)

The intercultural communication course is concerned with communication theory as it relates to cross-culture interactions. This course utilizes concepts drawn from sociology, psychology, anthropology and communication. Focus is on identifying the cultural bases of beliefs, attitudes, values and behaviors. Objectives include recognizing commonalities across cultures, tolerating ambiguity in a variety of situations, developing a more global multicultural perspective, identifying and appreciating other cultural orientations, and recognizing and assigning cultural explanations to specific behaviors. 3 hrs/wk.

SPD 230
Intermediate Debate II (3 CR)

Prerequisite: SPD 132 or the equivalent

This course is designed for students interested in participating in competitive intercollegiate debate. Through the course, students will learn debate theory, debate skills and techniques, and methods of becoming successful intercollegiate competitors. Students are expected to travel to tournaments in order to develop skills in research, argument construction, debate format, intercollegiate debate

speaking style and refutation. Students enrolling in this course will be required to participate as members of the intercollegiate debate team and will attend an appropriate number of weekend intercollegiate debate tournaments a semester. 3 hrs./wk.

SPD 235
Advanced Debate (3 CR)

Prerequisite: SPD 230 or the equivalent

This course is designed for students interested in participating in competitive intercollegiate debate. Through the course, students will learn debate theory, debate skills and techniques, and methods of becoming successful intercollegiate competitors. Students are expected to travel to tournaments in order to develop skills in research, argument construction, debate format, intercollegiate debate speaking style and refutation will be developed. Students enrolling in this course will be required to participate as members of the intercollegiate debate team and will attend an appropriate number of weekend intercollegiate debate tournaments a semester. 3 hrs./wk.

Surgical Technology (KST)

KST 100

Introduction to Surgical Technology (2 CR)

Explores historical aspects of surgery, health care facilities, and organizations. Includes the roles, duties, and responsibilities of the surgical team members. Ethical, legal and moral issues in health care and surgery are addressed. Focuses on effective communication skills, accurate medical terminology, and the impact of transcultural psychosocial outcomes for clients in the surgical setting. 4 hrs. lecture/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of surgical technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KST 102

Introduction to Fundamentals I (5 CR)

Prerequisites: The student must meet the entrance requirements and be accepted into the surgical technology program.

Applies principles of medical and surgical asepsis. Focuses on preparation of the sterile field, identification of instruments, sutures, supplies and equipment. Emphasis is on basic skills of the surgical technologist in preparation for and during the operative procedure. 6 hrs. lecture, 15 hrs. clinical/wk. Practices maintaining a safe client environment and includes the responsibilities and duties of surgery personnel. Common surgical techniques and procedures. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of surgical technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KST 103

Introduction to Fundamentals II (6 CR)

A description is not available for this course.

KST 104

Body Structure and Function (2 CR)

Prerequisites: Students must meet entrance requirements and must be accepted into the surgical technology program.

Introduces students to the major structures and functions of the human body. Is taught according to body systems. Laboratory time is used to introduce and

reinforce classroom instruction. 1 hr. lecture, 1 hr. lab/wk. Course taught at Penn Valley Community College. Students should contact the Penn Valley coordinator of surgical technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KST 105

Pharmacology for the Surgical Technologist (2 CR)

Development of knowledge and understanding of the metric, apothecary, household, and linear systems of measurement. The conversion of equivalents from one system to another. Focus is on terminology associated with pharmacology and procedures for safe and accurate handling of medications and solutions. Included is discussion of principles of anesthesia administration, post-anesthesia client care, and care in emergencies. 2 hrs. lecture/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of surgical technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KST 106

Microbiology for the Surgical Technologist (3 CR)

Study of structure, function and pathogenicity of micro-organisms, immune and infectious responses. An emphasis is placed on principles of sterilization, disinfecting, environmental sanitation, and practices that promote optimal healing. 3 hrs. lecture/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of surgical technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KST 109

Surgical Procedures I (8 CR)

Focus is on the diagnosis, pathology and surgical sequence of general surgery, gynecological surgery, genitourinary surgery and laparoscopic surgery. Included is discussion of postoperative care and complications. 4 hrs. lecture, 12 hrs clinical/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of surgical technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KST 110

Surgical Procedures II (8 CR)

Focus is on diagnosis, pathology and surgical sequence of general surgery, gynecological surgery, genitourinary surgery and laparoscopic surgery. Included is a discussion of postoperative care and complications. 4 hrs. lecture, 12 hrs. clinical/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of surgical technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KST 111

Career Development for the Surgical Technologist (2 CR)

Resume development, interviewing techniques and introduction to the current health care market. Emphasis is on self-evaluation of professional skills and their application to the health care market. 2 hrs. lecture/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of surgical technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

KST 114

Surgical Procedures III (8 CR)

Focus is on diagnosis, pathology and surgical sequence with complex surgical specialties: neurosurgery, cardiovascular and peripheral vascular, thoracic,

pediatric, geriatric, trauma and surgery. 4 hrs. lecture, 12 hrs. clinical/wk. Course taught at MCC-Penn Valley Community College. Students should contact the Penn Valley coordinator of surgical technology about the class meeting times and beginning and ending dates of classes. Call 816-759-4000.

Theater (THEA)

THEA 120
Introduction to Theater (3 CR)

Students will be introduced to a variety of theatrical experiences, read great plays and see live theater presentations. They also will discuss theater practices, dramatic literature and the history of the theater. Includes 12 required shop hours. 3 hrs./wk.

THEA 123
Improvisation for the Theater (2 CR)

Prerequisite: THEA 130

The student will be introduced to theater improvisation, which will emphasize creative stage activities not requiring a written script. Participation in activities of this course will release and enhance the work of serious acting students and show the students how to approach characterization viscerally rather than intellectually, spontaneously rather than intentionally. 2 hrs. lecture/wk.

THEA 130
Acting I (3 CR)

The fundamentals of acting will be studied in this class. Emphasis will be on discovering and expanding creative potential through exercises in self-awareness, posture, movement, voice and personality projection. Students will complete a minimum of three in-class performances. 3 hrs./wk. plus rehearsals and performances.

THEA 131
Voice and Speech (3 CR)

The student will develop techniques to expand breath support, vocal range and dynamics; learn precise articulation; and strengthen the connection between thought and sound. Through the use of exercises to free, develop and strengthen the voice, the student will be better able to communicate the full range of human emotion and all the nuances of thought. Skills acquired in this course are essential for actors, broadcast journalists, educators and other public speakers. 3 hrs. lecture/wk. This course is typically taught in the fall semester.

THEA 133
Technical Practicum I (1 CR)

Students gain practical experience in technical theater in this course. The student completes the course objectives by working in the theatre department's productions and/or working in the scene/costume shop during the semester. 2 hrs. lab/wk.

THEA 134
Performance Practicum I (1 CR)

This course will enable students to gain practical experience in performance-related aspects of college theater productions. Admission may be

granted upon being cast in a JCCC production. 2 hrs. lab/wk.

THEA 135
Stage Makeup (2 CR)

An introductory course designed to provide an understanding of, and practical skill in, the design and application of makeup for theatrical performance. 1 hr. lecture, 1 hr. lab/wk. This course is typically taught in the spring semester.
Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $30 to $60.

THEA 136
Basic Costuming (3 CR)

This is a survey of the theory, techniques and skills used in costume creation for the theater and film. Areas of study and practice include basic construction, patterning and cutting; fabrics, design and realization; millinery; craftwork; and organization. 2 hrs. lecture, 2 hrs. lab/wk. This course is typically taught in the fall semester.

THEA 137
Movement for the Stage (3 CR)

The student will develop techniques to expand kinesthetic awareness, flexibility, physical freedom and the language of movement. Through the use of exercises to free, develop and strengthen physical vocabulary, the student will be better able to communicate the physical life of a character. Skills acquired in this course will include mime, stage combat, commedia, improvisation and circus techniques. 3 hrs. lecture/wk. This course is typically taught in the spring semester.

THEA 138
Oral Interpretation of Literature (3 CR)

The student will develop techniques for effective spoken performance of literature. Using poetry, fiction and nonfiction, students will create literary interpretations and then master both the verbal and nonverbal methods necessary for effective spoken expression of those interpretations. This course includes topics such as selecting literary works for performance, interpretation of literary works, audience analysis and performance. Skills acquired in this course will be essential to actors, broadcast journalists, educators and other public speakers. 3 hrs. lecture/wk. This course is typically taught in the fall semester.

THEA 140
Basic Stagecraft (3 CR)

This course introduces the general student and theater major to basic stagecraft. Through lectures, in-class demonstrations and hands-on experiences, the student will gain a working and appreciative knowledge of technical theater. The course includes 15 lab hours and attendance at two live theatrical productions. 2 hrs. lecture, 2 hrs. lab/wk. This course is typically offered in the fall semester.

THEA 145
Introduction to Theater Design (3 CR)

This lecture and studio class introduces the theory and practice of theater design and the graphics and standards of entertainment technology. Emphasis will be on the processes and practices used in designing for the performing arts. Using course-taught computer and hand-based drawing techniques, the student will create a portfolio of his or her work through in-class projects. 2 hrs. lecture, 2 hrs. lab/wk. This course is typically offered in the spring semester.

Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $20 to $80.

THEA 209
Script Analysis (3 CR)

Script Analysis introduces students to those methods used in the theater for the study and/or analysis of plays. Directors, actors and designers use script analysis during their preparatory work and then continue to use it through the rehearsal process until, and sometimes even after, the production has finished. This course is of value to the student because it focuses on the crucial elements of a play encountered during the production process including dramatic structure, content and meaning. 3 hrs. lecture/wk. This course is typically offered in the fall semester only.

THEA 225
Reader's Theater (3 CR)

Students will combine acting, interpretation and rhetoric as they analyze and perform poetry, prose and dramatic literature and present public performances. Through the process of reading, studying, investing, rehearsing and performing literary and nonliterary works, the student will learn to pay particular attention to the voice embodied in a given text and the cultural and social context within which that voice speaks. 3 hrs./wk. plus rehearsals. This course is typically taught in the spring semester.

THEA 230
Acting II (3 CR)

Prerequisite: THEA 130

This continuation of Acting I will focus on more in-depth character analysis and development, emphasizing the actor's responsibility in creating the character. 3 hrs./wk. plus rehearsals and performances.

THEA 233
Technical Practicum II (1 CR)

Prerequisite: THEA 133

Students gain practical experience in technical theater in this course. The student completes the course objectives by working on the theatre department's productions and/or working in the scene/costume shop during the semester. 4 hrs.lab/wk.

THEA 234
Performance Practicum II (1 CR)

Prerequisite: THEA 134

This course will enable students to gain further practical experience in the performance-related aspects of college theater productions. Admission may be granted upon being cast in a JCCC production. 2 hrs.lab/wk.

THEA 235
Technical Practicum III (2 CR)

Prerequisite: Permission of the instructor

Students will gain professional technical theater experience in this course by working as an apprentice for the theater department and an outside professional performing arts agency. While on campus and/or on location, students will build

and install a stage and/or scenery as they work alongside theater professionals to execute theatrical productions. 4 hrs. lab/wk. This course is offered in summer only; permission from instructor is required to enroll.

THEA 240
Costuming (1 CR)

A 16-week course designed to introduce basic techniques in costume design and research and to provide an overview of the scope and impact of costume as a technical and artistic aspect of theater and film. 1 hr. lecture, 1 hr. lab/wk. This course is typically taught in the spring semester.

THEA 275
Selected Topics in Theatre I (3 CR)

Prerequisite: Permission of instructor

This course periodically offers specialized or advanced discipline-specific content related to performance, not normally taught in the curriculum, to interested and qualified students within the program. 3 hrs. lecture/wk.

THEA 276
Selected Topics in Theatre II (3 CR)

Prerequisite: Permission of instructor

This course periodically offers specialized or advanced discipline-specific content related to technical theatre and theatre design, not normally taught in the curriculum, to interested and qualified students within the program. 3 hrs. lecture/wk.

Veterinary Technology (KSAH)

KSAH 100

Introduction to Veterinary Technology (2 CR)

Orientation to career opportunities available in veterinary technology. Professional ethics, public relations and the psychological adjustment of the student in terms of understanding the need for physical treatment and care of animals. Client relations, vaccination programs, regulatory organizations, receptionist duties, breeds and breed characteristics neutering, puppy care, diets and hospital management. 2 hrs. lecture/wk. Course taught at MCC-Maple Woods Community College. Students should contact the Maple Woods coordinator of veterinary technology about the class meeting times and beginning and ending dates of classes. Call 816-437-3000.

KSAH 101

Principles of Animal Science I (3 CR)

Principles of handling, housing and management of animals. Basic dietary and sanitation requirements. Restraint and handling, administration of medications, bathing, skin scraping, and basic laboratory tests. Emphasis on animal physiology including the cell, muscle, nervous, respiratory and cardiovascular systems. Introduction to anesthesia and general animal nursing. 2 hrs. lecture, 2 hrs. lab/wk. Course taught at MCC-Maple Woods Community College. Students should contact the Maple Woods coordinator of veterinary technology about the class meeting times and beginning and ending dates of classes. Call 816-437-3000.

KSAH 108

Clinical Mathematics for Veterinary Technicians (1 CR)

Prerequisites: Admission into the Veterinary Technician Program

1 hr./wk. Course taught at Maple Woods Community College. Students should contact the Maple Woods coordinator of veterinary technology about the class meeting times and beginning and ending dates of classes. Call 816-437-3000.

KSAH 110

Principles of Animal Science II (3 CR)

Prerequisite: KSAH 101

Anesthesia and the physiology of the digestive, urinary, endocrine and reproductive systems. Blood and specimen collection, basic bandaging and introduction to surgical preparation and radiographic processing. 2 hrs. lecture, 2 hrs. lab/wk. Course taught at MCC-Maple Woods Community College. Students should contact the Maple Woods coordinator of veterinary technology about the class meeting times and beginning and ending dates of classes. Call 816-437-3000.

KSAH 111

Sanitation and Animal Care (2 CR)

Introduction to microorganisms, sanitation, disinfectants, sterilization and Zoonotic diseases and public health problems. Introduction to parasitology, vermin control, specimen preservation, instrument identification, cleaning and sterilization, and sanitary procedures in patient care. 1 hr. lecture, 2 hrs. lab/wk. Course taught at MCC-Maple Woods Community College. Students should contact the Maple Woods coordinator of veterinary technology about the class meeting times and beginning and ending dates of classes. Call 816-437-3000.

KSAH 200

Veterinary Hospital Technology I (3 CR)

Prerequisites: KSAH 101 and KSAH 110

Administration of anesthetics and surgical assisting, bandaging, casting, blood transfusions, surgical preparations and postoperative procedures, parenteral fluid administration, and intravenous hookups. Introduction to orthopedics, electrocardiography, bone marrow cytology, and pharmacology. 1 hr. lecture, 4 hrs. lab/wk. Course taught at MCC-Maple Woods Community College. Students should contact the Maple Woods coordinator of veterinary technology about the class meeting times and beginning and ending dates of classes. Call 816-437-3000.

KSAH 201

Clinical Pathology Techniques I (4 CR)

Introduction to laboratory procedures including preparation of blood smears, cell identification, fecal analysis and parasitology. Urinalysis and urine sediment valuation. 1 hr. lecture, 6 hrs. lab. Course taught at MCC-Maple Woods Community College. Students should contact the Maple Woods coordinator of veterinary technology about the class meeting times and beginning and ending dates of classes. Call 816-437-3000.

KSAH 202

Veterinary Anatomy (5 CR)

Prerequisite: BIOL 101 (Maple Woods) or BIOL 127 and KSAH 101 and 110

Basic principles of anatomy using a systemic approach. Physiology as it relates to anatomy and applicable pathology involving the animal body systems. Comparison of the animal species using the cat for dissection. 3 hrs. lecture, 4 hrs. lab/wk. Course taught at MCC-Maple Woods Community College. Students should contact the Maple Woods coordinator of veterinary technology of veterinary technology about the class meeting times and beginning and ending dates of classes. Call 816-437-3000.

KSAH 203

Laboratory Animal Technology (2 CR)

Prerequisites: KSAH 101, KSAH 110 and KSAH 201

Restraint and handling of laboratory animals and birds. Blood collection, restraint, identification, medicating, anesthesia and specimen collection. Technical skills for laboratory animal research. 1 hr. lecture, 2 hrs. lab /wk. Course taught at MCC-Maple Woods Community College. Students should contact the Maple Woods coordinator of veterinary technology about the class meeting times and beginning and ending dates of classes. Call 816-437-3000.

KSAH 209

Equine Medicine and Management (3 CR)

Prerequisite: KSAH 212

Breeds and types of horses and their use. A study of conformation as it relates to soundness, horse psychology, fitting, conditioning, first aid and restraint. Parasites and their control, farm management for safety, nutrition, mare care, breeding, foaling, hoof soundness, equine diseases and their prevention. Laboratory procedures. 2 hrs. lecture, 2 hrs. lab/wk. Course taught at MCC-Maple Woods Community College. Students should contact the Maple Woods coordinator of veterinary technology about the class meeting times and beginning and ending dates of classes. Call 816-437-3000.

KSAH 210

Veterinary Hospital Technology II (3 CR)

Prerequisite: KSAH 200

Introduction of anesthetics, surgical assisting, bandaging, casting, blood transfusions, surgical preparations and postoperative care. Administration of parenteral fluid and emergency treatments. Introduction to ophthalmology and dermatology. 1 hrs. lecture, 4 hrs. lab/wk. Course taught at MCC-Maple Woods Community College. Students should contact the Maple Woods coordinator of veterinary technology about the class meeting times and beginning and ending dates of classes. Call 816-437-3000.

KSAH 211

Clinical Pathology Techniques II (5 CR)

Prerequisite: KSAH 201

Theory and performance in hematologic, urinalysis, clinical chemistry and parasitology. Introduction to simple immunologic tests, blood coagulation tests, and bone marrow evaluation. Emphasis on hematology and hemoparasites. 2 hrs. lecture, 6 hrs. lab/wk. Course taught at MCC-Maple Woods Community College. Students should contact the Maple Woods coordinator of veterinary technology about the class meeting times and beginning and ending dates of classes. Call 816-437-3000.

KSAH 212

Large Animal Technology (4 CR)

Prerequisites: KSAH 101 and KSAH 110

Techniques necessary to assist the veterinarian in a large animal or mixed practice and in research facilities. Bovine, porcine, ovine and caprine medicine and management, including restraint, blood collection, medicating and nursing techniques. 2 hrs. lecture, 4 hrs. lab/wk. Course taught at MCC-Maple Woods Community College. Students should contact the Maple Woods coordinator of veterinary technology about the class meeting times and beginning and ending dates of classes. Call 816-437-3000.

KSAH 213

Radiology and Electronic Procedures (2 CR)

Intensive study and practice in radiological techniques, radiographic exposure techniques, film processing, contrast radiography and machine electronics. 1 hr. lecture, 2 hrs. lab/wk. Course taught at MCC-Maple Woods Community College. Students should contact the Maple Woods coordinator of veterinary technology about the class meeting times and beginning and ending dates of classes. Call 816-437-3000.

KSAH 214

Veterinary Technician Internship (6 CR)

Prerequisite: Two semesters of first-year veterinary technology courses

Supervised intensive clinical study under the direction of a cooperating veterinarian to provide 420 hours of actual work experience. 40 hrs. field study/wk. Course taught at MCC-Maple Woods Community College. Students should contact the Maple Woods coordinator of veterinary technology about the class meeting times and beginning and ending dates of classes. Call 816-437-3000.

Women and Gender Studies (WGS)

WGS 201
Global Women's Studies (3 CR)

The course is intended to increase student understanding of the history and experiences of women. It principally focuses on the ways in which gender interacts with race/ ethnicity, social class, sexual orientation, religion, age, nationality and other cultural identities to create differences and similarities in gendered lives. Students will critically examine and compare through a multidisciplinary approach the voices and experiences of women representing both domestic and global diversities. Selected topics may include: gender socialization; the female body and the sociopolitical context of reproduction, body image, appearance and of sexuality; similarities and differences between the genders; marriage and the family; work roles, inequalities and the global economy; health issues; violence against and by women; women in religion and politics; and, an historical and contemporary look at global feminism. 3 hrs. lecture/wk.

WGS 220
The Many Women of Islam (3 CR)

This course introduces students to Islam and the many ways in which Islam views women. It explores the relationship of the ideal teachings of the Qur'an to the everyday realities of marriage, family, divorce, education, religious participation, health, reproduction, violence, body image, economics, the workplace, political participation, and other topics in the context of the many nations and cultures in which Muslim women reside. Underlying the unity of the Islamic world is a diversity of interpretations and practices that are mediated by those many nations and cultures which compose it. This diversity within unity is reflected in the lives of the many women of Islam. 3 hrs. lecture/wk.

Continuing Education Certificate Programs

Continuing education class schedules are available from the continuing education class search open and closed class list.

For more information about these classes call Continuing Education Registration (913) 469-2323.

A+, Certificate in

Access Developer Certificate

Access Specialist Certificate

Adobe Graphic Design

Adobe Web Design, Certificate in

Audio Recording Engineering, Certificate in

Complementary and Alternative Medicine, Certificate in

End of Life Care, Certificate

Excel Specialist Certificate

Gerontology, Certificate in

Intensive English Program

Medical Coding Certification

Microsoft Certified Systems Administrator

Microsoft Certified Technical Specialist: SQL 2005

Network+, Certificate in

Project Management Certificate

Spirituality, Health, Healing

Word Specialist Certificate

A+, Certificate in

Start your IT training off in the right direction. Build a solid foundation with our A+ Essentials and A+ IT Technician classes as you start your IT career. Mapped toward both of CompTIA's A+ exams, this series will help prepare you for the industry recognized A+ certification. The exam vouchers alone have a $290 value. Prerequisite: Knowledge of Windows operating system and basic computer hardware.

See individual classes for detailed descriptions and outlines.

Required Courses

```
XCM 8252  A+ IT Technician: 220-602
XCM 8255  A+ Essentials: 220-601
XCM 8251  A+ Certificate Series
```

Access Developer Certificate

Finish off your Access education as you explore the most advanced features of Access and work with SQL. Class includes Access Application Development, Access VBA Programming and SQL Fundamentals curriculums.

Required Courses:

```
XCM 4232  Access Developer Certificate - 2003
XCM 4236  Access Application Development
XCM 8632  SQL Fundamentals
```

Access Specialist Certificate

Receive instruction in our complete lineup of Access classes. Build a solid foundation with Access Fundamentals and Access Intermediate before moving on to more advanced topics in Access Advanced. Once completed, either take the MOS exam at participating Prometric testing centers or use your Center for Business Access Specialist Certificate to verify your competency. 21 classroom hours.

Prerequisite: Knowledge of Windows OS, ability to use keyboard and mouse with proficiency and a basic knowledge of database use.

See individual classes for detailed descriptions and outlines.

Required Courses:

```
XCM 4220  Access Fundamentals
XCM 4225  Access Intermediate
XCM 4230  Access Advanced
XCM 4219  Access Certificate Series
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Adobe Graphic Design

Receive comprehensive instruction in a vast array of Adobe products. The series provides instruction in: PhotoShop Fundamentals, PhotoShop Advanced, InDesign Fundamentals and Advanced, Acrobat Fundamentals and Advanced, and Illustrator Fundamentals and Advanced.

See individual classes for detailed descriptions and outlines.

Required Courses:

```
XCM 1584  Adobe Graphic Design Series
XCM 4000  Adobe PhotoShop Fundamentals
XCM 4002  Adobe PhotoShop Advanced
XCM 1588  Adobe InDesign Fundamentals
XCM 1589  Adobe InDesign Advanced
XCM 1585  Adobe Acrobat Fundamentals
XCM 4100  Adobe Illustrator Fundamentals
XCM 4102  Adobe Illustrator Advanced
XCM 1583  Adobe Acrobat Advanced
```

Adobe Web Design, Certificate in

Combine the following classes: HTML and Web Page Design, Cascading Style Sheets, Dreamweaver: Designing Websites, Dreamweaver: Database Connections, Fireworks: Web Graphics and Interactivity, Flash Fundamentals, Flash: Interactive Movies and Flash: Advanced Techniques in one easy-to-follow schedule at a special, reduced price. Everything you need to know to become Web-design proficient. This course series is eligible for a payment plan. Prerequisite: Knowledge and experience with Windows OS and the internet.

See individual classes for detailed descriptions and outlines.

Required Courses:

```
XCM 9540   HTML and Web Page Design
XCM 9525   Cascading Style Sheets
XCM 9463   Dreamweaver: Designing and Developing Websites
XCM 4152   Fireworks: Web graphics and Interactivity
XCM 9470   Flash Fundamentals
XCM 9477   Flash, Interactive Movies
XCM 9450   Building Web Sites: Integrative Workshop
XCM 9478   Flash: Advanced Techniques
XCM 1605   Macromedia Web Design Certificate Series
```

Audio Recording Engineering, Certificate in

If you are interested in a studio career, JCCC's Audio Recording Engineering Certificate Program provides a focused two-year education. All recording classes are taught by experienced, working audio professionals. A superior audio teaching environment includes a professional recording studio, and state-of-the-art facilities on the JCCC campus.

The certificate program encompasses a two-year sequence with 1,376 contact hours of required work in recording and music. Curriculum is designed to prepare you for jobs in the field of commercial music, particularly in the areas of audio recording; computerized music systems;sound reinforcement; audio and audio/video production. After completing the program, you will be prepared for audio work in recording and/or video studios, radio/TV stations, corporate audio/video departments, and sound reinforcement/recording for theater, conventions, music concerts, and other live performance situations.

Semester 1

```
XRE 1008   Introduction to the Recording Studio.........128*
XRE 1015   MIDI in the Recording Studio....................64*
XRE 1010   Music Fundamentals & the Keyboard I.......64*
XRE 1016   Music Styles & Recording Analysis I.........64*
           or
XRE 1017   Music Styles & Recording Analysis II.......64*
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Semester 2

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XRE 1003   Recording Studio Skills II.....................128*
XRE 1001   Chamber Recording Ensemble I....................32*
XRE 1019   Music Fundamentals & the Keyboard II...........64*
XRE 1016   Music Styles & Recording Analysis I............64*
           or
XRE 1017   Music Styles & Recording Analysis II...........64*
XRE 1004   Music Theory for Recording Engineers......64*
           or
XRE 1010   The Studio Business...........................64*
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Summer

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XRE 1014   Sound Reinforcement Engineering.......64*
XRE 1012   Remote Location Recording................32*
XRE 1005   Chamber Recording Ensemble II..................32*
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Semester 3

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XRE 1002  Advanced Recording Engineering.................160*
XRE 1006  Chamber Recording Ensemble III..................32*
XRE 1004  Music Theory for Recording Engineers............64*
          or
XRE 1010  The Studio Business.............................64*
NOTE:Any credit hour ensemble or applied music lesson....1**
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Semester 4

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XRE 1009  Advanced Recording Engineering II..............160*
XRE 1007  Chamber Recording Ensemble IV...................32*
NOTE:Any credit hour ensemble or applied music lesson....1**
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Summer

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XRE 1011  Recording Portfolio Review...................32*
XRE 1013  Audio for Video and Film.....................96*


**Required to complete 2 credit hours total of any ensemble
or applied music lesson.

* Contact hours
        Total Contact Hours..............................1376
        Total Credit Hours...............................2
```

Complementary and Alternative Medicine, Certificate in

The certificate in complementary and alternative medicine is designed to provide a multidisciplinary educational experience. Those wishing to become knowledgeable, skilled and committed health care professionals in the field of complementary and alternative medicine should achieve certification.

- The program requires 27 contact hours.
- Students must register with JCCC and then complete the online orientation at www.ed2go.com/jccc.
- ALLEGRA Learning Solutions, LLC, is accredited as a provider of continuing education in nursing by the American Nurses Credentialing Center's Commission on Accreditation.
- The program meets the qualifications for the stated hours of continuing education credit for MFTs and/or LCSWs as required by the California Board of Behavioral Sciences.
- The program is provider approved by the California Board of Registered Nursing, Provider #CEP12385, for the stated number of contact hours.
- **The certificate program must be completed within six weeks of the start date.**

Required Courses:

```
XNH 1650  Certificate in Complementary and
          Alternative Medicine
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End of Life Care, Certificate

The U.S. population is aging at a rapid rate, and the number of individuals, young and old, who are living with debilitating, chronic or terminal illnesses, is also increasing. The demand for knowledgeable providers to meet the needs of this population is dramatically increasing, new jobs are being developed, and new services created. If you are a health professional who works with this population,

this program will provide you with continuing professional education to help you gain a broad understanding of this special area of care and stay current with emerging trends. 26 contact hours Note: Students must register with JCCC then complete the online orientation at www.ed2go.com/jccc. This program is accredited through ALLEGRA Learning Solutions, LLC, and accredited provider of continuing education in nursing by the American Nurses Credentialing Center's Commission on Accreditation.

Required Courses:

```
XNH 1770    Certificate in End of Life Care
```

Excel Specialist Certificate

Receive instruction in our complete lineup of Excel classes. Build a solid foundation with Excel Fundamentals and Excel Intermediate before moving on to more advanced topics in Excel Advanced. Once completed, either take the MOS exam at our Prometric testing center or use your Center for Business Excel Specialist Certificate to verify your competency. Prerequisite: Knowledge of Windows, keyboard and mouse.

See individual classes for detailed descriptions and outlines.

Required Courses:

```
XCM 3405   Excel Fundamentals
XCM 3406   Excel Intermediate
XCM 3407   Excel Advanced
XCM 3404   Excel Specialist Certificate - 2003
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Gerontology, Certificate in

Offered completely online, the certificate in gerontology represents a specialization in the field of gerontology. Divided into individual courses, the program provides 26 hours of instruction designed to enhance the knowledge and skills of individuals who work with adults by providing an educational experience that is multidisciplinary in nature.

- Students must register with JCCC and then complete the online orientation at www.ed2go.com/jccc.
- The program is accredited through ALLEGRA Learning Solutions, LLC, an accredited provider of continuing education in nursing by the American Nurses Credentialing Center's Commission on Accreditation.
- This program also meets the qualifications for the stated hours of continuing education credit for MFTs and/or LCSWs as required by the California Board of Behavioral Sciences.
- The program is provider approved by the California Board of Registered Nursing, Provider #CEP 12385, for the stated number of contact hours.
- **The certificate program must be completed within six weeks of the start date.**

The four core courses:

Introduction to Gerontology

Physiology of Aging

Mental Health and Aging

Healthy Aging

Elective Courses (complete any four):

Spirituality and Aging

Pain Assessment and Management in the Older Adult

Death and Dying
Sleep and Aging
The Older Woman
Elder Abuse

Required Courses:

```
XNH 1560   Certificate in Gerontology
```

Intensive English Program

Since 1997, the IEP has served English language (ESL) learners who want to improve and strengthen their English proficiency and cultural understanding for academic, career-enhancing, or personal reasons.

Curriculum and activities include:

- Beginning, intermediate and advanced-level oral communication, pronunciation, reading, writing, structure, idioms and slang, study skills, short stories and vocabulary skills courses.
- A maximum of up to 18 hours of instruction a week for full-time students during the fall and spring.

Required Courses:

```
XGI 1020   Idioms and Slang 1020
XGI 1030   Study Skills 1030
XGI 1043   English Pronunciation Improvement 1043
XGI 1110   Oral Communication 1110
XGI 1120   Oral Communication 1120
XGI 1130   Oral Communication 1130
XGI 1140   Oral Communication 1140
XGI 1112   Pronunciation 1112
XGI 1122   Pronunciation 1122
XGI 1132   Pronunciation 1132
XGI 1310   Writing 1310
XGI 1320   Writing 1320
XGI 1330   Writing 1330
XGI 1340   Writing and Structure 1340
XGI 1210   Structure 1210
XGI 1220   Structure 1220
XGI 1230   Structure 1230
XGI 1410   Reading 1410
XGI 1420   Reading 1420
XGI 1430   Reading 1430
XGI 1440   Reading 1440
XGI 1411   Vocabulary 1411
XGI 1421   Vocabulary 1421
XGI 1431   Short Stories 1431
```

Medical Coding Certification

Medical coding certification is

- designed for medical office professionals.
- a 16-week program offered each fall and spring.

Individuals who complete the course may choose to apply to sit for the national certification examination offered by the American Academy of Professional Coders. The exam application is made individually. Course completion does not quarantee you will pass the examination.

This comprehensive course is based on the Professional Medical Coding Student Workbook with information on medical terminology, anatomy and coding issues related to CPT and ICD-9-CM coding. Copies of the current CPT, ICD-9-CM and HCPCS are the required textbooks.

Required Courses:

```
Prerequisite Courses (must take one or have equivalent):

XNH 1550   Medical Terminology
XNC 2413   Demystifying Medical Terminology


Additional Required Course:

XNC 2430   Medical Coding Certification
```

Microsoft Certified Systems Administrator

Combine 70-290: Managing and Maintaining a Microsoft Windows Server 2003 Environment, 70-291: Implementing, Managing, and Maintaining a Microsoft Windows Server 2003 Network Infrastructure, 70-270: Installing, Configuring, and Administering Microsoft Windows XP Professional, and our Security+ Certification Series class at one low cost. One week a month for four months to your MCSA. Prerequisite: A+ Certification, Network+ Certification, or equivalent knowledge.

See individual classes for detailed descriptions and outlines.

Required Courses

```
XCM 8291   Security + Certification Series
XCM 8315   Install, Configure & Administer Win XP Professional
XCM 8395   Manage & Maintain Win Server 2003 Envrionment
XCM 8375   Implement, Manage & Maintain Win Network Server
XCM 8275   MCSA Certification Series
```

Microsoft Certified Technical Specialist: SQL 2005

Combine our Implementing and Maintaining SQL Server 2005 classes as you work toward one of Microsoft's newest certifications: 70-431 MCTS: SQL Server 2005 Implementation and Maintenance. Prerequisite: Knowledge of relational databases and database design.

See individual classes for detailed descriptions and outlines.

Required Courses

```
XCM 8832   SQL: Implementing SQL Server 2005
XCM 8833   SQL: Maintaining SQL Server 2005
XCM 8831   MCSA:Implementing and Maintaining SQL Server 2005
```

Network+, Certificate in

Combine our Networking Fundamentals class with our Network+ Test Prep CD in a package which will prepare you for CompTIA's Network+ certification. We will include an exam voucher, a $207 value. Prerequisites: A+ Certification or

comparable knowledge.
See individual classes for detailed descriptions and outlines.

Required Courses:

```
XCM 8305   Networking Fundamentals
XCM 8262   Network+ Certification Series
```

Project Management Certificate

The Center's Project Management Certificate program can help you generate real results and provide the most reliable and respected path to maintaining an understanding about that ever-shifting professional landscape.

Required Courses:

```
XCM 8927   Project Management Essentials
XCM 8928   Estimating and Managing Project Costs
XCM 8931   Effective Project Scheduling and Control
XCM 8929   Project Risk Management
XCM 8934   Project Quality Management
XCM 8933   Project Leadership and Team Motivation
XCM 8935   Project Management Workshop

Electives:

XCM 8932   Effective Communication for Project Managers
XCM 8937   Performance Management
XCM 8938   Software Testing
```

Spirituality, Health, Healing

The certificate in spirituality, health and healing presents a broad understanding of spirituality, health and healing. Health care professionals will stay current with emerging trends.

- The program requires 21 contact hours.
- Students must register with JCCC and then complete the online orientation at www.ed2go.com/jccc.
- ALLEGRA Learning Solutions, LLC, is accredited as a provider of continuing education in nursing by the American Nurses Credentialing Center's Commission on Accreditation.
- This course meets the qualifications for the stated hours of continuing education credit for MFTs and/or LCSWs as required by the California Board of Behavioral Sciences.
- The program is provider approved by the California Board of Registered Nursing, Provider #CEP 12385, for the stated number of contact hours.
- **The certificate program must be completed within six weeks of the start date.**

Required Courses:

```
XNH 1645   Certificate in Spirituality, Health and Healing
```

Word Specialist Certificate

Receive instruction in our lineup of Word classes. Build a solid foundation with Word Fundamentals, and Word Intermediate before moving on to more advanced

topics in Word Advanced. Once completed, either take the MOS exam at our Prometric testing center or use your Center for Business Word Specialist Certificate to verify your competency.

Required Courses

```
XCM 2321  Word Specialist Certificate - 2003
XCM 2350  Word Fundamentals
XCM 2306  Word Intermediate
XCM 2310  Word Advanced
```

Continuing Education Course Descriptions

- A -

ABE/GED (XGE)
Academic Achievement Center (XGH)
Administrative Skills (XBF)
Art Museum-Youth (XKU)
Arts and Crafts (XPA)
Aviation (XPV)

- B -

Business Skills (XBD)

- C -

CBT Special Events (XBA)
Career Planning (XVR)
Computer Training (XCM)
Cosmetology Training (XNCO)

- D -

Dance and Exercise (XYD)

- E -

EMT Training (XNT)
ESL Adv. and Prof. Courses (XGF)
Education (XNE)

- F -

Fire Science (XNF)
Food and Wine (XPE)
Foreign Language (XPL)

- H -

Health Care Professions (XNC)
Health Prof Independent Study (XNH)
Health and Lifestyles (XPG)

Home Ownership (XPK)
House and Garden (XPI)

- I -

Insurance (XNI)
Intensive English (XGI)

- L -

Law Enforcement (XNP)
Leadership (XBZ)
Legal Education and Mediation (XNL)
Lifetime Learning (XLN)
Literature and Writing (XKL)

- M -

Management Development (XDM)
Massage Therapy (XNM)
Money Management (XPM)
Music, Gemology (XKA)

- P -

Personal Development (XKD)
Photography (XKP)
Practical Know-how (XPR)
Professional Education (XNX)
Public Events (XKE)

- R -

Real Estate and Appraisal (XNR)
Recording Engineer (XRE)

- S -

Sign Language (XVS)
Small Business (XBE)
Special Interests (XPT)
Sports Clinics-Youth (XLC)
Sports and Recreation (XYS)

- T -

Technical Trades (XND)
Testing (XVT)
Tours and Travel (XKO)

- W -

Writing Center (XGW)

- Y -

Youth and Talents (XLY)

ABE/GED (XGE)

XGE 1100

Orientation to Literacy Volunteering

If you're interested in working as a literacy volunteer or as a General Educational Development (GED) or English as a Second Language tutor in the Project Finish Program, this orientation session is for you. Handout material will be provided. No fee.

XGE 5001

GED Test Preparation

This online course will help refine your reading and thinking skills neccessary to be successful in five areas tested on the GED exam: Language Arts/Reading, Language Arts/Writing, Social Studies, Science, and Mathematics. After completion of this course, you should be well-equipped to pass the GED practice test followed by the GED examination.

XGE 5002

GED Language Arts and Writing Test Preparation

This in-depth online course will give you the skills and knowledge you need to successfully prepare for the GED Language Arts, Writing test. Learn the basics of usage and mechanics so you can edit the passages on the multiple-choice part of the exam. Then, you'll learn a step-by-step approach to writing that will give you the confidence you need to write a winning GED essay!

XGE 5003

GED Math Test Preparation

This online course will help you master the skills required to successfully past Test 5 in the GED test series. Give yourself the strong foundation you'll need to solve the types of math problems commonly found on the test. Gain comfort with your math skills, and be able to recognize how, when and why to apply each math concept you learn.

Academic Achievement Center (XGH)

XGH 1100

Study Skills

A description is not available for this course.

$63.00

XGH 1102

Basic Spelling

This is a self-instructional course for students who wish to improve their spelling ability but who have not been successful in the traditional spelling program. An Academic Achievement Center instructor is available to work with students to establish specific goals, administer test, and provide individualized instruction as needed.

$65.00

XGH 1103

Advanced Spelling

A description is not available for this course.

$65.00

XGH 1104

Reading Comprehension

A description is not available for this course.

$65.00

XGH 1105

Reading Rate

A description is not available for this course.

$65.00

XGH 1106

Vocabulary Development

A description is not available for this course.

$65.00

XGH 1112

Basic Math Review

A description is not available for this course.

$65.00

XGH 1113

Algebra Preparation

A description is not available for this course.

$65.00

XGH 1114

Chemistry Preparation

A description is not available for this course.

$65.00

XGH 1120

Individual Study

This self-instructional course is designed for students who want to improve in any of the following A.A.C. areas: study skills, reading comprehension, reading rate, vocabulary improvement, advanced spelling, basic math, algebra preparation or chemistry preparation. Once the area of study has been determined, a pretest will be administered by the instructor and a program of study will be developed using materials provided by the A.A.C. An Academic Achievement Center instructor is available to work with students to establish specific goals, administer tests, and to provide individualized instruction needed to complete the student's program. This course does not fulfill degree requirements. Associated Costs: These are additional (out-of-pocket) expense considerations that students should expect in addition to the course tuition, fees, and textbooks. $2 to $5.

$65.00

XGH 5000

Merrill Ream Speed Reading

Save yourself oodles of time by learning to read faster and with better comprehension from acclaimed speed reading expert Dr. Merrill Ream. Topics are presented in a logical progression for lasting proficiency as a speed reader.

$98.00

XGH 5001

Response to Intervention: Reading Strategies that Work

Learn to help students with phonics, fluency, vocabulary mastery, comprehension, and writing, these intervention strategies tackle the toughest literacy problems with flexibility and creativity.

$99.00

Administrative Skills (XBF)

XBF 1000

NCCET Midwest Spring Alliance

National Council of Continuing Education and Training Midwest Spring Alliance

$189.00

Art Museum-Youth (XKU)

XKU 1001

Contemporary Creations: Illusion in Art

Students (ages 8-11) will learn about illusion and space in art through JCCC's diverse and nationally acclaimed permanent collection and exhibitions in the Nerman Museum of Contemporary Art and then create a layered painting in the museum's studio classroom. Ask us about becoming a museum member and saving $5 on children's classes at the Nerman Museum.

$15.00

XKU 1002

Contemporary Creations: Nature in Art

Students (ages 8-11) learn about nature in art through JCCC's diverse and nationally acclaimed permanent collection and exhibitions in the Nerman Museum of Contemporary Art and create an imaginary plant or animal out of clay in the museum's studio classroom. Ask us about becoming a museum member and saving $5 on children's classes at the Nerman Museum.

$15.00

XKU 1003

Contemporary Creations: Art & Architecture

Students (ages 8-11) will learn about buildings in art through JCCC's diverse and nationally acclaimed permanent collection and exhibitions in the Nerman Museum of Contemporary Art and then create a miniature monument with foam in the museum's studio classroom. Ask us about becoming a museum member and saving $5 on children's classes at the Nerman Museum.

$15.00

XKU 1004

Contemporary Creations: Native American Art

Students (ages 8-11) will learn about contemporary Native American art through

JCCC's diverse and nationally acclaimed permanent collection and exhibitions in the Nerman Museum of Contemporary Art and then create a clay vessel with symbols in the museum's studio classroom. Ask us about becoming a museum member and saving $5 on children's classes at the Nerman Museum.

$15.00
XKU 1005

Contemporary Creations: Abstract Art

Students (ages 8-11) will learn about abstract art through JCCC's diverse and nationally acclaimed permanent collection and exhibitions in the Nerman Museum of Contemporary Art and then create a 3-D paper design in the museum's studio classroom. Ask us about becoming a museum member and saving $5 on children's classes at the Nerman Museum.

$15.00
XKU 1006

Contemporary Creations: Exploring Ceramics

Students (ages 8-11) will learn about sculptural ceramics through JCCC's diverse and nationally acclaimed permanent collection and exhibitions in the Nerman Museum of Contemporary Art and then create a clay sculpture with a twist in the museum's studio classroom. Ask us about becoming a museum member and saving $5 on children's classes at the Nerman Museum.

$15.00
XKU 1007

Contemporary Creations: Realistic Art

Students (ages 8-11) learn about art that imitates life through JCCC's diverse and nationally acclaimed permanent collection and exhibitions in the Nerman Museum of Contemporary Art and create a life-like pastel drawing using shading techniques in the museum's studio classroom. Ask us about becoming a museum member and saving $5 on children's classes at the Nerman Museum.

$15.00
XKU 1008

Contemporary Creations: Narrative Art

Students (ages 8-11) will learn about works of art that tell stories through JCCC's diverse and nationally acclaimed permanent collection and exhibitions in the Nerman Museum of Contemporary Art and then create a watercolor painting in the museum's studio classroom. Ask us about becoming a museum member and saving $5 on children's classes at the Nerman Museum.

$15.00
XKU 1009

Contemporary Creations: Mixed Media Art

Students (ages 8-11) will learn about different materials contemporary artists use through JCCC's diverse and nationally acclaimed permanent collection and exhibitions in the Nerman Museum of Contemporary Art and then create a mixed media collage in the museum's studio classroom. Ask us about becoming a museum member and saving $5 on children's classes at the Nerman Museum.

$15.00
XKU 1010

Contemporary Creations: Art Connects with Science

Students (ages 8-11) will learn about artists who explore science through JCCC's diverse and nationally acclaimed permanent collection and exhibitions in the

Nerman Museum of Contemporary Art and then create a mobile structure in the museum's studio classroom. Ask us about becoming a museum member and saving $5 on children's classes at the Nerman Museum.

$15.00

XKU 1011

Contemporary Creations: Functional Art

Students (ages 8-11) will learn about art that can be used through JCCC's diverse and nationally acclaimed permanent collection and exhibitions in the Nerman Museum of Contemporary Art and then create a miniature piece of furniture in the museum's studio classroom. Ask us about becoming a museum member and saving $5 on children's classes at the Nerman Museum.

$15.00

XKU 1012

Contemporary Creations: Patterns in Art

Students (ages 8-11) will learn about patterns in art through JCCC's diverse and nationally acclaimed permanent collection and exhibitions in the Nerman Museum of Contemporary Art and then create a woven wire design in the museum's studio classroom. Ask us about becoming a museum member and saving $5 on children's classes at the Nerman Museum.

$15.00

XKU 1013

Contemporary Creations: Exploring Painting

Students (ages 8-11) learn about painting techniques through JCCC's diverse and nationally acclaimed permanent collection and exhibitions in the Nerman Museum of Contemporary Art and combine the processes in their own painting in the museum's studio classroom. Ask us about becoming a museum member and saving $5 on children's classes at the Nerman Museum.

$15.00

XKU 1014

Contemporary Creations: Out of Proportion

Students (ages 8-11) learn about proportion and scale in art through JCCC's diverse and nationally acclaimed permanent collection and exhibitions in the Nerman Museum of Contemporary Art and create a distorted self portrait drawing in the museum's studio classroom. Ask us about becoming a museum member and saving $5 on children's classes at the Nerman Museum.

$15.00

Arts and Crafts (XPA)

XPA 1003

Adventures in Color

Learn to improve your color choices by using the color wheel. Anyone who wishes to improve their color knowledge for artwork, design, fashion, decorating and more will benefit. In sessions one and two, we will examine color usage with a series of painting exercises. We will learn about harmonious color groups, values and color mixing. During the third session we will create beautiful handmade hard cover accordion-fold reference books into which we will compile our color studies. No prior painting or drawing skills are needed. Supply list will be mailed before class.

$29.00

XPA 1004

Precious Metal Clay Pendant

Precious Metal Clay Pendant is silver in a clay-like form. Learn how to shape, form and fire it while making a personalized three-layer silver pendant. After finishing the piece, you will leave the class with a completed fine silver necklace. Class kit and all supplies: $40.00, available from instructor.

$16.00

XPA 1006

Soldered Glass Charms

Soldered Glass charms are the latest trend in jewelry making. In this class you will create several two-sided glass charms that can be hung on a bracelet or necklace. Students can bring their own art images/photos reduced down to 1 inch square or use the instructor's images. Class kit is $15.00, available from instructor.

$16.00

XPA 1007

Stained Glass, Intermediate

Add to your stained glass skills, with stained glass lead construction. Students will complete an 18" x 24" project. Patterns and glass should be selected by the first class. Material fees of $75 will cover materials provided by the instructor. Prerequisite: Beginning Stained Glass.

$45.00

XPA 1008

Soldered Glass Shrine Necklace

Students will construct and create a mini glass box shrine diarama to showcase a small treasure or charm. Students will use collage and ageing techniques to make their shrine look vintage. Students will leave with a completed project. Students should bring favorite scrapbook papers and or collage materials to be used in the shrine construction. Students should also bring trinkets, charms, flea market jewelry to be the centerpiece of their shring and a length of chain. Class kit fee: $20 to be purchased from the instructor.

$16.00

XPA 1009

Snowman Coasters

This is an adorable project to paint and a great gift for a snowman collector. Four ceramic tile coasters and acrylic paints furnished by the instructor. Bring a #3/0 liner brush #2 flat brush and a stencil brush to class.

$25.00

XPA 1010

Hand Woven Baskets by Robbie

Robbie Wisdom is a real pro, she shows her baskets at all of the regional arts and crafts fairs. She'll show you how to weave a very useful utillity, 5 X 8 1/2 basket. This project can be completed in one class session and will start you on a new craft path. Bring $17 to class for basket supplies.

$20.00

XPA 1011

Market Basket

Robbie Wisdom is a real pro, she shows her baskets at all of the regional arts and

crafts fairs. Join Robbie and learn how to weave a classic 10x14" market basket. In this wonderful design, you'll have the option of adding color. You'll finish your market basket in one class meeting. This class lasts 5 hours, bring a sandwich for the break. Bring $35 to class for market basket supplies.

$25.00
XPA 1012

Hearth Basket

Make an 8" x 14" hearth basket with color, including braided border inside and out. Various sizes of reed will be used. Supplies, $38, available from instructor. Bring a sandwich for the lunch break.

$25.00
XPA 1013

Basket Tote with Leather Handle

Create a basket tote, 12" x 11." You can add color and use five sizes of reed. Supplies, $38, available from instructor. Bring a sandwich for the lunch break.

$25.00
XPA 1014

Acrylic Techniques

Learn the various techniques that acrylic reveals to the painter. We will discuss the similarities and differences in styles and compare this medium with oil, watercolor and pastel media. Bring to class small tubes of acrylic paint in Cadmium Red, Cadmium Yellow, Ultramarine Blue, Hooker Green and a large tube of white. One stretched canvas tablet, synthetic brushes; 3/4" flat, #8 round and #3 round; pallet knife and pallet, (large styrofoam picnic plate) water container and rags or tissues.

$79.00
XPA 1016

Knitting, Beginning

Learn to knit in a 4 session class. You will start off by making a pot holder, then move on to making a scarf, as well as checking guage and correcting mistakes. Bring to first class: size US 8 - 10 1/2 knitting needles and worsted weight wool (at least 100 yards), approximate cost $15.00. Class limited to 12 students.

$25.00
XPA 1017

Stained Glass, Beginning

Learn the basic techniques of stained glass: cutting, soldering and pattern-making for the copper foil method. Project design and construction will also be discussed. Students will complete a 10"x15" decorative stained glass panel. Material fees of $55 will cover material provided by the instructor.

$45.00
XPA 1018

Felted Purses

Make a simple but stylish felted purse by felting (boiling) your knitting to make any mistake vanish! Students can choose from 3 styles ranging from beginning to advanced. Must know how to cast on and knit. Bring to class US 10 1/2 24" circular knitting needle and 3 skeins of wool, approximate cost $30.00. Class limited to 12 students.

$25.00

XPA 1019

Retablo Painting

Students will examine the form and function of Hispanic Retablos (devotional paintings on metal or wood that pay tribute to a prayer or wish that's been answered). You will then create your own unique individual Retablo. For experienced painters. Bring to class various acrylic paints in colors you would prefer to work with, various brushes, cloth and pencil/paper

$19.00

XPA 1020

Start Your Family Photo Album I

This course is designed for those who have unorganized photos. You will get tips on how to organize them in a time-efficient, systematic manner using tools that are reusable for all your album needs. You may bring up to 700 photos and memorabilia to organize and prepare for your page layouts. Supplies cost approximately $10 and are available from the instructor.

$12.00

XPA 1021

Start Your Family Photo Album II

This follow up class to Start Your Family Photo Album I will help you begin the process of laying out your album pages. Do you have boxes of pictures that you want to get into an album ... someday? Are you too busy to do more than a page or two in your album at a time? Many boxes of photos can be overwhelming, but you can complete your albums using the Power Layout method. This method will save you time by helping you organize each page in advance, allowing you to store them neatly, until you can mount and journal your pages later. Supplies cost approximately $25 and are available from the instructor.

$12.00

XPA 1022

Contemporary Painting Techniques

For beginning and intermediate students. Use time tested painting techniques including wet into wet, palette knife, glazing, and under painting, using comtemporary materials, water soluble oil paints or acrylic paints. Compositional sketches and value oriented thumbnail sketches are emphasized along with the hands-on painting. Using your choice of subject and techniques you will complete a 16 x 20 inch original work. A supply list will be distributed before the first class.

$125.00

XPA 1024

Drawing, Beginning to Intermediate

Bring a 14 x 17 sketch pad, HB pencil, kneaded eraser and dark crayon to first class. Explore using basic shapes, shading, perspective and measuring methods while using various techniques, tools and mediums. A supply list will be mailed before the first class. Supply costs, approximately $25-$30.

$85.00

XPA 1027

Handstamped Cards - Level I

Rubber stamping is a fun way to create greeting cards. Make 10 different cards and learn exciting techniques like using shaving cream and baby wipes to create incredible cards. Cards cost $1.00 per card and are available from the instructor.

$18.00

XPA 1028

Handstamped Gift Workshop

Need a gift for a teacher, coach, boss, or friend? Hand stamp 10 small gifts including a candle, a checkbook cover, a CD cover and a gift card holder. Get great ideas for those people on your gift list. Supplies available from instructor for $20.

$15.00

XPA 1029

Handstamped Occasional Card Workshop

Rubber stamp your own cards using the latest innovation in stamping-acrylic stamps. Use see-through clear stamps and blocks for accurate placement as you create thank-you cards, thinking-of-you cards and more. Learn new techniques and decorate with the latest embellishments. Supplies are available from the instructor for $10.

$12.00

XPA 1032

Portrait Art

Learn about form, perspective and structure of the head in the first two classes. Eight classes will have a live model. The goal is for you to portray a three-dimensional, live person. We will work in one color, 2-3 colors and in full color, with one color work emphasized in the first few classes. Bring to class compressed soft charcoal sticks (4), charcoal soft pencils (2), kneaded eraser, white soft pastel or white Nupastel (1), paper stump (1), pencils (HB-6B, 2 total), pastel pencils-sepia (1), set of pastel colors (optional), drawing paper (11" x 14" or 17"), drawing pad of Canson colored pastel paper.

$99.00

XPA 1033

Learn to Purl

Begin the next level of your knitting: learn to purl stitch! We will focus on stitch patterns and dive deeper into the structure of your new skill. You must know how to knit. Bring to first class: size US 8-10 1/2" knitting needles and at least 100 yards of worsted weight wool (approximate cost $15). Class limited to 12 students.

$29.00

XPA 1034

Sweater Workshop

Move beyond scarves and purses in this advanced beginner's garment workshop. Learn simple applications of knitted structures and have 2 handmade sweaters ready for cold weather! Must know how to knit and purl.

$36.00

XPA 1036

Holiday Card Workshop

Rubber stamp you own holiday cards using the latest innovation - acrylic stamps. See through clear blocks for accurate placement. Use 5+ different techniques on these 10 cards. Decorate with a variety of embellishments such as eyelets, ribbon, and brads. Cards, $1.00, available from instructor.

$15.00

XPA 1037

Hand Stamped Event Calendar

Create a holiday gift anyone would love in this perpetual calendar. Hand stamp each month using acrylic stamps and color coordinated paper. List birthdays, anniversaries and other dates which remain the same each year. Calendar, $15.00, available from instructor.

$19.00
XPA 1038

Art of Pastel

Some of the most lively and fresh works of the French Impressionists were painted with pastel. Contemporary artists enjoy pastel because of its unique qualities of line, color and texture. This class will familiarize you with soft pastel, a variety of techniques and painting surfaces with a "hands on" approach. Bring to class 24 soft pastels, sketchbook, charcoal or pencils, plastic eraser, pastel paper tones of grey, photos to work from (optional), table easel, approx cost $40-$60. Having had beginning drawing and painting would be helpful.

$49.00
XPA 1053

Holiday Scrapbook Pages

Create four winter holiday 12" x 12" pages using the latest embellishments and techniques. Get ready for your holiday pictures with these beautiful scrapbook layouts. Bring to class a paper cutter and scissors, you do not need to bring pictures. Supplies cost $10 and are available from the instructor.

$15.00
XPA 1054

Handstamped Mini Scrapbook

Create a unique 6" x 6" album with 10 coordinating pages. With a single sheet of random stamped cardstock and 3 12" x 12" sheets of paper, you will make an adorable mini scrapbook. Use it for a special occasions like a baby shower, graduation, wedding or anything you would like to brag about! Supplies cost $15 and are available from the instructor.

$12.00
XPA 1056

Creative Cloth I

An information-filled demonstration series for anyone who quilts, sews, designs or just enjoys working with cloth and wants to take their creativity to a higher level! You will take a close look at how contemporary textile artists use innovative techniques to create original cloth. Observe and interact with the teacher as she completes hands-on demonstrations of cloth design techniques. Informative handouts detailing the process and materials and will examine cloth printing, painting and hand-dyeing techniques will be available.

$29.00
XPA 1057

Creative Cloth II

This class is a continuation of Creative Cloth I. Also, examine silk screening on cloth, collage process and fusing, and free form machine quilting techniques. Note: Creative Cloth I is not a prerequisite.

$29.00
XPA 1060

Metal Casting

Learn about the lost wax bronze-casting process. On the first day, work in wax to create your sculpture; on the second, we prepare it for casting; and the third day, we prepare the bronze. Wear non-flammable clothing, close-toed shoes, and prepare to get dirty. No prior experience necessary. Students must purchase the bronze and wax for their project.

$139.00

XPA 1061

Jewelry Enameling, Introduction to

This class will introduce you to the basic tools, materials, and techniques of enameling in jewelry form. The types of enameling covered will be basic enameling, cloisonne and, time permitting, champleve. The piece that you create can either be a brooch, pin or pendant. No previous experience is necessary. A supplies list will be sent to you before the first session. (Supplies will cost approximately $60).

$90.00

XPA 1062

Sculptural Welding Workshop

Design an art piece by welding and cutting steel using electric and gas-welding equipment. We will also use a metal bender, sheer, grinders, saws, drills, and the forge. Wear shoes that cover your feet and wear clothes that you don't mind getting dirty. No prior experience necessary.

$129.00

XPA 1065

Advanced Sculpture Workshop

If you've taken one of Graham Lane's other classes and need to put final touches on a project or want to see what others have learned so you can pick up some ideas, then this is the class for you. Bring a project to class. The instructor will be doing quick demonstrations to help those that need brushing up. Wear appropriate clothing.

$99.00

XPA 1067

Jewelry Casting, Introduction to

In this hands-on class, you will design a piece of jewelry using the tools, materials and techniques of cuttlefish bone casting and lost wax investment casting. The jewelry you make can be a brooch, pendant, pin or bracelet. No previous experience is necessary. A supplies list will be sent to you in advance of the first session. (Supplies will cost approximately $50.)

$95.00

XPA 1077

Summer Top Workshop

Tired of scarves? Expand your knitting and crocheting skills by trying your hand at a great summer sweater. Start with a basic tank top, tee shirt, or anything that catches your eye. Choose two patterns based on your experience level, or try the easy pattern provided in the class. You'll have a cool hand-knit shirt ready for the warm summer! Supply list will be mailed to students before first class session. Prerequisite: Student must know how to knit and/or crochet.

$49.00

XPA 1078

Afghan and Blanket Workshop

Create your very own knitted or crocheted heirloom in this 8-week workshop! Students will gain a comprehensive understanding of working from patterns, identifying and "reading" the stitches as they are produced, and even learning how to write their own patterns. Choose from a wide variety of afghan styles, shapes, and sizes and perk up the couch with your own handmade creativity. Supply list will be mailed to students before first class session. Prerequisite: Must know how to knit and/or crochet.

$49.00

XPA 1079

Learn to Crochet

Learn to chain, single and double crochet, and much more in this four session class. Start with really easy scarves, hats, and functional items for the home and see where your creativity takes you! Patterns will be provided by instructor. Supply list will be mailed before first class session.

$29.00

XPA 1080

Calligraphy, Beginning

Have fun learning the chancery cursive alphabet (italics) in this course. These skills may be used for personalized gifts, invitations, cards, envelopes, weddings, etc. Bring a medium point calligraphy pen or purchase one at the first class. Practice sheets and paper will be provided.

$35.00

XPA 1081

Calligraphy, Intermediate

Improve your basic italic script penmanship and experiment with various pens and size writing. Practice centering techniques and envelopes and produce a project of your choice. Prerequsite: Beginning Calligraphy.

$35.00

XPA 1083

Wearable Sculpture

With wire, fabric and a little glue you can create anything. We will be using silver, wood and brass along with whatever you can combine to create art for your hair and your body. Through basic design principles we will make wonderful things. Supply list will be mailed out prior to first class.

$35.00

XPA 1085

Calligraphy, Intermediate II (Expressive Calligraphy)

You will learn varieties of calligraphy that are casual, contemporary, spontaneous and ideally suited for handmade books and other personalized projects. Supplies will cost approximately $15 to $20. Bring calligraphy pens, paper, a notebook and pencil to the first class. (B&G $35)

$42.00

XPA 1086

Handstamped Birthday Card Workshop

Everyone needs a supply of birthday cards on hand! Rubber stamp 10 cards using acrylic stamps. Learn new techniques and decorate with the latest embellishments. Cards are available from instructor for $1 each.

$12.00

XPA 1087

Easter Egg Decorating

Leave the mess and fuss at home. Come to learn and leave with 24 decorated Easter eggs using decorating techniques from around the world such as batik and marbling. Fee covers eggs and supply costs.

$19.00

XPA 1088

Cartoon Caricature Drawing

Caricatures charm and satirize real people. Learn to see proportions and features, then exaggerate the drawing for comic effect while keeping a likeness. Monochrome only (black and white). Bring to class HB pencil, ink (felt tip or brush pen), charcoal, 9 x 12 drawing pad and 9 x 12 tracing paper.

$39.00

XPA 1089

Matting and Framing

Learn how to finish and display photographs, drawings and paintings with a hand cut mat and how to pick out the perfect frame. You will learn about archival preservation and proper placement of sometimes delicate artwork. Bring two pieces of flat 2D artwork (photo, drawings or paintings on paper) for the first session and mat board for second session, foam core board to cut on, metal straight edge and pencil.

$25.00

XPA 1093

Frescoes For Your Home

"Frescoes" are created with fresh pigments, fresh water and fresh plaster. This course will explore Pompeii "Frescoes" story telling themes, the lost language of symbolism, earth pigments, painting techniques and the creation of an authentic fresco. No experience necessary! You will create a one-pound fresco using ancient methods and techniques. Students will be expected to purchase $25 fresco paint set from the instructor. Bring your lunch.

$50.00

XPA 1097

Soapmaking

Soapmaking is a fun and creative hobby! Join us for a lesson in this art and bring home soap for yourself or to use as gifts. Supplies purchased from instructor, approximate cost $8 - $10.

$19.00

XPA 1098

Tall Angel Candleholder Workshop

Paint a spring angel to watch over you this season. She is 3 1/4" in diameter and 11 3/4" high. Acrylic paints and resin angel furnished by the instructor. Bring a #10/0 liner brush, #10 flat brush to class.

$25.00

XPA 1100

Drawing, Beginning

This is a drawing class for beginners (or others) using the classical method to learn to draw realistically (similar to Drawing on the Right side of the Brain). Bring 6B or 8B lead pencils, soft charcoal pencils, kneaded eraser, a white pastel and

"11 X 14" drawing pad.

$89.00

XPA 1102

Still Life Drawing

You will work with graphite and ink while participating in memory exercises. From these exercises, you will observe in detail and then draw from memory. Bring to class: 18" x 24" drawing pad Canson or Strathmore; Pencils - H, 2B, 3B, 4B; Staedtler Mars Plastic Eraser (white drafting eraser); Still Life Materials, these will vary for the projects. Cost will vary depending on projects.

$35.00

XPA 1105

Landscape Drawing, Beginning

Study the various aspects of plein air work (French term for working outside in front of your subject as opposed to working in the studio from photographs or the imagination). Work on all the prime aspects of drawing: values, line, proportions/perspective, composition. Depending on weather, class subjects may be reversed in order. In case of rain we will work indoors and work from a set-up. Bring an outdoor chair and an easel if you have a portable one. Supplies include hardboard or cardboard, pencils (HB to 8B), charcoal pencils (soft or compressed), kneaded eraser, pastels or colored pencils, kleenex or paper towels, masking tape, exacto knife. The first class session will meet at the location listed below. The remaining class sessions will be at off-campus sites to be discusssed at the first class meeting.

$35.00

XPA 1106

Landscape Drawing in Color, Beginning

Learn about color landscape drawing by studying the basic principles of drawing; how to choose and edit a subject; artistic perspective; composition; and color. The class will work outdoors part of the time, as weather permits. Bring a sketchbook (approximately 11" x 17") of white paper, black lead pencils, colored pencils and kneaded eraser. Other optional supplies will be discussed at the first session. Note: this class is for beginners as well as those with drawing experience.

$55.00

XPA 1107

Landscape Painting in Pastels, Beginning

Learn to paint from life ("en plein aire") as well as outdoors, and learn to choose and Edit your subject; how to use pastels; about pastel paintings supplies; how color works with pastels; and how to work simultaneously on drawing along with painting. The Class will work outdoors part of the time, as weather permits. Bring a sketchbook (approximately 11" x 17") of white paper and a set of soft pastels (about 15-20 colors). Other optional supplies will be discussed at the first session. Note: this class is for Beginners as well as those with drawing experience.

$55.00

XPA 1108

Figure Sculpture

Learn how to sculpt the human figure in clay. You will complete a one-third figure from a model. Anatomy of the figure also will be discussed and your project will be fired for you. No prior experience needed. Supply list will be mailed before first class session.

$99.00

XPA 1112

Botanical Art - The Still-Life: Fruit & Flower

Learn how to draw and paint using the genre of still-life. This special weeklong workshop will focus on the realistic portrayal of fruits and flowers, subjects typically found in a still-life setting. The workshop teaches the principles of accurate observation of line and color, graceful brushstroke, confident color mixing. Beginners learn observation skills necessary to draw and paint accurately; advanced artists have the opportunity to extend their range. $10 fee due to the instructor for natural plant materials and use of art supplies.

$69.00

XPA 1120

Drawing on the Right Side of the Brain

Explore your creativity! If you would like to draw but haven't developed your skills or feel you have no talent, this is the class for you. Based on Drawing on the Right Side of the Brain by Betty Edwards, this class requires no art experience. Bring a 14" by 17" sketch pad and 4B drawing pencils to the first class. Additional supplies will be discussed at the first session. Supplies will cost approximately $40.

$35.00

XPA 1127

Decorative Painting

Discover the joy of decorative art painting where we will learn basic strokes, techniques, brush loading and blending. Various paint surfaces will be discussed, methods of preparing and finishing and best paints for each surface. No previous experience necessary. Subjects will be different types of flowers. Bring to class a container for water and/or brush caddy, paper towels, foam plates, art paper or art pad 8 1/2 x 11 or 11 x 14, practice art paper.

$35.00

XPA 1128

Decorative Painting on Glass and Ceramics

Learn basic strokes applied to glass and ceramic pieces creating beautiful results on glass frames, glasses, mirrors, lamps, plates or a project piece of your choice. Bring to class a container for water and/or brush caddy, paper towels, foam plates, art paper or art pad 8 1/2 x 11 or 11 x 14, practice art paper, acrylic enamel paints and enamel medium.

$35.00

XPA 1130

Watercolor

Using photos as a reference, this class will explore the basic art process of creating a watercolor. Techniques such as wash application, push and pull to control moisture content, and the use of additional materials such as salt and alcohol will be shown. Please be sure to bring a notebook to the first class. Supply list will be provided at first class session. Supplies approximately $60 - $100.

$89.00

XPA 1145

Stone Carving Workshop

In this introduction to stone carving, you will learn to chip, tear and shear stone. Each student in the class will receive a piece of limestone from a local quarry. Traditional and contemporary carving methods, as well as the history of stone carving, will be addressed and applied to the work at hand. This workshop is open

to everyone; prior experience is not necessary. Wear shoes that cover your feet and clothes that you don't mind getting dirty. There will be a one-hour break for lunch (on your own).

$129.00
XPA 1150

Oil Painting

Oil painting is one of the world's most widely recognized mediums. In this class, designed to be helpful for both beginning and intermediate students, we will work from photographs and review the sequential process of creating an oil painting. I'll begin with a demonstration on stretching a canvas and proceed directly to underpainting technique, color analysis, and review various styles of brush work. Please be sure to bring a notebook to the first class; a supply list will be provided and discussed. Supplies approximately $60 - $100.

$89.00
XPA 1162

Painting on Silk

Learn to paint silk fabric and scarves with Fiber artist Valerie Doran Bashaw. We will work with luminous French dyes and explore pattern, design, drawing and color. Beginners are welcome to explore this unusual art form. Bring to class 2 fine point watercolor brushes, one large, one small, four 26" wooden canvas stretcher bars, plastic palette, cup for water, pencil, black marker-fine point, stainless steel pins with heads, masking tape, thin latex gloves, paint shirt, small sketchbook approximate cost $25. Fee includes cost of two silk scarves, dye and resist.

$89.00
XPA 1164

One Stroke Decorative Painting, Beginning

Learn decorative brush lettering with paint and inks. Beautiful for special pictures, posters, walls or scrapbooks. Supplies approximately $30. Supply list will be mailed to students prior to class.

$29.00
XPA 1172

Santa Workshop

Learn the art of painting resin Santas for gifts or your own collection. The Santa, as well as acrylic paints, will be furnished by the instructor. Bring to class a #3/0 liner brush, #2 flat brush, paper towels, Krylon Spray Varnish Matte Finish and disposable gloves (available at craft stores for approximate total cost of $10).

$19.00
XPA 1173

Herbal Wreaths and Swags

Using fragrant herbs and flowers on different bases, in this workshop you will make a wreath or swag of your choice. Materials will be available, including decorative holiday items; in addition, please bring a glue, gun, scissors, ribbon and twine.

$25.00
XPA 1185

Floral Arrangements

Custom-design silk and dried floral arrangements for your home. A wide variety of materials will be studied. You may complete two projects from the following styles:

traditional, contemporary, country or Southwest. Students will need a glue gun and wire cutters. Additional supplies will cost $30 to $60 and will be discussed at the first session.

$36.00
XPA 1186

Floral Arrangements, Advanced

This class is a continuation of "Floral Arrangements". Become more proficient in floral design, and better understand the principles and elements of design as you complete three projects: a centerpiece, tall floral and topiary arrangement. Bring your floral supplies to the first session, along with your glue gun and wire cutters. Note: supplies will cost $30-$60 per project. Prerequisite: Floral Arrangements or Wreaths and Swags

$36.00
XPA 1191

Fresh Florals: Seasonal Home Decor

Hands on design of basic fresh florals focusing on the most commonly decorated items in a home for all seasons. From flower care to designing and propping for all seasons and seasonal inspired parties, this course will show simple step-by-step instructions for the do-it-yourself and novice floral designer in training how to design seasonal focal points for maximum impact on home decor. Approximate supply cost per class, $25, available from the instructor and will be discussed at the first class session. Bring floral scissors.

$69.00
XPA 1192

Santa & Snowman Ornaments Workshop

The Holidays are just around the corner. Paint 2 Santa and 2 snowmen ornaments for gift giving or to display. The resin ornaments and paints will be furnished by the instructor. Bring a 10/0 liner brush and a #4 shader brush to class.

$25.00
XPA 1193

Butterfly Stepping Stone

This painted fluttering beauty looks as if it is resting in your garden waiting for a gentle breeze. The 12" stepping stone and patio paints will be furnished by the instructor. Bring an old toothbrush, 1/2" angular brush, #4 flat brush, #1 liner brush, ruler and pencil to class.

$29.00
XPA 1194

Ladybug Stepping Stone

These flying friends of the garden will bring a feeling of loveliness and delight to all that see them. The 12" stepping stone and patio paints will be furnished by the instructor. Bring an old toothbrush, 1/2" angular brush, #6 stencil brush, #4 flat brush, 5/0 liner brush, ruler and pencil to class.

$20.00
XPA 1195

Snowman Tray

Winter is definitely coming. Paint a snowman and all the things that go with him on a wooden tray. Snowman tray and acrylic paints furnished by the instructor. Bring a 3/4" angular brush and 5/0 liner brush to class.

$21.00

XPA 1196

Old World Santa Workshop

Celebrate the season by painting and antiquing your own Santa with the instructor who has painted over 1000 Santas. The resin old-world Santa and acrylic paints will be furnished by the instructor. Bring #3/0 liner B brush, #2 and #4 flat brush, and disposable gloves. (2 sessions)

$35.00

XPA 1197

Moon Santa Stepping Stone Workshop

Paint your own holiday gifts. Learn how to paint a wonderful Moon Santa on a 12" stepping stone for your yard or garden using patio paints. The stepping stone and patio paints will be furnished by the instructor (supplies included in fee). Bring an assortment of brushes to class.

$19.00

XPA 1198

Country Snowman Stepping Stone

Let the beauty of the outdoors inspire your next painting project. Paint a country snowman on a 12" stepping stone using patio paints. The stepping stone and patio paint will be furnished by the instructor. Bring an assortment of brushes to class.

$25.00

XPA 1199

Frog Stepping Stone

What a fun design for your yard or garden! This plump frog fills a 12" stepping stone with charm. The stepping stone and patio paints will be furnished by the instructor. Bring a stencil brush, a #2 round brush and a 1/2" regular brush to class.

$20.00

XPA 1205

Wreaths and Swags

Custom-design a wreath and swag for your home. A wide variety of materials will be studied. You may complete two projects from the following styles: traditional, contemporary, country, or Southwest. Students will need a glue gun and wire cutters. Additional supplies will cost $30 to $60 and will be discussed at the first session.

$36.00

XPA 1224

Bangles & Beads (Jewelry)

You'll be the envy of your friends when you wear the funky bangle bracelet and rings that you made in this class. The jewelry will be made from wire and beads. Class supplies cost $20 and may be purchased directly from the instructor.

$11.00

XPA 1225

Basic Bead Stringing

Learn to use jewelry wire, beads, simple crimp beads and clasps to make and repair bracelets and necklaces. This class is for beginners. A supply kit is

available from the instructor for $20.

$14.00
XPA 1227

Basic Wire Wrap Techniques (Jewelry)
Like the look of those stunning pendants hanging from gold or silver collars? Join this class and make your own pendant (collar not included) with a 40 x 30 mm gemstone cabochon. Supplies for class will cost $20 and may be purchased directly from the instructor.

$11.00
XPA 1229

Crystal Choker (Jewelry)
In this workshop, you will make an elegant crystal choker necklace with matching earrings. These make great gifts for yourself or friends. Supplies for this class will cost $20 and may be purchased directly from the instructor.

$11.00
XPA 1231

Intermediate Wire Wrap Techniques (Jewelry)
Like the look of those stunning pendants hanging from gold or silver collars? Join this class and make your own pendant using wire-wrap technique (collar not included) with a donut-shaped gemstone. Supplies for this class will cost $20 and may be purchased directly from the instructor.

$11.00
XPA 1236

Introduction to Fused Glass
Learn about different kinds of glass, tools, compatibility, cutting and finishing. You will complete one project by disigning and fusing the piece in the kiln. This piece can be used as jewelry or as a sun- catcher. Bring $35 to class for your project materials, supplied by the instructor.

$19.00
XPA 1241

Faux Finishes I
A beginning class for students interested in the art of faux finishing or decorative painting, you will be introduced to the materials used and different techniques applied. A $25 supply cost will be payable to the instructor.

$39.00
XPA 1242

Faux Finishes II
For those who have completed Faux Finish I. You will learn the techniques of rag-roll, stippling, combing, stripping, sponge, marble and stone effects. A $25 materials fee will be payable to the instructor.

$39.00
XPA 1243

Home Decor to Knit & Crochet
Update your home accents with beautiful pillows, table cloths, curtains, or any decorations you choose. This class will allow you to spruce up your home and garden while learning new techniques, patterns and skills whether you knit or

crochet! Must know basics of knitting or crocheting. Supply costs will vary depending on project.

$45.00
XPA 1247

Acrylic and Oil Painting

Explore traditional techniques for using oil paints established during the Renaissance, and now translated into the use of modern materials of acrylic and/or water soluble oil paints as well as the traditional oils. No toxic fumes will be found in the classroom. The student will use their own pictures and ideas in a supportive environment. Supply list will be mailed one week before the beginning class date.

$99.00
XPA 1250

Watercolor, Beginning

For beginning to intermediate students. Learn the basic techniques of watercolor painting in this fun and relaxed beginner's class. You'll learn about color, composition, layout, perspective and more as you first draw, then paint your own still life and landscape projects from photographs. Supply list to be mailed to participants before the first class.

$125.00
XPA 1260

Watercolor, Intermediate

This class is for those who already have watercolor supplies and are ready to "loosen up" and enjoy a painting adventure. Tracings will be provided for those who wish to use them. More experienced students are encouraged to design their own "similar" drawings. Bring your supplies to the first class, which will meet for two hours. Note to those who have taken this class previously: each term contains new and interesting material!

$99.00
XPA 1270

Oil Painting I, Classical

This is a beginning class for students interested in Classical Realism. You will be introduced to the materials used in oil painting, and some of the techniques of using these materials. You will learn to prepare a canvass for painting, transfer a drawing to canvass, and to paint a picture of your choosing. Individual attention will be given for completion of your painting. Supplies will be discussed at the first meeting. This class is a prerequisite for Classical Oil Painting II.

$109.00
XPA 1271

Oil Painting II, Classical

This class is open to returning students and those who have previously taken Classical Oil Painting I. You'll be encouraged to develop your own style using the skills and methods you acquired in the first course, and to develop new techniques.

$109.00
XPA 1275

Oil Painting III, Classical

Classical Oil Painting I and II are prerequisites for this class. Lectures will cover composition, color harmony, and art history. Demonstrations will include

landscapes, still life and portraits. You will complete your own original paintings.

$109.00

XPA 1291

Interacting With Color

Discover an appreciation for color as it affects one's daily life. Become familiar with the unique qualities of color, its application and how it affects the atmosphere or mood of expression. Suggested for beginners, intermediate and advanced students in painting and design. You will progress at your own rate, and individual creative styles will be encouraged and nurtured. Bring to first class a sketch book, drawing supplies (pencils and eraser) and scissors. Additional supplies may be needed depending upon individual projects.

$29.00

XPA 1298

Jewelry Making, Beginning

Use a variety of tools, materials (silver, gold, copper), chemicals and stones to make a project of your choice such as a ring, pendant or bracelet. Bring your ideas to the first session and the instructor will discuss your project ideas with you. Then, choose your project, materials and tools. Additional material costs will be necessary but will vary depending on the project selected, i.e. silver, stones, etc. An optional kit costs approximately $180 includes tools and supplies, but not materials. Items may be purchased through the instructor but must be ordered and paid for at the first session.

$39.00

XPA 5001

Drawing for the Absolute Beginner

Have you always been interested in drawing, but never really knew how to get started? If so, then this is definitely the course for you! Gain a solid foundation and understanding of the basics to drawing and become the artist you've always dreamed you could be!

$85.00

Aviation (XPV)

XPV 1000

Private Pilot Ground School

Share the synergy of learning to fly with other student pilots as you prepare for the F.A.A. private pilot computer exam. Experience colorful PowerPoint presentations on airplane systems, instruments, aerodynamics, weather, flight safety, air traffic control procedures, navigation and federal aviation regulations. Bring the textbook and flight planning materials (JCCC bookstore), to the first class. Note: ATTENDANCE IS REQUIRED FOR THE FIRST CLASS and does not include the FAA exam.

$249.00

XPV 1010

Instrument Pilot Ground School

Don't let a few clouds keep you on the ground. Add an instrument rating! Class prepares private pilots for FAA Instrument Knowledge Exam. Soon you'll be safe flying IFR in IMC! Chart interpretation, ATC procedures, weather, physiology. Meet local pilots.

$299.00

XPV 1035

Flight Review Refresher

Prepare for your flight review; continue pilot-in-command privileges; brush up on regulations, chart symbology, weather, airspace, radio communications, traffic patterns, and emergencies. Taught by Gold Seal CFII. Satisfies flight review ground requirement. Logbook endorsement available for additional fee.

$49.00

XPV 1040

Partners of Pilots "Pinch Hitter"

Would your spouse, child, parent or friend enjoy flying with you more if the cockpit and flight environment weren't so intimidating? Maybe he or she is concerned about their own safety and that of your family if during the flight something should happen to you? This "pinch hitter" course is designed to educate the non-pilot on essential information and make flying more enjoyable for both pilot and guests.

$49.00

Business Skills (XBD)

XBD 0101

Business Etiquette: Gaining That Extra Edge

In today's world, business demands more than keeping your nose to the grindstone and your ear to the ground. You need business savvy and the ability to establish yourself in a credible manner. A faux pas at the wrong time can damage your career. If you are newly appointed to a management position, or if you interact with people you don't know on a regular basis, this workshop can help you succeed. If you want to enhance and polish your business image, or if you just want to avoid feeling uncomfortable in the corporate world, this workshop will allow you to take a quantum leap forward in skill, sophistication, and confidence.

$99.00

XBD 0102

Communication Strategies

Have you ever wondered why it seems so difficult to talk with some people and so easy to talk with others? Can you recall an occasion where you met someone for the first time and immediately liked that person? Something about the individual made you feel comfortable. A major goal of this workshop is to help you understand the impact your communication skills have on other people, and how improving these skills can make it easier for you to get along in the workplace.

$99.00

XBD 0103

Accounting Basics

In this seminar, you will learn the essential language, concepts and processes of accounting, presented in a practical, non-technical fashion. You'll cover accounting concepts, the nature of accounting and generally accepted accounting principles, as well as the process of accounting, accounting equations, debits and credits, and accounting cycles. You will also explore how to create financial statements, balance sheets, statements of income and retained earnings, statements of changes in financial position, and more.

$249.00

XBD 0104

Managerial Accounting

This course focuses on providing you with the necessary accounting information

to make better business decisions. After a brief review of basic accounting concepts, you will cover financial statements, the analysis of financial statements, cost patterns/behavior, cost-volume-profit analysis and budgeting. This course is presented in a practical, hands-on, non-technical fashion.

$169.00

XBD 0105

Time Management: Get Organized for Peak Performance

Time is money, the adage goes, and lots of it gets lost in disorganization and disruption. This workshop helps you organize and prioritize for greater workplace efficiency. You'll learn to get a grip on your office space, organize your work flow, learn how use your planner effectively, say no without guilt, and delegate some of your work to other people. This workshop is full of ideas for organizing your work area and your paperwork and working on the "right" things.

$99.00

XBD 0106

Public Speaking: Presentation Survival School

A great presenter has two unique qualities, appropriate skills and personal confidence. This confidence comes from knowing what you want to say, and being comfortable with your communication skills. In this two-day workshop, you will master the skills that will make you a better speaker and presenter.

$299.00

XBD 0107

Business Writing for Results

Our two goals in business writing are to write so the reader can understand immediately and to get the response or results we want in a timely way. This course emphasizes concise, clear correspondence, including e-mail, letters, summaries, and meeting minutes. Relaying executive-level and customer-focused information are primary concerns.

$169.00

XBD 0108

Grammar, Punctuation and Word Usage

The tools, tips and techniques presented in this program will help you to develop the competence and confidence you need in written communication. This class will concentrate on grammar concerns: effective sentence structure, proper punctuation and correct word usage. You will be able to compose appropriate written correspondence with clarity and conciseness by the end of the program and through continued use of the manual as a reference text.

$169.00

XBD 0109

Stress Management

This workshop will explore the harmful long-term effects of stress on our mental and physical health and provide suggestions for managing our individual stresses more effectively. Strategies may include changes in lifestyle, stress management techniques such as relaxation and exercise, and the use of music or humor as coping strategies.

$99.00

XBD 0115

Interpersonal Communication Skills

The recipe for effective interpersonal communication is really quite simple: two or

more people who trust each other's motives, speak honestly and listen attentively as they discuss the subject in question. In this seminar, participants will develop specific communication strategies that build a culture of alliance and collaboration and increase their effectiveness by achieving breakthrough performance as communicators. Topics include the DiSC model of human nature, Powerful Listening, Assertiveness and Conflict Management.

$299.00

XBD 0116

The Critical Elements of Customer Service

This workshop is for any employee who deals with the public or who serves those who do deal with the public. Customer service skills can increase your value to your company and advance your career at the same time. This session will cover topics such as communication skills, tools for dealing with difficult people, and resolving conflicts.

$99.00

XBD 0118

Managing Customer Service

The need for leading, promoting, and enhancing a customer focused culture, are essential within every organization. Leading, creating, and enhancing a customer focused culture are essential within government departments. This one-day workshop will provide you with an opportunity to explore your responsibilities within your role as a customer service agent. As we discuss the various skills and techniques, draw from your own personal and varied experiences to share elements of reward and challenge.

$159.00

XBD 0122

Analyzing Financial Statements

Learn the accounting terms and concepts that will help you interpret a firm's true financial performance by taking an in-depth look at what statements can tell you. You will cover the information required for accurate financial statements, what such statements reveal, and the ratios used in their analysis.

$169.00

XBD 0134

Basic Government Accounting

This course focuses on providing you the basics of state and local government accounting. You will learn the concepts of government accounting, definitions of terms, types and components of governmental, proprietary and fiduciary funds, and financial reporting. This course is presented in a non-technical, practical, hands-on approach and integrates the GASB 34 implementation changes.

$249.00

XBD 0135

Proofreading: Finding Errors Before They Embarrass You

Employers make the error in thinking if a person can read and write, that person can also proofread. Researchers tell us there are two kinds of published errors: those we do not know are wrong and those we know are wrong but we do not see. This course complements "Grammar, Punctuation & Word Usage" for the former issue and presents techniques to use for the latter issue.

$109.00

XBD 0136

Technical Writing Made Easy

Although technical writing is a part of business writing, special considerations are necessary to accommodate the need for details and specifications. Reports, abstracts, proposals, protocols, and standardized operating procedures are the targets for this course.

$159.00

XBD 0141

E-mail Professionalism: What, How, To Whom and How Long?

This program will give you an overview of the background of electronic mail. The conventional manners and cultural expectations of netiquette will be discussed. The participants will be given suggested guidelines for writing professional messages.

$114.00

XBD 0153

Customer Service: You ARE the Organization

When building working relationships, teams, or a loyal customer base, bosses, co-workers, visitors, vendors and clients become your customers during a day's activity. Learn how to juggle responsibilities to each while maintaining a sincere smile and positive attitude.

$169.00

XBD 0155

Overcoming Presentation Anxiety

This workshop will focus on both the psychological and vocal production aspects of public speaking. Various factors that play a role in anxiety related to public speaking will be examined as well as ways to cope with this anxiety, including the understanding and execution of efficient vocal function. Techniques in both of these areas will be discussed and then demonstrated during the afternoon session when the instructors will work with participants as they present a five minute informal presentation prepared beforehand.

$169.00

XBD 0190

Powerful Presentations

Want to add zip and pizzazz to your presentation? Want to have your participants leave feeling pumped about applying what they learned? Want to get creative? Then this session is for you! You will learn ways to set the stage and create dynamic openers. Learn exciting ways to present key points, learn techniques for adding humor, and find ways to get participants involved.

$169.00

XBD 0191

Power Up Your Telephone Skills for Excellent Customer Service

Find out why telephone skills are the heart of organization communications while you learn about different communication styles, and how to handle difficult customers and prospects on the telephone. Participate in group discussions to discover how specific issues can be resolved and apply the lessons learned by studying real situations which achieved success.

$89.00

XBD 0192

Train-the-Trainer

Often subject matter experts are asked to become trainers. This 3-day program covers everything you ever needed to develop dynamic content, present powerful

presentations and deliver results. Video-taping is done for enhanced learning. Leave with techniques for handling an unruly audience, keeping an audience's interest and strategies for maximizing the learning experience.

$399.00

XBD 0193

Developing a Mentoring Program

Organizations have long acknowledged the value of mentoring as a tool for developing and retaining talented employees. In this seminar, you will learn how to design and implement an effective facilitated mentoring program for bright but inexperienced entry-level people to mature employees who need to expand or refocus their skills.

$189.00

XBD 0200

Managing Diversity

Without effective diversity management capability, the strength of your organization is in jeopardy. This course will help you build diversity management skills to create a high-performing work environment. It will reinforce diversity concepts and knowledge and provide tools, processes and techniques to use with a diverse workforce to improve organizational performance.

$109.00

XBD 0205

Managing Generations

You cannot productively manage today's workers without understanding the social, political, economic, and cultural world in which they grew up. The four generations in today's workforce were each shaped by different values, cultural icons, and defining events. In this class you will analyze these differences in detail and review managing skills that will make you a better leader.

$99.00

XBD 0215

From Difficulty to Dignity: How to Communicate with Diverse Customers and Coworkers

Discover communication techniques and tools to help you achieve and maintain dignity and productivity for all those involved in difficult circumstances. When someone becomes confused, angry, offended, or frustrated, know how to talk and walk your way through the moment with confidence. Find ways to increase performance, collaboration, decision agreement, and problem resolutions for on-the-job scenarios.

$159.00

XBD 0220

Conducting Critical Conversations

You will gain confidence conducting conversations when potential for conflict or disagreement is likely...whether it is an employee performance review, customer conflict, bad news for the boss or a nosy-neighbor. You will learn how to control your reactions to hostile responses and prepare for a productive outcome.

$109.00

XBD 2210

Assessment Center

A description is not available for this course.

$1,499.00

CBT Special Events (XBA)

XBA 0001

Vital Learning Showcase

Learn more about our new partnership with Vital Learning! Exciting Business Development modules designed to improve team communciation, increase leadership skills, and more.

$15.00

XBA 0002

Vital Learning

Number Skills Pilot class with Vital Learning

$179.00

XBA 0003

Administrative Professionals

This year will focus on The Power of YOU and will continue the tradition of years past; incorporating fun and business skill training that Administrative Professionals can use to generate results in the workplace. Fees for the Day: Single Registration $169; Two or more from the same company $159; and Early Bird (before March 9, 2007) $149.

$169.00

XBA 0004

DDI Showcases

A description is not available for this course.

$39.00

XBA 0005

Consensus Building Workshop

A description is not available for this course.

XBA 1000

Terrorism

Understand how a terrorist cell functions; learn the HVGO principle; understand terrorism linkages; become familiar with Islamic extremism, develop an understanding of bombing and its relationship to the technology of terrorism.

$249.00

Career Planning (XVR)

XVR 1000

Resumes, Interviews and Job-Hunting Techniqes

Before you begin job hunting, learn to write an effective resume, interview effectively, and explore the job- hunting process. Topics will cover what to include on your resume, various resume styles used, how to prepare in advance for your interview, common questions asked in an interview, various approaches to job hunting and understanding how to use informational interviewing and networking for an effective job search.

$50.00

XVR 1004

Individual Mock Interview

Successful interviewing requires practice. If you need practice, this service would be beneficial to you. participants will be video-taped during the mock interview and be provided with a critique of the session. Please bring a videotape.

$75.00

XVR 1005

Resume Development

A description is not available for this course.

$175.00

XVR 1006

Cover Letter Development

A description is not available for this course.

$50.00

XVR 1007

Building Your Resume: The Ins and Outs of Resume

Development Whether you are looking for your first job, changing careers, or seeking a promotional opportunity outside of your current organization, your resume is one item that makes a first and lasting impression. During this session, you will learn how to develop your own resume that will help you land your desired job. Time will be allocated to answer your specific questions or handling tough work situations or experiences. Bring your education and work histories, along with any information you believe necessary to assist in building your resume - from the first line to the last!

$125.00

XVR 1010

Getting Hired is the Goal

Individual outplacement services.

$750.00

XVR 1015

Career Redirections Showcase

Career Redirections is Johnson County Community College's premier outplacement and employee career development program which provides a comprehensive, cost-effective array of services tailored to your company's specific needs. Please join us as we launch the JCCC Career Redirections Showcase on January 11, 2005.

$0.00

XVR 1100

Career Transitions - A Career Planning Workshop

Through the workshop activities and assessments, you will learn more about yourself and how this relates to your career options. Participants will take the MBTI (M), Self-Directed Search, SkillScan and a work values inventory.

$89.00

XVR 1101

Career Transitions PLUS - A Career Planning Workshop with Individual Career Counseling

Do you need some added direction as you define a new career path? If so, this package is designed for you. In addition to the Career Transitions workshop, participants will receive a personalized career coaching session with a qualified professional career counselor. (Session to be scheduled within 60 days after completion of the workshop.)

$124.00

XVR 1102

Women In Career/Work Transition

Are you a mom who wants to re-enter the workforce? Are you going through a divorce and need to reevaluate your career path? In addition to assessments, this workshop will emphasize balancing a career, family and personal life.

$94.00

XVR 1103

Careers After Retirement

Are you nearing retirement - or already there and interested in looking for a second career? Are you like other retirees who are choosing to work for a variety of reasons - supplemental income, mental stimulation or an opportunity to connect with others? Through activities and a series of assessments including the Strong Interest Inventory and the Myers Briggs Type Indicator, the workshop will help you identify potential satisfying career options.

$94.00

XVR 1105

Retirement: Your Next Great Adventure

Explore how you can turn your retirement years into the most fulfilling exciting chapter in your life. We'll talk about challenges to expect and share strategies to help you "reinvent" your life and make the most of the new opportunities that retirement can bring you.

$24.00

XVR 1110

Parents as Career Coaches

Designed for parents to guide their high schooler through the process of self-discovery and career exploration. This workshop will increase awareness of career coaching by parents in the Supporter, Connector, Clarifier, and Motivator roles through different life stages.

$35.00

XVR 1112

Job Campaign Strategy

A description is not available for this course.

$75.00

XVR 1120

Recharging Your Career Resiliency

Autumn is a natural time for nurturing the earth after harvest. Autumn is also a time for self-reflection. This intensive weekend career development program is designed to reclaim one's self and to redefine a more conscious career path. Participants will be given a batter of career assessments to rediscover their strengths, gifts, aptitudes, interests, and skills. (Boxed lunch will be provided on Saturday.)

$395.00

XVR 1125

Exploring A Mid-Life Career Change

Are you still trying to figure out what to do when you grow up?   Participants will take Strong Interest Inventory and Meyers Briggs Type Indicator (Q) assessments online before class. One hour follow-up session for individualized career counseling is included.

$179.00

XVR 1205

MBTI, SII & SkillScan Package

Combination of Myers-Briggs, Strong Interest Inventory and SkillScan assessments with 3-hours individual counseling interpretation.

$195.00

XVR 1206

Online Myers-Briggs Type Indicator

This course assesses personality preferences and correlating preferences with occupations. Online with access capability from off campus. Includes one-hour interpretation session with a career counselor on campus.

$84.00

XVR 1215

Online Strong Interest Inventory

This inventory assesses interests based on Holland's occupational interest themes and correlates interests with 100+ occupations. Online with access capability from off campus. Includes one-hour interpretation session with a career counselor on campus.

$69.00

XVR 1221

Online MBTI and Strong

This course offers online versions of MBTI and Strong Interest Inventory assessments with two hours of interpretation with a career counselor on campus.

$145.00

XVR 1225

Individual SkillScan Assessment

Skills assessment with one-hour counseling interpretation.

$79.00

XVR 1231

Online MBTI and Strong Combo Report

In addition to online versions of the MBTI and Strong Interst Inventory assessments a report combining the results of the two assessments will be developed. Includes two hours of interpretation with a career counselor on campus.

$155.00

XVR 1235

Individual SkillScan Assessment

Skills assessment with one-hour individual counseling interpretation.

$79.00

XVR 1240

MBTI and SII Combo Report

Combining SII code and MBTI preference for a report.

$25.00

XVR 1300

Individualized Counseling

Professional career counseling services are available for community members who are interested in personalized career planning. For more information or to schedule an appointment, call 913-469-3890. $50 per one hour session.

$50.00

XVR 1301

Individualized Career Planning

Individualized Career Planning, 1st two hour session.

$100.00

XVR 1302

Individual Career Counseling

Individual Career Counseling, 125.00

$125.00

XVR 1500

Career Coaching

A description is not available for this course.

$459.00

XVR 1501

Career Compass

Geared to high school students interested in self- discovery and exploring career opportunities. Workshop includes taking career assessments, learning methods of career exploration and utilizing available career resources in the community.

$42.00

XVR 5012

Individual Excellence - Web-Based

Develop career-enhancing skills in a single course that covers twelve popular one-day seminar topics, including goal setting, time management, and personal organization. You'll learn how to improve your creative abilities, gain confidence with financial matters, and how to minimize conflict in your life. Develop a fulfilling career plan and improve relationships with co-workers, friends and family.

$98.00

XVR 5014

Work Yourself Happy! - Web-Based

Here's your chance to begin designing a life that really works for you. With a complete understanding of your own interests, values, needs and abilities, you'll

learn how you can use work to express yourself and share your interests and talents. You will be given the opportunity to experience, understand, and implement career strategies as they are introduced.

$98.00

XVR 5015

12 Steps to a Successful Job Search - Web-Based

In this course, a world-renowned author and career advisor will help you identify the job that is best for your needs. You'll then be given complete step-by-step instructions on how to get that job, regardless of your level of expertise or state of the economy. This motivational course will increase your confidence, help you feel great about yourself, and provide you with the foundation you need to get the job you want.

$98.00

Computer Training (XCM)

XCM 1000

Lunch and Learn with the Center for Business

Come to the Center for Business and Technology for lunch and an hour of helpful tips, tricks, and hints related to computers and computer applications. Seating is limited. Call CE Registration at 913.469.2323 to reserve your spot.

$0.00

XCM 1001

Train the Trainer - Computer

A description is not available for this course.

$0.00

XCM 1002

Pro Golf Exam

A description is not available for this course.

$25.00

XCM 1006

Senior Series

Combine all four of our Senior classes into one series at a discounted price. Learn about basic computer skills, word processing and the internet.

$140.00

XCM 1007

Introduction to Personal Computers for Seniors I

If you have never owned a computer, have never touched a mouse, and need to have instruction and the time to practice the basic skills necessary to operate a keyboard and mouse, then this is the class for you. Three hours of personal attention.

$40.00

XCM 1008

Introduction to Personal Computers for Seniors II

This class will introduce new owners to the necessary skills needed to use the

computer, such as mouse skills and using the keyboard. We will spend time examining how to make files, store files, personalizing the desktop, keyboard and mouse. We'll find tutorials on the computer and on the Internet that will help you learn how to do various jobs on the computer.

$40.00

XCM 1009

Introduction to Windows Vista for Seniors

This class will introduce new computer owners to the basic skills needed to work with Windows Vista. We will spend time examining how to make files, store files, personalizing the desktop, keyboard, mouse, plus finding tutorials inside the computer and on the Internet that will help you learn how to do various jobs on the computer.   Prerequisite: Intro to PC for Seniors I or competent skills with mouse and keyboard.

$40.00

XCM 1010

eBay--Online Auctions

Take a class that just might pay for itself. Learn the ins and outs of selling and buying on eBay, the world's premier online auction site. The provided information, proven tactics, and easy-to-apply methods empower users, especially those already familiar with the site, to quickly achieve higher levels of success at eBay. Prerequisite: Introduction to the Internet or comparable knowledge.

$199.00

XCM 1018

Teen Programming

Game design, application development, program manipulation; they all require programming skills. Here is the place to find out if you have what it takes to become a software programmer. Prerequisite: Competent keyboarding skills.

$299.00

XCM 1019

Teen Web Design with Dreamweaver and Flash

Why settle for surfing the web when you can build your own website? Discover how easy it is to build and animate a website and then publish to the internet for all your friends to view. Prerequisite: Ability to work with computer, keyboard and mouse.

$299.00

XCM 1020

Dreamweaver Web Design-Teens

This class is for young adults, ages 12-18 years old. Discover the easy way to build Web sites using Macromedia's Dreamweaver MX. Why bother with HTML when an application will do the work for you? Create a Web page, design a site, work with text and images, frames, links and more as you get on your way in Web design and development.

$249.00

XCM 1023

Teen 2D/3D Game Pack

Receive instruction in our 2D and 3D game development classes for one low price. Prerequisite: Familiarity with Windows applications and simple graphics manipulations -- ages 10-18.

$799.00

XCM 1024

Social Software: Tools for Collaboration

This course explores the rich environment of social networking software. We'll set up accounts in the popular programs for collaborating online, including LinkedIn and Facebook, as well as other emerging online social software tools. The course will explore how to use these environments to work with other people online. We'll create an avatar in Second Life, and explore some of the communities being built in that virtual world. Finally, we'll explore some of the ramifications of living online in these virtual communities. Prerequisites: Experience with Windows, mouse and keyboard.

$139.00

XCM 1025

Teen Game Design

Why play computer games when you can create them? In this class you will use Game Maker software to create computer games you can share with friends and family. Prerequisite: Ability to work with computer, keyboard and mouse.

$449.00

XCM 1028

Teen A+

Learn how to support PC hardware, including installation of new hardware, hardware troubleshooting strategies, and updating components. Obtain the skills and knowledge necessary to install, build, upgrade, repair, configure, troubleshoot, and perform preventative maintenance on personal computer hardware and operating systems. You'll do hands-on work including installing hard drives, adapter cards, and other components. Along with the hands-on work, you'll receive the theory behind the operation of the computer and its operating system to diagnose and fix both hardware and software problems. In addition, you'll install a Windows operating system and configure it to work with its hardware and the network.

$899.00

XCM 1034

Introduction to the Internet for Seniors

Configuring the browser, understanding the Internet, Internet security, cookies, temp files, popups, spyware, favorites, history, etc. We will have search projects in class as groups. Prerequisite: Ability to use Windows, keyboard and mouse.

$40.00

XCM 1051

Introduction to Word Processing for Seniors

This class will use existing word processing programs within Windows XP, plus Microsoft Word to complete projects that include tables, inserting graphics, creating greeting cards, creating labels, and mail merge. Prerequisite: Ability to use Windows, keyboard, mouse, and some typing skills.

$40.00

XCM 1100

Mac: Photoshop Fundamentals

Familiarize yourself with digital image editing using Photoshop. Examine the tools and features as you edit images using Photoshop. Work with tools for painting, retouching, and enhancing images. In addition, you will work with layers and layer selections. The course material maps to the Adobe Certified Expert Exam, available through the Testing Center at the Center for Business. Prerequisite:

Familiarity with Windows, keyboard and mouse.

$299.00

XCM 1101

Mac: Photoshop Advanced

Learn to edit images for best print quality or optimized for the web. We'll begin by working with advanced image editing tools and features available in Photoshop. For web work, we'll learn to edit images for web page design, prepare images for optimal display across Windows and Apple operating systems, and manage color in images. The course covers the use of video features as well, the tools to automate Photoshop tasks. The course maps to the Adobe Certified Expert exam, given at the Prometric Testing Center at the Center for Business. Prerequisite: Mac: Photoshop Fundamentals or comparable knowledge.

$299.00

XCM 1102

Mac: Illustrator Fundamentals

Adobe Illustrator is a sophisticated digital drawing program. Illustrator allows you to create attractive illustrations and type effects for use in logos, advertisements, and other illustrations. In this course, you will start by drawing and manipulating simple shapes to create logos, and then combine text and graphics to create advertisements. Prerequisites: Knowledge of OS X, keyboard and mouse.

$199.00

XCM 1103

Mac: Illustrator Advanced

Expand on your skills to create more complex illustrations. Receive a better understanding of how to print documents without any errors or color mismatches. Discover how to prepare illustrations for the Web. Create complex, robust illustrations that go beyond those created using Illustrator's basic tools. Prerequisite: Mac: Illustrator Fundamentals or equivalent knowledge.

$199.00

XCM 1104

Mac: InDesign Fundamentals

Familiarize yourself with print layout and design using InDesign. Work with the tools and features to create eye-catching printed documents. Manage the InDesign environment, design documents, manage text, utilize colors, swatches, and gradients, flow text into layouts, build tables for presenting data, prepare for handoff to a service provider, and create Acrobat PDF files. The course content maps to the Adobe Certified Expert Exam, available through the Testing Center at the Center for Business. Prerequisite: Knowledge of OS X, keyboard and mouse.

$299.00

XCM 1105

Mac: InDesign Advanced

Discover the advanced features in InDesign to create attractive documents. Build and use styles with InDesign's style tools, control text, handle page elements, graphics and paths, build Bezier paths to design graphic elements, manage long documents, import and export files, adjust print settings and work with the XML features built into the program. The course material maps to the Adobe Certified Expert exam, available through the Prometric Testing Center at the Center for Business. Prerequisite: Mac: InDesign Fundamentals or comparable knowledge.

$299.00

XCM 1106

Mac: Flash Fundamentals

We begin by exploring the Flash development environment, then move to importing and creating graphics. Symbols are a critical part of Flash design, and we'll learn how to create graphic symbols and button symbols. Flash can deliver text content, and the course covers how to display text in Flash in the most readable manner. We'll then create animations using four different methods. Our Flash documents will frequently require user interaction, and we'll use Flash to control Flash documents with buttons, and movie clip symbols. Finally, the course will cover the techniques to add audio and video to our Flash documents. Prerequisite: Knowledge of OS X, keyboard and mouse.

$299.00

XCM 1107

Mac: Flash Level 2-Building Interactivity with ActionScript

This Flash class focuses on writing ActionScript to control Flash documents. We'll create forms with interactive components, and build conditional logic to control the flow of content through the form. We'll then script a Flash document to allow a site visitor to drag and drop objects in the Flash document, and control how and where they are dropped. The course covers the use of built-in classes and function creation by building a web page layout with Flash and adding interactivity to the objects we build. Finally, we manage data captured in a form on a Flash-driven web page by controlling dynamic content. Prerequisites: Mac: Flash Fundamentals.

$299.00

XCM 1108

Mac: Flash Level 3-Delivering Video with Flash

This class focuses on using Flash to deliver video to our web sites. We begin with a discussion of techniques to produce good video content, and discuss video encoding techniques. The course covers three different methods to encode video for use in Flash, and then moves to setting cue points to add additional information for our site visitor. We then build a customized Flash video player, and then explore transparency, masking and blend modes for Flash video. The course then explores deploying Flash video content and enhancing it with closed captions, cue points and playlists. Prerequisites: Mac: Flash Level 2: Building Interactivity with ActionScript.

$299.00

XCM 1109

Mac: Dreamweaver Designing Web Sites

Discover how to design and build a website as you explore the features Dreamweaver. From novice to advanced, there is something for everyone in this class. In two days, you will move from basic web design to professional-looking websites. We'll add text and images to web pages, layout pages using tables, and prepare the site for uploading. In the second day, we'll build rollover buttons, and discover how to use built-in Flash buttons and text for navigation. Then, we'll use Dreamweaver's Cascading Style Sheet tools to more format our web page content more efficiently. The course finishes by introducing forms using traditional HTML form objects, and the built-in Spry objects. Prerequisites: Mac: HTML, Mac: Cascading Style Sheets, or comparable knowledge.

$299.00

XCM 1110

Mac: Cascading Style Sheets

Cascading Style Sheets (CSS) is the professional approach to web site design. CSS can more efficiently control color, typography, and layout techniques than relying on HTML alone. We begin with techniques to specify color and font information in a single web page. We then improve our management and workflow by moving our formatting rules to a .css file and link multiple pages to a single set of formatting rules. We then explore the use of borders, margins, and

padding to control the layout of a web page, as well as consider four different CSS layout tools. We finish by styling HTML forms, and improve the experience of our site visitors by building a print style sheet. Prerequisite: Experience with OS X, mouse and keyboard, HTML, and comfortable working with a text editor and simple code.

$359.00

XCM 1111

Mac: HTML Fundamentals

Examine the basic concepts of Hypertext Markup Language (HTML), write source code, place text on the page, format text, and create headings and horizontal rule lines. Display lists, color Web pages, use graphics, add hypertext links and create graphic hyperlinks. Prerequisite: Knowledge of OS X, keyboard and mouse.

$299.00

XCM 1112

Mac: Fireworks

Work with Fireworks to gain better control over editing vector and bitmap graphics and also make web graphics appear the way you had intended. Explore the tools and features of Fireworks to create and edit vector and bitmap graphics, apply interesting effects, as well as add graphical text to web pages. Prerequisite: Knowledge of OS X, keyboard and mouse.

$299.00

XCM 1113

Mac: Building Web Sites Interactive Workshop

The Web Site Workshop offers you the opportunity to fine-tune your web site in a classroom setting with the assistance of the Center for Business's web design curriculum instructors. Bring in your code, content, and supporting files for a day of hands-on work on your site. Prerequisite: Mac versions of HTML, Cascading Style Sheets, Dreamweaver Designing Web Sites, Flash Fundamentals, and Fireworks.

$169.00

XCM 1114

Mac: OS X Introduction

Get started with Mac OS X, and take control of your computer. The best way to become comfortable working with your computer is to learn about the operating system. Explore the basics as you do just that in this introductory class. We'll explore the user interface, and use the Finder to manage our documents and files. We'll explore how to control the Mac using Preferences, and how to start and run software programs. The class concludes with an introduction to the included software on Mac. Prerequisite: knowledge of OS X, keyboard and mouse.

$149.00

XCM 1115

Mac: Final Cut Pro Fundamentals

A two-day course, the Introducing Final Cut Pro class will cover the primary features of the Final Cut Pro video editing application. Students will learn the basic interface of Final Cut Pro, and use this interface to perform basic video editing. Additionally, students will be introduced to the digital editing workflow process from capture to finished output. They will learn how to adjust and customize editing preferences and learn how to capture video and audio. Students will also learn several methods for fine-tuning the rough cut, including use of the ripple, roll, slip and slide tools, and a look at audio editing. Prerequisite: Knowledge of OS X, keyboard and mouse.

$199.00

XCM 1116

Mac: Final Cut Pro Advanced

This three-day class covers more advanced editing and finishing techniques, and will incorporate the use of other Final Cut Pro Studio applications such as LiveType and Soundtrack Pro. Also, the course covers working with film as a capture medium. Students of the Advanced Editing course will get hands-on experience as they learn how to edit multi-camera projects, create professional-looking graphics and transitions, and correct errors in performance and/or direction. Additionally, students will work with nested sequences, use picture and audio filters, color correct, and composite shots. Prerequisite: Mac: Final Cut Pro Fundamentals.

$199.00

XCM 1200

Introduction to Personal Computers

New to computers? In this course, learn about the physical components of computers and take a brief tour of Windows. Hard drives, floppy disks, CD-ROMs, RAM, monitors, modems and other hardware, and computer terminology will be discussed.

$119.00

XCM 1201

Computer Basics

If you are new to computers, getting ready for college, or preparing for a new job, our Computer Basics class will introduce you to the skills you need to succeed. You will learn about computer fundamentals and the Windows OS, key applications, and the online universe. Maps to IC 3 certification. Prerequisite: Ability to use keyboard and mouse with competence.

$599.00

XCM 1202

Podcasting

We'll walk through the process of creating, broadcasting, and promoting your podcasts. We'll begin by stepping into our audience's shoes by subscribing, downloading, and listening to other podcasts. Then we'll investigate the hardware and software necessary to record our own podcasts. Once we have the tools in place, we'll plan, record, edit, and release our podcast. Then we'll add music, sweeps, interviews, and other elements.

$199.00

XCM 1450

Windows XP Introduction

Get started with Windows XP, and take control of your computer. The best way to become comfortable working with your computer is to learn about the Operating System (OS). Explore the basics as you do just that in this introductory-level class.

$149.00

XCM 1451

Windows Vista Fundamentals

We'll begin with an overview of the Vista interface, then the course examines the methods to control the windows in Vista. We'll work with the help system next, and then we'll work with the new features built into Vista such as the Sidebar, Gadgets and Photo Gallery. Then, we'll customize the Vista desktop to our liking, and we'll finish with file and folder management in Vista. Prerequisites: Familiarity

with keyboard and mouse.

$149.00

XCM 1452

Windows Vista Advanced

We'll begin with performing advanced customization of Vista, including setting accessibility options, and setting up user accounts. We'll take a look at the network maintenance tasks in Vista, and then focus on maintaining and optimizing Vista itself. We'll then take a look at managing peripherals. Connecting to a remote computer is sometimes necessary for maintenance duties, and we'll examine the tools for remote administration in Vista. Finally, we'll use the built-in backup and restore capabilities in Vista, as well as the hard disk maintenance utilities.

$149.00

XCM 1453

Implementing Windows Vista

This three-day course provides is designed for people who have experience with previous versions of Windows and whose organizations will be deploying Vista within a year of the completion of this course. Students will gain an overall understanding of the new operating system. Topics covered will concentrate on new features and end-user impact. Students will also be introduced to the Windows Vista deployment life cycle, with a special focus on methods for automating deployment. The hands ?on sections of the course will implement a customized deployment.

$799.00

XCM 1455

Windows XP Advanced

Explore advanced features that stream-line the use of Windows XP and allow you to work more efficiently. Create passwords and user profiles, work with network features, and system tools to optimize system performance. Prerequisite: Experience with Windows, keyboard and mouse required.

$149.00

XCM 1457

Office 2007 New Features

Explore how to use the Microsoft Office Button, Ribbon tabs and Ribbon groups, galleries, contextual Ribbon tabs, Live Preview, the Dialog Box Launcher, the Document Information Panel, and the Mini toolbar. This course also covers the XML file format and the macro and non-macro file formats. There is a dedicated unit for each Office application (Word, Excel, PowerPoint, Outlook, and Access) that introduces new features unique to that application. Prerequisites: Familiar with Office 2003 versions of these applications.

$179.00

XCM 1583

Adobe Acrobat Advanced

Further develop your PDF documents. Use Acrobat to convert technical documents to PDF files, enhance and control PDF content accessibility, customize PDF documents for interactive use online, and prepare PDFs for commercial printing. Maps to ACE. Prerequisite: Acrobat Fundamentals or comparable knowledge.

$299.00

XCM 1584

Adobe Graphic Design Certificate

The Adobe Graphic Design Certificate covers the Adobe software packages devoted to print design, including Illustrator, Photoshop, InDesign, and Acrobat. We begin by exploring the drawing capabilities found in Illustrator with two one-day classes. We then move to InDesign, Adobe's page layout program that allows us to build flyers, brochures, posters, and books, with two, two-day classes. Images are a vital part of print work, and we continue the series with two, two-day Photoshop classes. We finish the series with two, one-day courses in Acrobat, to generate the files necessary to reproduce our work, or distribute it on the web. Once you've completed the course, the Testing Center at the Center for Business offers the Adobe ACE exams to demonstrate your proficiency. Prerequisite: Experience with Windows OS.

$1,899.00

XCM 1585

Adobe Acrobat Fundamentals

Use Adobe Acrobat to make information more portable, accessible, and useful to meet the needs of your target audience. Access information in a PDF document, create PDF documents, modify PDF documents, add PDF navigation aids, work with multiple PDF documents, and review PDF documents. Maps to ACE. Prerequisite: Familiarity with Windows, keyboard, and mouse.

$299.00

XCM 1586

Adobe GoLive Fundamentals

Discover the basics of the GoLive web development application by using it to build and upload a website. Learn to develop a website complete with web pages that contain text, images, links, tables, and forms. Maps to ACE. Prerequisite: Familiarity with Windows, keyboard and mouse. Should have familiarity with the internet.

$299.00

XCM 1587

Adobe GoLive Advanced

Building a website is no longer a difficult task. Discover GoLive's advanced features to build more sophisticated websites. Explore advanced concepts that include dynamic elements, rollovers, navigation bars, layers, and animations. Maps to ACE. Prerequisite: GoLive Fundamentals or comparable knowledge.

$299.00

XCM 1588

Adobe InDesign Fundamentals

Familiarize yourself with print layout and design using InDesign. Work with some of the tools and features to create eye-catching printed documents. Manage the InDesign environment, design documents, manage text, utilize colors, swatches, and gradients, manage transparency, utilize tables, prepare for handoff to a service provider, and create Acrobat PDF files. Maps to ACE. Prerequisite: Familiarity with Windows, keyboard and mouse. Should have basic understanding of page layout and design.

$299.00

XCM 1589

Adobe InDesign Advanced

Discover the advanced features in InDesign to create catchy and attractive documents for print and web. Administer advanced styles, control text, handle page elements, graphics and paths, develop Besier paths, manage long documents, import and export files, adjust print settings and work with XML.

Maps to ACE. Prerequisite: InDesign Fundamentals or comparable knowledge.

$299.00

XCM 1605

Adobe Web Design Certificate

The Adobe Web Design Certificate includes: HTML Fundamentals, Cascading Style Sheets, Dreamweaver: Designing Websites, Fireworks: Web Graphics and Interactivity, Flash Fundamentals, Flash Level 2: Building Interactivity with ActionScript, and Flash Level 3: Delivering Video with Flash. The certificate is capped with a special class Building Web Sites: Integrative Workshop. This capstone class is built as a facilitated class to work with and build your web site content, with an instructor present for facilitation. The certificate program consists of one easy-to-follow schedule at a special, reduced price. This course series is eligible for a payment plan. Please call 913-469-3891 for information about this option. Prerequisite: Knowledge and experience with Windows OS and the internet. Some programming background is helpful, but not required.

$1,900.00

XCM 1700

Keyboarding Fundamentals

Learn keyboarding skills or improve your current skill level. The flexible format is designed to improve skill, speed and accuracy. Immediate feedback on typing speed and accuracy is provided with each lesson. IBM-compatible software and practice exercises are provided for the student to take home.

$159.00

XCM 2300

Word 2007 Fundamentals

We'll begin with creating a basic document, and then we'll investigate the new interface in Word 2007 in order to manipulate the document. We'll save and proof our work, and then we'll work with text formatting tools to enhance our work. Font choices and paragraph formatting will help to add structure to our documents, and we'll use tabs to develop lists. Finally, we'll use Word's views to preview our work, and then print the final version. Prerequisites: Competent with Windows and mouse with good typing skills.

$169.00

XCM 2301

Word 2007 Intermediate

Intermediate level tools allow us to add structure to our documents, and produce documents more efficiently. We'll begin by producing templates for consistent formatting. Bullets and numbering of content help our readers by organizing content, and we'll extend that by using paragraph options for our content. Header and footer content add information to our longer documents, and we'll see how using header and footer tools extend our documents. Tables and styles allow us to present information in easily read documents, and we'll investigate the use of styles to ensure consistency. We'll finish with mail merge tools to distribute our work. Prerequisites: Word 2007 Fundamentals.

$169.00

XCM 2302

Word 2007 Advanced

Our examination of advanced techniques begins by working with graphics, SmartArt, and text boxes. Following our look at graphic techniques, we'll develop table and charts inside Word documents. Then, because many of us work in team environments, we'll work with tracking changes to our work, and managing those changes to produce a finished document with everyone's contribution. Word employs many tools to produce long documents, and we'll create a table of

contents, bibliographies, and use citation and reference tools for formal documents. We'll conclude by building macros to automate our work. Prerequisites: Word 2007 Intermediate.

$169.00

XCM 2303

Word 2007 Specialist Certificate

Receive instruction in our lineup of Word 2007 classes. Build a solid foundation with Word Fundamentals 2007and Word Intermediate 2007 before moving on to more advanced topics in Word Advanced 2007. Once completed, either take the MOS exam at our Prometric testing center or use your Center for Business Word Specialist Certificate to verify your competency. Prerequisite: Familiarity with Windows, keyboard and mouse.

$429.00

XCM 2305

Word Fundamentals - 2003

Designed to give proficiency in creating, opening, formatting, saving, and printing a document. Explore how to edit documents and automate tasks. Format text, characters, and paragraphs. Create tables, control page layout and use proofing tools. Prerequisite: Knowledge of Windows, keyboard and mouse.

$169.00

XCM 2306

Word Intermediate - 2003

Explore more advance Word features and functions, such as creating columns and sections, formatting tables, importing table data, applying styles, adding headers and footers, using the drawing canvas, and creating templates. Prerequisite: Word Fundamentals - 2003 or comparable knowledge.

$169.00

XCM 2310

Word Advanced - 2003

Perform mail merges, create and use forms and form letters, and create master documents as well as macros to automate tasks. Customize menus and toolbars. Prerequisite: Word Intermediate - 2003 or comparable knowledge.

$169.00

XCM 2321

Word Specialist Certificate - 2003

Receive instruction in our lineup of Word classes. Build a solid foundation with Word Fundamentals - 2003 and Word Intermediate - 2003 before moving on to more advanced topics in Word Advanced - 2003. Once completed, either take the MOS exam at our Prometric testing center or use your Center for Business Word Specialist Certificate to verify your competency. Prerequisite: Familiarity with Windows, keyboard and mouse.

$429.00

XCM 2500

Web-Based Creating Web Pages (HTML)

Learn how to design, create and post your very own site on the Internet's World Wide Web. Discover low-cost marketing techniques and search engine strategies. Note: Please confirm computer requirements before registering for this course and Web registration is not available. After you register, complete the required on-line orientation at www.ed2go.com/jccc.

$110.00

XCM 2502

Web-Based Introduction to JSP Programming

In this course you will learn how to create JSP code and use it to access data stored in a Web application or in a database. You will be able to create and manage cookies, handle forms, display custom data, and more! Note: Please confirm computer requirements before registering for this course and Web registration is not available. After registration, please complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 2503

Web-Based Intermediate Photoshop CS3

A description is not available for this course.

$110.00

XCM 2505

Web-based Advanced Web Pages

Learn how to turn great Web pages into great Web sites from a top Internet author. Note: Please confirm computer requirements before registering for this course and Web registration is not available. After you register, complete the required on-line orientation at www.ed2go.com/jccc.

$78.00

XCM 2508

Web-Based Designing Effective Websites

Learn powerful graphic design techniques and build Web sites that are both attractive and wickedly effective. Note: Please confirm computer requirements before registering for this course and Web registration is not available. After you register, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 2517

Web-Based Introduction to Dreamweaver MX

Master the best and most widely used Web design tool available. You will create and format text, images, tables, and various other Web page elements. You will also explore page design. Note: Please confirm computer requirements before registering for this course, web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 2518

WB: Intro to FrontPage 2003

A description is not available for this course.

$104.00

XCM 2519

WB: Intro to Dreamweaver 8

Learn to harness the power of this industry-standard Web design program from a Silicon Alley veteran. Master the basics of document creation and how to insert and format text, images, hyperlinks, tables, multimedia files, and other types of Web page content.

$104.00

XCM 2522

Web-Based Introduction to PhotoShop 7

Learn how to use layers, blends, masks, and transformations. You will also learn how to create a variety of special effects and how best to create and save images for the Web. Note:Confirm computer requirements before registering for this course. Web registration is not available. After you register, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 2525

Web-Based Keyboarding

Use the computer program FasType for Windows to learn the basic skills of touch-typing. Note: Please confirm computer requirements before registering for this course and Web registration is not available. After you register, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 2530

Web-Based Introduction to Visual Basic 6.0

Visual Basic is the most popular development tool in the world and the easiest to learn. You will learn the basic designs and how to add various controls to interfaces. Note: Please confirm computer requirements before registering for this course and Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 2531

Web-Based Introduction to CorelDraw X3

Enhance your company newsletter, logo, or letterhead, boost your personal Web page, or create an original greeting card with dazzling images you've created with CorelDRAW. Learn how to add brilliant colors, designs and exquisite text to your original artwork and then export them with ease to other computer applications, such as Microsoft Office, Adobe Acrobat, and the Web. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 2532

Web-Based Introduction to Visual Basic 2005

Visual Basic is the most widely used programming language and development tool for creating Windows applications. The Visual Basic programming language is very easy to learn, and the Visual Basic 2005 development environment enables you to rapidly build Windows applications. In six short weeks, you'll learn how to write Windows applications using the Visual Basic programming language and the Visual Basic 2005 development environment. You'll also learn principles of object-oriented and event-driven programming that you can use, not only with Visual Basic, but also with other programming languages you may want to learn. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$150.00

XCM 2545

Web-Based Computer Skills for the Workplace

Learn the fundamental computer skills you need to succeed in today's workplace. You'll discover practical applications for e-mail, word processors, spreadsheets and databases, gaining a working foundation for the critical computer skills you need to survive in the modern job market. Note: Please confirm computer requirements before registering for this course and Web registration is not available. After registering, complete the required on-line orientation at www.ed2go.com/jccc.

$110.00

XCM 2573

Web-Based Introduction to Flash MX 2004

In this six-week on-line course, you'll learn how to use Flash MX 2004 to create dynamic, entertaining, and interactive Web sites and other projects. You'll discover the basic tools and techniques for making a Flash movie. You'll use Flash to create and modify graphics and text , build simple animations, and design Web site navigation buttons. Before you know it, you'll have a solid understanding of Flash and how best to make it work for you.   Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 2577

Web-Based Introduction to Gaming Industry

Learn about game development, game design, and production and the current challenges facing the gaming industry. Learn how to prepare for a dynamic career and succeed on the technical, artistic, or business side of game development. Note: Please confirm computer requirements before registering for this course and Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$110.00

XCM 2585

Web-Based PowerPoint Intermediate

Learn to create exciting presentations from an expert in PowerPoint and digital media. Work smarter in PowerPoint and use graphics, animation, digital photography and video to hold your audience's attention and create memorable presentations for public speaking, teaching, video, or the Web. Note: Please confirm computer requirements before registering for this course and Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 2596

Web-Based Introduction to Windows XP

This course covers all the basic skills and concepts needed to use a computer. This course will teach you how to work with text, pictures, photos, sound, music, DVD, Interactive TV, and video. Note: Confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 2597

WB: Introduction to the Internet

Master the ins and outs of the Internet with this informative , behine-the-scenes look at the World Wide Web, e-mail, Gopherspace, Newsgroups, FTP, chat, telephony, Telnet, and more. Note: Confirm computer requirements before registering for this course. Web registration is not available. After you register,

complete the required on-line orientation at www.ed2go.com/jccc.

$104.00
XCM 2701

Web-Based Using the Internet in the Classroom

Find out how you can use the Internet to make your textbooks and lessons come alive. Teach your students how to locate and evaluate Internet resources. Improve the caliber and amount of discussion throught the use of e-mail and discussion boards. The Internet can make teaching easier--this course will show you how.

$104.00
XCM 2702

Web-Based PowerPoint in the Classroom

This course will help you discover the exciting possibilities of using PowerPoint with your students. You will master a variety of uses for PowerPoint in the classroom, by creating compelling lessons and presentations. Note: Please confirm computer requirements before registering for this course and Web registration is not available. After registering please complete the required on-line orientation at www.jccc.ed2go/jccc.com

$104.00
XCM 2703

Web-Based Introduction to PrintShop Deluxe

Work with an expert designer and learn how you can get the most out of the friendliest and most popular design programs on the market. In this fun and practical course you will learn how to quickly and effortlessly create a variety of projects that you can put to immediate use, including greeting cards, envelopes, labels, postcards, signs and banners. By the end of this course, you will be fully prepared to create your own design projects from scratch. Note: Please confirm all computer requirements before registering for this course and Web registration is not available. After registering, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00
XCM 2704

Introduction to Crystal Reports 10

Learn how to use Crystal Reports to convert raw database or accounting data into meaningful and readable reports. You will be able to create a wide variety of reports that communicate more than mere facts. You will be able to use charts and maps to present information visually, and cross-tabs, to show correlations between loosley related data items. Note: Please confirm computer requirements before registering for this course and web Registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00
XCM 2705

WB: Intro to Outlook Express

Learn to create, send receive, and organize e-mail and newsgroup messages using the popular Outlook Express e-mail program. Note: Please confirm computer requirements before registering for this course and Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00
XCM 2706

Web-Based: Introduction to MS Word 2003

A description is not available for this course.

$104.00

XCM 2707

Web-Based: Intermediate MS Word 2003

A description is not available for this course.

$104.00

XCM 2708

Web-Based: Advanced MS Word 2003

A description is not available for this course.

$104.00

XCM 2709

Web-Based: Introduction to MS Excel 2003

A description is not available for this course.

$104.00

XCM 2710

Web-Based: Intermediate MS Excel 2003

A description is not available for this course.

$104.00

XCM 2711

Web-Based: Introduction to MS Access 2003

A description is not available for this course.

$104.00

XCM 2712

Web-Based MS Outlook 2003

Harness the communication and information management power of Microsoft Office Outlook 2003. Take advantage of its redesigned interface and new features to become more organized and productive than ever before. Note: Please confirm computer requirements before registering for this course and Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 2713

Web-Based Imaging for the Web using Fireworks MX 2004

Tap into the power of Fireworks MX 2004 to create dynamic Web graphics.

$104.00

XCM 2714

Web-Based Imaging for the Web using Fireworks MX

Tap into the power of Fireworks 2004 to create dynamic Web graphics.

$104.00

XCM 2715

Web-Based Projects for Illustrator

Learn the basics of Adobe Illustrator with design projects that let you practice as you learn.

$104.00

XCM 2716

WB: Intro to Powerpoint 2003

Learn to create impressive slide presentations filled with formatted text, images, video, audio, animation, charts, and links to the Web.

$104.00

XCM 2717

WB: Interm Access 2003

A description is not available for this course.

$104.00

XCM 2718

WB: Intro to MS Proj 2003

A description is not available for this course.

$104.00

XCM 2719

WB: Intro to Photoshop CS

Learn the basics of using Adobe Photoshop to create images and edit photos.

$104.00

XCM 2720

WB: Photoshop Elements Project

Take your Photoshop Elements skills to the next level by working through 12 hands-on projects.

$104.00

XCM 2721

Web-Based: Introduction to MS Publisher 2003

A description is not available for this course.

$104.00

XCM 2722

Introduction to Dreamweaver MX 2004

If you want to be a Web designer, you need to know Dreamweaver MX 2004. In this highly-interactive, project-oriented course, a Web pro will help you harness the full potential of this industry-standard development tool. You'll find out how to create, arrange, and format text, images, hyperlinks, tables, and various other media types. You'll also examine intelligent page design - with an emphasis on avoiding common layout errors. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 2724

Web-Based Introduction to Adobe Framemaker 7.1

If you want to be a technical writer, you need to learn Adobe Framemaker, the gold standard for publishing technical documentation. In this practical, hands-on course, a seasoned professional will show you how to take advantage of Framemaker's renowned ability to handle large, complex documents for both print and online. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$110.00

XCM 2726

Web-Based Advanced Microsoft Excel 2003

Maximize your investment in MS Excel by learning advanced techniques that most users don't even know exist. In this practical, hands-on course, you'll learn how to use scenarios and data tables to quickly perform multiple what-if analyses. You'll discover a variety of advanced pivot table techniques like creating calculated fields and calculated items. You'll be able to use validation to protect the integrity of your worksheets from other, less experienced users. You'll become adept at consolidating and importing data, and you'll learn the act of conditional formatting to highlight duplicate entries and other common worksheet problems. Impress your co-workers by learning how to add functional and eye-catching controls to any worksheet, and find out how to nest one function inside another to accomplish just about anything that Excel has to offer. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 2727

Introduction to Macromedia Director MX 2004

Master the world's leading multimedia production tool and gain skills that are in high demand. Learn how to create high-impact applications for distribution on CD-ROMS and the Web. Combine text, graphics, audio, video, and animated elements to create dazzling , interactive presentations, even if you are completely new to the world of media and animation. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 2728

Web-Based PMP Certification Preparation I

Learn how to prepare for the Project Management Institute's prestigious PMP certification exam. Master the first six chapters of A Guide to the Project Management Body of Knowledge (PMBOK Guide), 3rd edition--the most essential resource for the PMP certification exam. Learn all about the nine Project Management Knowledge Areas, five Process Groups, and 44 project management processes. Raise your project management IQ by discovering tips and techniques related to the questions you'll encounter on the PMP exam. Use proven learning strategies to help absorb key terminology, concepts, and formulas. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$299.00

XCM 2729

Web-Based PMP Certification Preparation II

Prepare to take--and pass--the Project Management Institute's PMP certification

exam. Master chapters seven through twelve of A Guide to the Project Management Body of Knowledge, the most essential resource for the PMP certification exam. Learn all about the nine Project Management Knowledge Areas, five Process Groups, and 44 project management processes. Raise your project management IQ by discovering tips and techniques related to the questions you'll encounter on the PMP exam. Use proven learning techniques to help you absorb key terminology, concepts, and formulas. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$299.00

XCM 2730

Web-Based PMP Certification Prep I

Learn how to prepare for the Project Management Institute's prestigious PMP certification exam. Master the first six chapters of A Guide to the Project Management Body of Knowledge (PMBOK Guide), 3rd edition--the most essential resource for the PMP certification exam. Learn all about the nine Project Management Knowledge Areas, five Process Groups, and 44 project management processes. Raise your project management IQ by discovering tips and techniques related to the questions you'll encounter on the PMP exam. Use proven learning strategies to help absorb key terminology, concepts, and formulas. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$299.00

XCM 2731

Web-Based PMP Certification Prep II

Prepare to take--and pass--the Project Management Institute's PMP certification exam. Master chapters seven through twelve of A Guide to the Project Management Body of Knowledge, the most essential resource for the PMP certification exam. Learn all about the nine Project Management Knowledge Areas, five Process Groups, and 44 project management processes. Raise your project management IQ by discovering tips and techniques related to the questions you'll encounter on the PMP exam. Use proven learning techniques to help you absorb key terminology, concepts, and formulas. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$299.00

XCM 2732

Web-Based Design Projects for Adobe Illustrator CS2

Practice while you learn the fundamentals of Adobe Illustrator CS2 with useful design projects. Master Illustrator's drawing tools, including the Pen tool. Learn how to use Illustrator's many image-editing features. Reinforce your Illustrator skills as you explore the elements of composition, color, and typography, along with secrets of good graphic design. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 2733

WB: Intermediate Photoshop CS2

Learn the secrets of professional image editing from a 2006 nominee to the Photoshop Hall of Fame. If you already understand the basics of the Photoshop toolset, this course will help you explore new and better techniques you can use to create images, edit photos, and combine existing images in amazing ways. Note: Please confirm computer requirements before registering for this course,

web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 2734

Web-Based Introduction to Microsoft Visio 2003

In today's fast-paced, technology-driven workplace, you need clear communication to get ahead. Learning to create professional-looking diagrams in Microsoft Visio 2003 will take your skills set to the next level. Follow along as a seasoned industry professional leads you through easy-to-follow projects and exercises to design diagrams based on industry standards and best practices. You'll learn how to use Visio's many features and functions to make your diagrams pop. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 2735

Web-Based Creating Web Pages II

Are you using HTML to its fullest potential? In this hands-on course, you'll become adept at using color, tables, and frames to give your Web pages a more polished and professional look, improved navigation, and more organization. Beef up the fun factor with audio and interactive forms, and learn how to save hours of time and effort with Cascading Style Sheets. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$110.00

XCM 2736

Web-Based Introduction to CSS and XHTML

Learn how to create state-of-the-art Web sites using modern CSS and XHTML techniques. Take your existing HTML skills to the next level and start building sites like the pros. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 2737

Web-Based Introduction to Flash 8

Learn how to create exciting interactive animations from a working Flash designer and author with more than a decade of experience in Flash development. Discover how to create animations, build online applications, manage photos, integrate video, and upload your very own Flash presentations to a Web site. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 2738

Web-Based Introduction to ASP.NET

Learn how to create exciting, interactive, and professional Web sites with ASP.NET. In this hands-on course, you'll begin by adding the power of interactive controls to your Web pages, and you'll discover how you can use style sheets to give every Web page you create the same clean and consistent look and feel. You'll find out how to connect to a database and put the information it contains on public display. Then, you'll develop a true community-based Web site that allows users to register, log in, create and update profiles, and post messages to a

forum. You'll also explore the issue of Web security, and learn some simple things you can do to secure your site against some common attacks. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 2739

Web-Based The Classroom Computer

Discover how the classroom computer can ignite a desire for learning in your students! You'll discover a wide variety of simple, field-tested techniques guaranteed to unleash the power of the computer throughout your curriculum. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 2740

Web-Based Excel 2003 in the Classroom

Learn the basics of Microsoft Excel 2003 while exploring ways both you and your students can benefit from this powerful program. You'll learn Excel terminology, how to use the toolbars; how to sort data; how to insert formulas for addition, subtraction, multiplication, and division, how to create colorful charts and graphs; and much more! Throughout the course, you'll explore standards-based lesson plans and activities that will allow you to pass your Excel knowledge on to your students, no matter what their grade level. By the end of this course, you'll have a solid understanding of the basic functions of Excel, and a wealth of ideas for integrating Excel technology into lesson plans across your curriculum. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 2741

Web-Based Word 2003 in the Classroom

Mastering Microsoft Word can make you a more productive and creative teacher. Throughout this course, you?ll learn to create, open, edit, and save documents, as well as create tabs and margins, change alignment and line spacing, add clip art and tables, and complete a host of other exciting tasks. As you get more familiar with this program, you'll likely find that it enhances your teaching in ways you didn't think possible. Join us on this exciting journey into Microsoft Word. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 2742

Web-Based Intermediate Visual Basic 2005

Gain in-demand skills writing sophisticated Windows programs that access and modify business databases and implement Structured Query Language. This course will be ideal if you're a Visual Basic programmer and want to upgrade your programming skills or prepare yourself for a new and exciting line of work. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$150.00

XCM 2743

Web-Based Top Search Engine Positions

With nearly 90% of web traffic coming from search engines, the most important thing you can do to increase your web site's traffic is to increase your search engine ranking. Learn proven, step-by-step strategies to achieve the highest position with the major search engines.   Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$110.00

XCM 2744

Web-Based Learn to Buy and Sell on E-Bay

Online auctions match buyers with sellers in a global marketplace for almost any item. If you've ever dreamed of working from home or just earning extra income by buying and selling goods online, our experienced instructors will guide you every step of the way. You'll learn how to create titles that get noticed, how to craft advertising copy that sells items quickly and for top dollar, and how to create and upload photos of the items you are selling. You'll also learn how to safely conduct financial transactions, how to accept credit card payments, and how to pack and ship any item hassle-free. If you're a buyer, you'll learn how to value almost any item up for auction, how to get the best possible price, how to protect yourself against fraud, and how to compete effectively against other bidders. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 2745

Web-Based Introduction to Windows Vista

Windows Vista is a radical departure from the Windows of yesteryear. Whether you're a beginner or an experienced Windows user, you won't want to miss out on everything this powerful new version has to offer. In this course, specifically designed for beginners and casual users, you'll learn to use Vista's best and most important features.   Note: Please confirm computer requirements before registering for this class. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$110.00

XCM 2746

Web-Based Integrating Technology in the K-5 Classroom

Join us for an exciting and fun-filled tour of the technology-friendly classroom. Educational technology is advancing at an astounding rate, offering today's busy teacher quick and easy solutions for more interactive lesson plans, exciting WebQuests, and challenging assignments. Discover the power and creativity that technology can bring to your classroom as we look at basic integration, subject-specific activities, and smart ways to make your integration seamless. Take your teaching to another level with these fun new ways to incorporate technology into your lesson plans.   Note: Please confirm computer requirements before registering for this course. Web registration is not available.   After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 2747

Web-Based Intermediate Photoshop CS3

Learn the secrets of professional image editing from a 2006-2007 nominee to the Photoshop Hall of Fame. This course, for the student who already knows the Photoshop toolset, explores new and better ways to create images and edit photos. Students will explore the sophisticated layers features that allow users to combine images in amazing ways.   Note: Please confirm computer requirements before registering for this course. Web registration is not available. After

registration, complete the required on-line orientation at www.ed2go.com/jccc.

$79.00
XCM 2748

Web-Based Introduction to Microsoft Word 2007

Learn to use the word processor PC Magazine ranked as one of the 'strongest and most intelligent programs ever written.' In this hands-on workshop, you'll learn how to add, move through, and edit text, move words from one part of your document to another, work on two or more documents simultaneously, change the size or appearance of text, change margins and tab settings, automatically center, right align, justify, and indent text; run the integrated grammar and spelling checker; use the thesaurus, and save, retrieve, copy, organize, and print your documents. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$110.00
XCM 2749

Web-Based Introduction to Microsoft Excel 2007

Work with numbers? Then you need to learn Excel 2007. In this unique six-week online workshop, you'll discover dozens of shortcuts and tricks for setting up fully formatted worksheets quickly and efficiently. You'll also learn the secrets behind writing powerful mathematical formulas, using the function wizard to quickly and automatically calculate statistics, loan payments, future value, and more. You'll also learn the best ways to sort and analyze data, create custom charts and graphs, create 3-dimensional workbooks, build links between files, endow your worksheets with decision-making capabilities, and automate oft-repeated tasks with macros and buttons. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$110.00
XCM 2750

Web-Based Introduction to Microsoft Access 2007

Learn how Microsoft's powerful and award-winning database can help you manage, store, search, analyze, and display important information you've collected about your business, home, community, or any other entity. In this practical and project oriented hands-on workshop, you'll learn how to create tables filled with fields and records. You'll build relationships between the tables to eliminate redundancies and slash data entry time. You'll discover how to achieve huge reductions in data entry errors by setting default values, creating validation rules, and building input masks. You'll find out how to make your database more user-friendly with custom data entry forms, smart lists, and other sophisticated controls. You'll learn how to retrieve exactly what you need from your database with powerful queries and reports, and you'll even start automating routine tasks with labor-saving macros. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$110.00
XCM 2751

Web-Based Introduction to Microsoft Outlook 2007

Want to learn Microsoft Outlook 2007 fast? Want to become a confident and productive user of this powerful program without having to memorize a lot of technical mumbo-jumbo? In this course, you'll see what's new in Outlook 2007 and get up and running quickly with the most important aspects of the program, from basic e-mailing to automating your work with rules. You'll learn security basics and how to perform maintenance tasks, like backing up your data. You'll even create a Google Gmail account for class assignments and personal use. You'll also interact with other students and an instructor whose Outlook books,

articles, and online courses have helped thousands of people like you learn the essentials of earlier editions of Outlook. Whether you're new to Outlook or you've been using it for years, you're sure to learn something useful in every lesson. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$110.00

XCM 2752

Web-Based Introduction to Microsoft PowerPoint 2007

Learn how to use Microsoft PowerPoint 2007-- the best presentation program on the market today. This version of PowerPoint is very different from previous versions because of its new interface in which a Ribbon replaces the menu bar and toolbars. You'll find out how to create dazzling slide presentations consisting of slides that contain text, objects, animation, slide transitions, sounds, charts, outlines, media clips, clip art, and hyperlinks. You'll learn how to work with the new PowerPoint Ribbon, task panes, the clip organizer, and how to access Microsoft's Web site to download clip art and templates for your presentations. You'll see how to make global changes to your slides with the Slide Master. Finally, you'll discover how to save your presentations so you can share them online or copy them onto CDs.   The instructor will share valuable tips and keyboard shortcuts that you'll use all the time with PowerPoint 2007. She'll also provide you with many links to Web sites to broaden your knowledge of PowerPoint even further. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$110.00

XCM 2753

Web-Based Introduction to Microsoft Project 2007

Discover how to effectively plan, implement, and control projects using Microsoft Project 2007. Learn how to apply the world's most popular project management software to convert your lists and schedules into an integrated plan you can be proud of. See how Microsoft Project helps you think through and organize your project's details, sequence tasks, produce a baseline, assign resources and costs, track progress, identify and analyze variances, and revise your project plan. You'll discover the basics of Microsoft Project 2007 so you can create a project schedule in no time flat. Once you construct a basic schedule, you'll learn how to enlarge and share it with clients and coworkers. After completing the course, you'll know how to develop, implement, and control a project plan that meets organizational and customer objectives. The course will help you avoid going down dead-end alleys and also prevent you from overloading your schedule. Should you encounter trouble on your project, you'll be able to apply a number of tried-and-true problem-resolution techniques to help get back on track. You'll learn how to fine-tune different aspects of your project, including splitting tasks for work interruptions and defining material consumption rates.   Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$110.00

XCM 3400

Excel 2007 Fundamentals

After an introduction to spreadsheet terminology and Excel's window components, explore how to use the Help system and navigate worksheets and workbooks. Work with the new interface in Excel 2007 to perform the typical actions necessary to create worksheets and workbooks. Enter and edit text, values, formulas, and pictures, and save workbooks in various formats. Explore how to move and copy data, and work with rows and columns. This course also covers basic formatting techniques and printing. Finally, create and modify charts. Prerequisites: Strong competence with Windows, keyboard and mouse. Some familiarity with spreadsheet concepts.

$179.00

XCM 3401

Excel 2007 Intermediate

Investigate functions and formulas, and the use of named ranges to work more efficiently. Explore the use of Excel worksheets as a database, by using sorts and filters, as well as arrays for data handling. Enhancing workbooks will be covered, by using text boxes, WordArt and clip art, as well as the use of embedding objects in worksheets. Explore the methods to protect data. Investigate the use of Excel in Word, Access, and with other applications. Finally, examine the ways to embed internet resources by using links, saving workbooks as web pages, as well as creating a PDF from a workbook, and integrating web-based data into workbooks. Prerequisite: Excel 2007 Fundamentals.

$179.00

XCM 3402

Excel 2007 Advanced

Work with advanced formulas, as well as lookup functions such as VLOOKUP. Explore data validation and database functions such as DSUM. Discover how to work with PivotTables, what if analysis, and use Scenarios. Expert level topics on form controls and advanced functions will advance understanding of Excel. Learn about the analytical features of Excel (such as Goal Seek and Solver), running and recording macros, and the use of XML in Excel. Prerequisite: Excel 2007 Intermediate.

$179.00

XCM 3404

Excel Specialist Certificate - 2003

Receive instruction in our complete lineup of Excel classes. Build a solid foundation with Excel Fundamentals 2003 and Excel Intermediate 2003 before moving on to more advanced topics in Excel Advanced 2003. Once completed, either take the MOS exam at our Prometric testing center or use your Center for Business Excel Specialist Certificate to verify your competency. Prerequisite: Knowledge of Windows, keyboard and mouse.

$479.00

XCM 3405

Excel Fundamentals - 2003

Designed for students with limited Excel experience. Gain proficiency with entering and editing data, modifying a worksheet, using functions, printing, creating charts and basic web features. Prerequisite: Knowledge of Windows, keyboard and mouse.

$179.00

XCM 3406

Excel Intermediate - 2003

Create simple worksheets and charts that will be used for internal reports and data tracking. Work with large worksheets, multiple worksheets and multiple workbooks as you use 3-D formulas for linking and consolidating data. Customize menus and toolbars and use advanced formatting to make Excel work for you. Explore list management, advanced charting, auditing features,and templates. Prerequisite: Excel Fundamentals 2003 or comparable knowledge.

$179.00

XCM 3407

Excel Advanced - 2003

Perform advanced tasks, such as creating nested functions and using advanced

formulas. Work with data tables, PivotTables and PivotCharts. Export/import data, perform what-if analyses, record macros, and publish worksheets as Web pages. Prerequisite: Excel Intermediate 2003 or comparable knowledge.

$179.00

XCM 3408

Excel Power User - 2003

Designed for the experienced Excel user who wants to gain proficiency in how to use formulas, functions, arrays, and add-ins for manipulating and analyzing data. Prerequisite: Excel Advanced 2003.

$99.00

XCM 3409

Excel 2007 Specialist Certificate

Receive instruction in our complete lineup of Excel 2007 classes. Build a solid foundation with Excel Fundamentals 2007 and Excel Intermediate 2007 before moving on to more advanced topics in Excel Advanced 2007. Once completed, either take the MOS exam at our Prometric testing center or use your Center for Business Excel Specialist Certificate to verify your competency. Prerequisite: Knowledge of Windows, keyboard and mouse.

$479.00

XCM 3411

Excel VBA Programming - 2003

Create procedures that run in response to specific events, create user forms to accept or display data, validate the data entry in user forms, and debug and handle errors in code. Explore the Visual Basic Editor (VBE) as you begin programming basics and application development. Prerequisite: Excel Advanced 2003 or comparable knowledge.

$179.00

XCM 3415

Excel Customization and Data Analysis

Use formulas, functions, arrays, and add-ins for manipulating and analyzing data. Explore advanced editing and formatting features, advanced graphics and chart customization, analyzing and sharing data, and advanced customization. Prerequisite: Excel Intermediate or comparable knowledge.

$169.00

XCM 4000

Adobe Photoshop Fundamentals

Familiarize yourself with digital image editing using Photoshop. Examine the tools and features as you edit graphic imagery in the Photoshop environment. You will work with Photoshop?s powerful selection and layer tools. In addition, work with tools for painting, altering, and enhancing images. Save images for web, print and to Acrobat. The course material maps to the Adobe Certified Expert Exam, available through the Testing Center at the Center for Business. Prerequisite: Familiarity with Windows, keyboard and mouse.

$299.00

XCM 4001

Adobe Photoshop Web Production

This course will familiarize you with concepts and techniques important for optimizing images for display on the Internet, including image animation. Prerequisite: Adobe Photoshop Fundamentals, Adobe Photoshop Advanced.

$189.00

XCM 4002

Adobe Photoshop Advanced

Begin working with advanced image editing tools using masking techniques available in Photoshop. Learn about tools used for retouching photographic imagery. Work with the latest Photoshop filter and video advancements. Use tools to record and automate Photoshop tasks as well. The course maps to the Adobe Certified Expert exam, given at the Testing Center at the Center for Business. Prerequisite: Photoshop Fundamentals or comparable knowledge.

$299.00

XCM 4005

Adobe Photoshop Elements: Working with Photos

Photoshop Elements opens the door for amateur photographers, business users, students, and home users who want professional-looking images for their print and Web projects. Capture photos from traditional or digital cameras, reduce red eye, correct color, work with layers, erase backgrounds, create photo-illustrations and Web graphics, simulate painting and drawing techniques, apply artistic effects, and more. Prerequisite: Familiarity with Windows, keyboard and mouse.

$249.00

XCM 4006

Adobe Premiere Elements: Video & DVD Creation

Learn how to make impressive home videos using Adobe Premiere Elements. Use either still photos or video to create high quality movies and DVD's.

$249.00

XCM 4100

Adobe Illustrator Fundamentals

Adobe Illustrator is a sophisticated digital drawing program. Illustrator allows you to create attractive illustrations and type effects for use in logos, advertisements, and other illustrations. In this course, you will start by drawing and manipulating simple shapes to create logos, and then combine text and graphics to create advertisements. Prerequisites: Knowledge of Windows, keyboard and mouse.

$199.00

XCM 4102

Adobe Illustrator Advanced

Expand on your skills to create more complex illustrations. Receive a better understanding of how to print documents without any errors or color mismatches. Discover how to prepare illustrations for the Web. Create complex, robust illustrations that go beyond those created using Illustrator's basic tools. Prerequisite: Illustrator Fundamentals or equivalent knowledge.

$199.00

XCM 4152

Fireworks: Web Graphics and Interactivity

Work with Fireworks to gain better control over editing vector and bitmap graphics and also make web graphics appear the way you had intended. Explore the tools and features of Fireworks to create and edit vector and bitmap graphics, apply interesting effects, as well as add graphical text to web pages. Prerequisite: Proficiency with Windows, keyboard and mouse.

$299.00

XCM 4153

Web Site Design with Fireworks and CSS

This one-day class explores web site design using two tools to create and build a web page layout. We begin with using Adobe Fireworks to build the look of the site layout. We use Fireworks graphic tools to building a multi-column web page with rounded corner boxes, gradients, and text. Once we've built the look of the site, we then use hand-coded Cascading Style Sheets to turn the Fireworks layout into an identical CSS-driven layout. Once the layout is built in CSS, we use Dreamweaver to generate multiple pages to complete the framework of the site. Prerequisites: Experience with HTML, Adobe Fireworks, and Cascading Style Sheets.

$299.00

XCM 4154

3D Modeling with Google Sketchup

Course description Google's Sketchup application allows you to build in 3D. Sketchup manages perspective, shading, angles, and rotation as you build, making the 3D modeling process more intuitive and doesn't require drawing skills to execute. The course begins with an overview of the Sketchup's interface, followed by an orientation of the tools, including measurement tools, painting and texturing tools, and selection tools. We then build a simple building, followed by a house with walls, stairs, a hip roof, interior walls, doors and windows. Sketchup uses layers and components to keep our drawings organized, and we explore their uses. Once we've finished the simple house plan, we use Sketchup to build everyday objects for our models, such as handrails or gutters for our house model. We can then add styles, shadowing, and sections to modularize and enhance our drawings. We finish with printing, exporting, and sending your model to Google Earth.

$189.00

XCM 4200

Access 2007 Fundamentals

After an introduction to database terminology and Access's interface, explore how to use the help system and Microsoft's new Trust Center to ensure security. Explore the new interface in Access 2007 to perform the typical actions necessary to create databases. Create basic databases, and explore the use of queries, forms, reports, views and printing of database objects. Prerequisite: Strong competence in Windows, keyboard and mouse. Familiar with database concepts.

$189.00

XCM 4201

Access 2007 Intermediate

Begin by studying the tools in Access to maintain Access databases and export database information to other formats. Explore the techniques and tools to work with database tables, including referential integrity. Creating input masks, lookup fields and techniques to validate data entry will be covered. Work with form controls by adding, setting properties, and formatting. Build basic queries, multiple table queries, and advanced query techniques. Conclude by working with the report building tools built into Access. Prerequisite: Access 2007 Fundamentals.

$189.00

XCM 4202

Access 2007 Advanced

Begin with an examination of referential integrity to assure the quality of the data in the database. Perform advanced techniques with forms, including using subforms, exporting forms, and the use of switchboards and modal dialog boxes. Use advanced query techniques to expand the usefulness of the database. Visually representing data will then be accomplished using PivotTables and PivotCharts. Finally, examine the basics of SQL in Access, as well as an

introduction to building macros and scripts to automate our database work. Prerequisite: Access 2007 Intermediate.

$189.00

XCM 4203

Access 2007 Specialist Certificate

Receive instruction in our complete lineup of Access 2007 classes. Build a solid foundation with Access Fundamentals 2007 and Access Intermediate 2007 before moving on to more advanced topics in Access Advanced 2007. Once completed, either take the MOS exam at our Prometric testing center or use your Center for Business Access Specialist Certificate to verify your competency. Prerequisite: Knowledge of Windows OS, ability to use keyboard and mouse with proficiency and a basic knowledge of database use.

$499.00

XCM 4204

Access 2007 VBA Programming

Learn about ActiveX data objects, control structures, and the basics of VBA programming. No programming knowledge required. Prerequisite: Access Advanced 2007, Access Application Development 2007 strongly recommended.

$189.00

XCM 4205

Access 2007 Application Development

The Access Application Development class teaches you advanced techniques to customize access to a database. The course demonstrates the techniques to build a user friendly front-end to a database, which helps users manipulate the database more easily, while avoiding errors or invalid data entry. The course demonstrates techniques to automate frequently used tasks with macros and VBA code. This simplifies complex and repetitive tasks for the developer and the database user. The class guides you through the process to create and implement splash screens to welcome users to the database. After building the splash screen, we build a switchboard to help the database user both manipulate the database components, and execute the common tasks the developer makes available to the user. The class demonstrates how to customize the menu bar, toolbars and shortcut menus to control access to the database design tools. Finally, the course covers the design tools available to build a properly designed application. Database applications that are properly designed, as shown in this class, can be designed to help prevent data entry errors and validate the data entry process.

$189.00

XCM 4219

Access Specialist Certificate - 2003

Receive instruction in our complete lineup of Access 2003 classes. Build a solid foundation with Access Fundamentals 2003 and Access Intermediate 2003 before moving on to more advanced topics in Access Advanced 2003. Once completed, either take the MOS exam at our Prometric testing center or use your Center for Business Access Specialist Certificate to verify your competency. Prerequisite: Knowledge of Windows OS, ability to use keyboard and mouse with proficiency and a basic knowledge of database use.

$499.00

XCM 4220

Access Fundamentals - 2003

Designed for students with limited Access experience. Explore how to use the Table Wizard, AutoForm, the Report Wizard, and filtering. Discuss database concepts, database planning and design, data entry rules and simple queries.

Create forms and reports. Prerequisite: Knowledge of Windows, keyboard and mouse.

$189.00
XCM 4225

Access Intermediate - 2003

Work with concepts such as relating tables, referential integrity, joins, complex queries, advanced form design, advanced reports, charts, PivotTables, PivotCharts, and Internet integration. Prerequisite: Access Fundamentals 2003 or comparable knowledge.

$189.00
XCM 4230

Access Advanced - 2003

Explore advanced techniques such as: querying with SQL; using crosstab, parameter, and action queries; creating and running macros; importing, exporting, and linking database objects; optimizing, replicating and synchronizing databases; and basic database security. Prerequisite: Access Intermediate 2003 or comparable knowledge.

$189.00
XCM 4232

Access Developer Certificate - 2003

Finish off your Access education as you explore the most advanced features of Access and work with SQL. Class includes Access Application Development, Access VBA Programming and SQL Fundamentals curriculums. Prerequisite: Access Advanced - 2003 or comparable knowledge.

$599.00
XCM 4233

Access VBA Programming - 2003

Learn about ActiveX data objects, control structures, and the basics of VBA programming. No programming knowledge required. Prerequisite: Access Advanced 2003, Access Application Development 2003 strongly recommended.

$189.00
XCM 4234

Access Workshop

The Access Workshop offers you the opportunity to fine-tune your database work in a classroom setting with the assistance of the Center for Business's database instructors. Bring in your files, content, and supporting files for a day of hands-on work on your database. Prerequisites: Access Intermediate or above.

$189.00
XCM 4236

Access Application Development - 2003

The Access Application Development class teaches you advanced techniques to customize access to a database. The course demonstrates the techniques to build a user friendly front-end to a database, which helps users manipulate the database more easily, while avoiding errors or invalid data entry. The course demonstrates techniques to automate frequently used tasks with macros and VBA code. This simplifies complex and repetitive tasks for the developer and the database user. The class guides you through the process to create and implement splash screens to welcome users to the database. After building the splash screen, we build a switchboard to help the database user both manipulate

the database components, and execute the common tasks the developer makes available to the user. The class demonstrates how to customize the menu bar, toolbars and shortcut menus to control access to the database design tools. Finally, the course covers the design tools available to build a properly designed application. Database applications that are properly designed, as shown in this class, can be designed to help prevent data entry errors and validate the data entry process.

$189.00

XCM 5102

Publisher Fundamentals - 2003

Discover Microsoft Publisher, a flexible, easy-to-use program for creating newsletters, brochures, business cards, postcards, fliers, and more, for print, e-mail, and the Web. Explore how to create a publication from scratch or use one of the hundreds of business and personal designs available in Publisher. Prerequisite: Experience with Windows and Word Fundamentals or equivalent knowledge.

$189.00

XCM 5103

Publisher 2007 Fundamentals

We'll begin by creating a basic publication by adding and formatting text. Text boxes are an important tool for page layout, and we'll use them in a number of ways to flow text through our layouts. Graphics and images enhance our publications, and we'll work with WordArt and Autoshapes to quickly add graphic content. Building a consistent look and feel in our publications is critical, and we'll use several tools to arrange objects in our layouts quickly and easily. Finally, we'll use print tools to preview our publication before printing. Prerequisites: Competent with Windows, mouse and keyboard.

$189.00

XCM 5104

Publisher 2007 Advanced

Our starting point for the intermediate course is editing graphics, text and the entire publication. Publications offer the greatest impact when they are produced consistently, and we'll use master pages and styles to achieve that consistent look and feel. We'll then use tables to present information to our readers in a structured fashion, and add to our audience's view of the publication using headers, footers, color schemes, and font schemes. We'll finish with preparing our publication for reproduction, including proofing tools, and various techniques to assure the best reproduction. Setting options for Publisher allows us to control our work and our output, and our session finishes with customizing Publisher for our working environment. Prerequisites: Publisher 2007 Fundamentals.

$189.00

XCM 5500

PowerPoint 2007 Fundamentals

Create slides for presentations using Powerpoint 2007's new interface. Explore slide formatting, the use of background colors, gradients, textures and pictures to enhance the presentation. Add information to the headers and footers, and rearrange slides to best present information. Format the text content by using font formatting, lists, and proofing tools such as spell checking, the thesaurus, and the Research Task Pane. Conclude the session with printing techniques for distributing presentations. Prerequisite: Competent with Windows, keyboard and mouse.

$169.00

XCM 5501

PowerPoint 2007 Advanced

Adjust PowerPoint's default behavior, then work with multiple presentations to combine presentations or link presentations. Investigate the techniques to deliver presentations for different situations, and the methods to create photo albums using PowerPoint, as well as using linking tools to manipulate the content. Examine techniques to work on presentations in a team environment. Add voice narration, background music, and finish with using macros to automate the production of our presentations. Prerequisites: PowerPoint 2007 Fundamentals.

$169.00

XCM 5505

PowerPoint Fundamentals - 2003

Designed for students with little or no PowerPoint experience. Build new presentations while formatting slides, using drawing tools, working with graphics, tables and charts. Work with the slide master, add transitions and timings, create speaker notes and footers, and set up slide shows. Prerequisite: Knowledge of Windows, keyboard and mouse.

$169.00

XCM 5510

PowerPoint Advanced - 2003

Use PowerPoint's advanced features to create enhanced presentations. Build custom presentations by modifying templates, using multimedia, using organization charts and tables, and adding special effects. Even add Office integration with Word and Excel. Prerequisite: PowerPoint Fundamentals - 2003 or comparable knowledge.

$169.00

XCM 5512

PowerPoint Workshop

The PowerPoint Workshop offers you the opportunity to fine-tune your presentation work in a classroom setting with the assistance of the Center for Business?s PowerPoint instructors. Bring in your files, content, and supporting files for a day of hands-on work on your presentation. Prerequisites: PowerPoint Intermediate or above.

$169.00

XCM 6000

Programming Fundamentals

Ready to become a programmer, or just want an introduction to object oriented skills? Receive an introduction to Classes, Objects, Behaviors, Attributes and other object-oriented topics such as inheritance and exception handling. This is a language-independent class using an object-oriented approach to programming logic, the solid foundation needed to build 21st-century business applications and successful Web sites. Prerequisite: Proficiency with Windows, keyboard and mouse.

$449.00

XCM 6001

Ruby on Rails

We'll use the interactive Ruby shell to learn key features of Ruby, as well as extend Ruby by using RubyGems, the Ruby package manager. The course will explore the techniques to implement functional and meta-programming techniques to save you time. We'll investigate optimization and profiling tools for testing code. Along the way, we'll create a web application using Rails. Prerequisite: Programming knowledge.

$499.00

XCM 6139

Visual Basic 2005 Jump Start

Focus on the new version of Visual Studio, Visual Studio 2005, and on the changes and enhancements to Visual Basic 2005. Discover key features such as enhancements to Visual Studio, the Visual Basic language, building Visual Basic desktop, mobile and web applications, and data access with ADO.NET 2.0. Prerequisite: Working knowledge of Visual Basic.NET or another .NET programming language.

$349.00

XCM 6141

Visual Basic 2005

Create programs in Visual Basic 2005 using a clean, conceptual approach. Whether new to programming or just wanting to upgrade your programming skills, you'll receive comprehensive instruction in the Visual Basic 2005 programming language.

$999.00

XCM 6143

Programming Visual Basic .NET with ADO

ADO.NET-the data-access component of the Microsoft .NET Framework-works with any component on any platform that understands XML. Get a solid handle on ADO.NET and learn how to exploit the database functionality of Microsoft Visual Basic.NET. Work with ADO.NET object model and how to use it to develop data-bound Windows forms and Web forms. See how ADO.NET interacts with XML and how to access older versions of ADO from the .NET environment. Prerequisites: Visual Basic.NET Fundamentals.

$799.00

XCM 6168

ASP.NET Fundamentals

This is the next generation of Active Server Pages! Revolutionizing the way Web applications are developed, ASP.NET is built on Microsoft's .NET framework with new functionality to ASP to make Web application development easier and more tool friendly. In this introductory course, receive an introduction to ASP.NET and Visual Studio.NET, the use of Server Controls and ASP.NET Rich Controls. Prerequisite: Programming knowledge or background, and a familiarity with HTML.

$579.00

XCM 6171

ASP.NET Advanced

Develop and deploy your ASP.NET applications. In this advanced-level class, work on configuring an ASP.NET application, troubleshooting and deploying an ASP.NET application, creating XML Web Services, and extending ASP.NET applications. Prerequisite: ASP.NET Fundamentals.

$459.00

XCM 6200

C# with ASP.NET

Revolutionizing the way Web applications are built and deployed, ASP.NET is built on Microsoft's .NET framework with new functionality to make Web application development more streamlined and simpler to create more powerful content. In this introductory course, receive an introduction to ASP.NET and Visual Studio.NET, the use of Server Controls and ASP.NET Rich Controls.

Prerequisite: Some programming background is helpful. This course will be taught using Visual C# and Visual Studio

$459.00

XCM 6201

C#: Introduction for Developers

The software development industry has gone through several revolutions over the last 50 years, the most recent of which is the introduction of Microsoft's .NET platform. As a programmer, you will want your skills on the leading edge of this revolution. Of all the languages targeting the .NET platform, C# has been tailor-made for future .NET developers. Prerequisite: Knowledge of programming principals.

$999.00

XCM 7200

MS Project Fundamentals

The smart way to learn Microsoft Project! Develop a project plan with tasks, resources and assignments, master the tools for presenting your plan and creating reports. Track progress and costs, and make real-time adjustments. Learn techniques for managing multiple projects and dependencies. Prerequisite: Knowledge of project management terms and functions, experience working with Windows, keyboard and mouse.

$359.00

XCM 7250

Visio 2003 Fundamentals

Discover the key functions and features of Visio Professional. Explore basic drawing techniques, create basic diagrams, develop document layouts and use custom features. Prerequisite: Experience with Windows, keyboard and mouse.

$189.00

XCM 7251

Visio 2003 Advanced

Work with the more advanced features of Visio. Advanced flowcharts, use formulas, control shape behavior, use layers and work with linked objects. Prerequisite: Visio Fundamentals.

$189.00

XCM 7252

Visio 2007 Fundamentals

We'll begin by creating a basic document, and then we'll investigate the new interface in Visio 2007. Visio makes use of templates for basic drawings, and we?ll leverage the use of the pre-installed templates, stencils, and shapes to produce drawings quickly. We'll work with text and shape formatting tools to enhance our work. By exploring font and shape formatting we'll add structure to our drawings. Next, we'll add layers, graphic objects, and links to add more information for our audience. Our work may require shapes and stencils that Visio does not include, and we'll create our own. Finally, we'll use navigation and drawing tools to manage our drawings, and prepare them for printing. Prerequisites: Competent with Windows, mouse and keyboard.

$189.00

XCM 7253

Visio 2007 Advanced

Work with the more advanced features of Visio 2007. Advanced flowcharts, use

formulas, control shape behavior, use layers and work with linked objects. Prerequisite: Visio 2007 Fundamentals.

$189.00

XCM 8101

Introduction to the Internet

Explore the basic concepts, technologies and resources of the Internet and World Wide Web. Learn how the Internet works, how to search the Internet and how to use other Internet resources such as e-mail and newsgroups. Prerequisite: Experience with Windows, keyboard and mouse.

$159.00

XCM 8251

A+ Certification Series

Start your IT training off in the right direction. Build a solid foundation with our A+ Essentials and A+ IT Technician classes as you start your IT career. Mapped toward both of CompTIA's A+ exams, this series will help prepare you for the industry recognized A+ certification. The exam vouchers alone have a $290 value. Prerequisite: Knowledge of Windows operating system and basic computer hardware.

$1,299.00

XCM 8252

A+ IT Technician: 220-602

Learn how to support PC hardware in a business setting, including installation, troubleshooting, and component replacement. The target student for this course is responsible for maintaining PCs in their workplace. Prerequisite: CompTIA A+ Essentials course or equivalent experience.

$699.00

XCM 8253

Test Prep: A+ Operating Systems

Take as much time as you need to prepare for the A+ OS exam. In this self-paced, non-instructor led class you will receive an A+ OS LabSim CD and the A+ OS Exam Voucher, a $145 value. Study at home or use one of our computer labs to get yourself ready to pass the A+ OS exam. Match this with our A+ Operating Systems class and you will receive the best of instructor led training to supplement your CD based instruction. When enrolling on-line, please call 913-469-2323 to inform us of your enrollment so that we can mail the materials to you.

$199.00

XCM 8254

Test Prep: A+ Hardware

Take as much time as you need to prepare for the A+ Hardware exam. In this self-paced, non-instructor led class you will receive an A+ Hardware LabSim CD and the A+ Hardware Exam Voucher, a $145 value. Study at home or use one of our computer labs to get yourself ready to pass the A+ Hardware exam. Match this with our A+ Hardware class and you will receive the best of instructor led training to supplement your CD based instruction. When enrolling on-line, please call 913-469-2323 to inform us of your enrollment so that we can mail the materials to you.

$199.00

XCM 8255

A+ Essentials: 220-601

Mapped to the new A+ 2006 exam objectives. Obtain the skills and knowledge necessary to install, build, upgrade, repair, configure, troubleshoot, and perform preventative maintenance on personal computer hardware and operating systems. Prerequisite: Experience with desktop computers and Windows OS.

$699.00

XCM 8261

Test Prep: Network+

Take as much time as you need to prepare for the Network+ exam. In this self-paced, non-instructor led class you will receive a Network+ Lab Sim CD and the Network+ Exam Voucher, a $199 value. Study at home or use one of our computer labs to get yourself ready to pass the Network+ exam. Match this with our Networking Fundamentals and Networking Advanced classes and you will receive the best of instructor led training to supplement your CD based instruction. When enrolling on-line, please call 913-469-2323 to inform us of your enrollment so that we can mail the materials to you.

$199.00

XCM 8262

Network+ Certification Series

Combine our Networking Fundamentals class with our Network+ Test Prep CD in a package which will prepare you for CompTIA's Network+ certification. We will include an exam voucher, a $207 value, to make this an even greater deal. Prerequisite: A+ Certification or comparable knowledge.

$809.00

XCM 8263

Network Specialist Certificate Series

Prepare for your IT career as you learn about computers and networks. This foundation level certificate maps to the A+ and Network+ certifications. Exam vouchers included. Prerequisite: Basic knowledge of computer hardware and operating systems.

$1,799.00

XCM 8275

MCSA Certification Series

Take our three Microsoft classes and combine them with your A+ and Net+ certifications or your Security+ certification to achieve your MCSA. Prerequisite: A+ and Network+ certifications or equivialent knowledge.

$2,499.00

XCM 8279

Internet Marketing

Learn to use the internet as a marketing tool for your business or website. Prerequisites: Familiar with Windows and Internet Explorer, keyboard and mouse.

$299.00

XCM 8281

Computer Forensics and Investigation

Explore the skills necessary to launch and complete a successful computer investigation. Discover how to conduct a high-tech investigation, from acquiring digital evidence to reporting its findings. Coverage includes how to set up a forensics lab, how to acquire the proper and necessary tools, and how to conduct the investigation and subsequent digital analysis. Prerequisite: Competent skills with Windows, keyboard and mouse. Knowledge of Windows XP, Linux, and DOS

helpful.

$799.00

XCM 8282

Certified Ethical Hacker Training and Exam Prep (CEH)

This course provides a review of topics and exam preparation for the Certified Ethical Hacker Training & Exam Prep (CEH). The Certified Ethical Hacker (CEH) certification is a vendor neutral certification in the network security discipline of Ethical Hacking. It covers the standards and language involved in attempting to penetrate a network or computer system. The Ethical Hacker is a technical professional who uses the same knowledge and tools as a hacker to look for the weaknesses in target systems and to help prevent unauthorized penetration. This knowledge or certification applies to security officers, auditors, security professionals, site administrators, and really anyone who is concerned about the integrity of the network infrastructure. In this course students prepare for the CEH exam by studying security risks through lectures and hands-on lab exercises. Students understand and learn how to look for the weaknesses and vulnerabilities in target. In addition, the application and testing process for the CEH as well as key topics on the exam are covered.

$1,599.00

XCM 8283

CISSP Review and Exam Preparation

This course provides a review of topics and exam preparation for the Certified Information Systems Security Professional (CISSP) certification. The CISSP is globally recognized as an objective measure of competence and achievement for information security professionals. In CISSP Review and Exam Preparation students review the 10 domains of the information security practice or common body of knowledge (CBK). This course also allows students to master concepts and topics related to all aspects of information systems security. Some of the topics include security models, distributed access control methods, DBMS architectures, key cryptography algorithms, intrusion detection systems, and data network components and technologies Audience: This course is designed for information security professionals who want to further their knowledge in the ten domains of the information systems security industry's best practices. Prerequisite: Individuals wanting to sit for the CISSP certification test must be able to document a minimum of 4 years experience in the information security field or 3 years experience and a college degree

$1,599.00

XCM 8291

Security+ Certification Series

Combine our Security+ class with our Security+ Test Prep CD in a package which will prepare you for CompTIA's Security+ certification. We will include an exam voucher, a $207 value, to make this an even greater deal. Prerequisite: A+ certification, Network+ certification or equivalent knowledge.

$999.00

XCM 8294

Test Prep: Security+

Take as much time as you need to prepare for the Security+ exam. In this self-paced, non-instructor led class you will receive a Security+ Lab Sim CD and the Security+ Exam voucher, a $225 value. Study at home or use one of our computer labs to get yourself ready to pass the Security+ exam.

$199.00

XCM 8305

Networking Fundamentals

Mapped to CompTia's Network+ certification. This course introduces networking topics and terminology including topologies, protocols, media and connectors, signaling, and access methods. You'll also receive an introduction to networking hardware and the OSI model and explore TCP/IP and IP addressing. Additional topics include an introduction to IP subnetting, WAN technologies, and security and remote access protocols.

$659.00

XCM 8309

Word MOS 2003/MCAS 2007 Certification Test

This CRN is to be used when calling Continuing Education Registration to pay to take the Word 2003 MOS Certification Exam. The cost for the exam is $60. The Registration phone number is 913-469-2323. After payment has been made, students will need to call the Prometric Testing Center at 913-469-2388 to schedule a time to take the exam.

$60.00

XCM 8310

MOS 2003/MCAS 2007 Certification Test

This CRN is to be used when calling Continuing Education Registration to pay to take the MOS Certification Exams. The cost is $60 per exam. The Registration phone number is 913-469-2323. After payment has been made, students will need to call the Prometric Testing Center at 913-469-2388 to schedule a time to take the exam.

$60.00

XCM 8311

Excel MOS 2003/MCAS 2007 Certification Test

This CRN is to be used when calling Continuing Education Registration to pay to take the Excel 2003 MOS Certification Exam. The cost for the exam is $60. The Registration phone number is 913-469-2323. After payment has been made, students will need to call the Prometric Testing Center at 913-469-2388 to schedule a time to take the exam.

$60.00

XCM 8312

Access MOS 2003/MCAS 2007 Certification Test

This CRN is to be used when calling Continuing Education Registration to pay to take the Access 2003 MOS Certification Exam. The cost for the exam is $60. The Registration phone number is 913-469-2323. After payment has been made, students will need to call the Prometric Testing Center at 913-469-2388 to schedule a time to take the exam.

$60.00

XCM 8313

PowerPoint MOS 2003/MCAS 2007 Certification Test

This CRN is to be used when calling Continuing Education Registration to pay to take the PowerPoint 2003 MOS Certification Exam. The cost for the exam is $60. The Registration phone number is 913-469-2323. After payment has been made, students will need to call the Prometric Testing Center at 913-469-2388 to schedule a time to take the exam.

$60.00

XCM 8315

70-270: Installing, Configuring & Administering MS Windows XP Professional

Mapped toward MS exam 70-270, this class will help you gain the knowledge and skills needed to implement, administer, and troubleshoot information systems that incorporate Microsoft Windows XP Professional. Part of MCSA and MCSE core exam requirement. Prerequisite: A+ Certification and Network+ Certification or equivalent knowledge.

$999.00

XCM 8317

Test Prep: 70-215 Windows 2000 Server

Take as much time as you need to prepare for the Windows 2000 Server exam 70-215. In this self-paced, non-instructor led class you will receive a Windows 2000 Server LabSim CD and the Windows 2000 Server Exam Voucher, a $60 value. Study at home or use one of our computer labs to get yourself ready to pass the Microsoft exam 70-215. When enrolling on-line, please call 913-469 2323 to inform us of your enrollment so that we can mail the materials to you.

$179.00

XCM 8318

Test Prep: 70-217 Implementing and Administering Windows 2000 Active Directory Server

Take as much time as you need to prepare for the Windows Active Directory exam 70-217. In this self-paced, non- instructor led class you will receive a Windows Active Directory LabSim CD and the Windows Active Directory exam voucher, a $125 value. Study at home or use one of our computer labs to get yourself ready to pass the Microsoft exam 70-217. When enrolling on-line, please call 913-469-2323 to inform us of your enrollment so that we can mail the materials to you.

$229.00

XCM 8319

Test Prep: 70-290 Windows Server 2003

Take as much time as you need to prepare for the Windows Server 2003 exam 70-290. In this self-paced, non- instructor led class you will receive a Windows Server 2003 LabSim CD and the Windows Server 2003 exam voucher, a $125 value. Study at home or use one of our computer labs to get yourself ready to pass the Microsoft exam 70-290. When enrolling on-line, please call 913-469-2323 to inform us of your enrollment so that we can mail the materials to you.

$229.00

XCM 8323

Test Prep: 70-210 Windows 2000 Professional

Take as much time as you need to prepare for the Windows 2000 Professional exam 70-210. In this self-paced, non- instructor led class you will receive a Windows 2000 Professional LabSim CD and the Windows 2000 Professional Exam Voucher, a $60 value. Study at home or use one of our computer labs to get yourself ready to pass the Microsoft exam 70-210. When enrolling on-line, please call 913-469-2323 to inform us of your enrollment so that we can mail the materials to you.

$179.00

XCM 8375

70-291: Implementing, Managing & Maintaining MS Windows Server 2003 Network Infrastructure

Mapped toward exam 70-291, in this class you will explore the skills needed to implement, manage, and maintain a Microsoft Windows Server 2003 network infrastructure. Part of MCSA, MCSE and can be used for an MCDBA core exam requirement. Prerequisite: A+ Certification and Network+ Certification or

equivalent knowledge.

$999.00
XCM 8376

Test Prep: 70-216 Implementing and Administering Windows 2000 Network Infrastructure

Take as much time as you need to prepare for the Implementing and Administering Windows 2000 Network Infrastructure exam 70-216. In this self-paced, non-instructor led class you will receive an Implementing and Administering Windows 2000 Network Infrastructure LabSim CD and the Implementing and Administering Windows 2000 Network Infrastructure exam voucher, a $125 value. Study at home or use one of our computer labs to get yourself ready to pass the Microsoft exam 70-216. When enrolling on-line, please call 913-469-2323 to inform us of your enrollment so that we can mail the materials to you.

$229.00
XCM 8377

70-293: Planning and Maintaining a Microsoft Windows Server 2003 Network Infrasturcture

Mapped toward MS exam 70-293, this class will help you gain knowledge and skills necessary to plan and maintain a Windows Server 2003 network infrastructure. Part of the MCSE core exam and MCDBA elective exam requirement. Prerequisite: 70-291: Implementing, Managing, and Maintaining a Microsoft Windows Server 2003 Network Infrastructure.

$1,199.00
XCM 8378

70-294: Planning, Implementing, Maintaining a MS Windows Server 2003 Active Directory Infrastructure

Mapped toward MS exam 70-294, this class will help you gain the knowledge and skills to successfully plan, implement, and troubleshoot a Microsoft Windows Server 2003 Active Directory directory service infrastructure. The course focuses on a Windows Server 2003 directory service environment, including forest and domain structure, Domain Name System (DNS), site topology and replication, organizational unit structure and delegation of administration, Group Policy, and user, group, and computer account strategies. Part of the MCSE core exam requirement. Prerequisite: 70-293: Planning and Maintaining a MS Windows Server 2003 Network Infrastructure.

$1,199.00
XCM 8379

70-297: Designing a Microsoft Windows Server 2003 Active Directory & Network Infrastructure

Mapped toward MS exam 70-297, this class will help you gain the knowledge and skills to design a Microsoft Active Directory directory service and network infrastructure for a Microsoft Windows Server 2003 environment. Part of MCSE core exam requirement. Prerequisite: 70-293: Planning and Maintaining a MS Windows Server 2003 Network Infrastructure AND 70-294: Planning, Implementing, and Maintaining a Microsoft Windows Server 2003 Active Directory Infrastructure

$1,199.00
XCM 8392

Test Prep: 70-270 Microsoft Windows XP Professional

Take as much time as you need to prepare for the Windows XP Professional exam 70-270. In this self-paced, noninstructor led class you will receive a Managing a Windows XP Professional LabSim CD and the Windows XP

Professional exam voucher, a $125 value. Study at home or use one of our computer labs to get yourself ready to pass the Microsoft exam 70-270. When enrolling on-line, please call 913-469-2323 to inform us of your enrollment so that we can mail the materials to you.

$229.00

XCM 8395

70-290: Managing and Maintaining a MS Windows Server 2003 Environment

Explore the Windows Server 2003 Editions and the concepts and practices of networked systems. Management of hardware, user groups, computer accounts, file access and disk storage are thoroughly explored. Server administration is also covered, including important concepts such as Group Policy, performance monitoring, backups, disaster recovery, and Windows Server 2003 security features. Part of MCSA , MCSE and can be used for an MCDBA core exam requirement. Prerequisite: A+ Certification and Network+ Certification or equivalent knowledge.

$999.00

XCM 8396

Test Prep: 70-218 Managing a Microsoft Windows 2000 Network Environment

Take as much time as you need to prepare for the Managing a Windows 2000 Network Environment exam 70-218. In this self-paced, non-instructor led class you will receive a Managing a Microsoft Windows 2000 Network Environment LabSim CD and the Managing a Microsoft Windows 2000 Network Environment exam voucher, a $125 value. Study at home or use one of our computer labs to get yourself ready to pass the Microsoft exam 70-218. When enrolling on-line, please call 913-469-2323 to inform us of your enrollment so that we can mail the materials to you.

$229.00

XCM 8397

Test Prep: 70-291 Managing a Windows 2003 Network Environment

Take as much time as you need to prepare for the Managing a Windows 2003 Network Environment exam 70-291. In this self-paced, non-instructor led class you will receive a Managing a Windows 2003 Network Environment LabSim CD and the Managing a Windows 2003 Network Environment exam voucher, a $125 value. Study at home or use one of our computer labs to get yourself ready to pass the Microsoft exam 70-291. When enrolling on-line, please call 913-469-2323 to inform us of your enrollment so that we can mail the materials to you.

$229.00

XCM 8398

Test Prep: 70-293 Planning a Windows Server 2003 Network

Take as much time as you need to prepare for the Planning a Windows Server 2003 Network exam 70-293. In this self- paced, non-instructor led class you will receive a Planning a Windows Server 2003 Network LabSim CD and the Planning a Windows Server 2003 Network exam voucher, a $125 value. Study at home or use one of our computer labs to get yourself ready to pass the Microsoft exam 70-293. When enrolling on-line, please call 913-469-2323 to inform us of your enrollment so that we can mail the materials to you.

$229.00

XCM 8399

Test Prep: 70-294 Windows Server 2003 Active Directory

Take as much time as you need to prepare for the Windows Server 2003 Active Directory exam 70-294. In this self- paced, non-instructor led class you will

receive a Windows Server 2003 Active Directory LabSim CD and the Windows Server 2003 Active Directory exam voucher, a $125 value. Study at home or use one of our computer labs to get yourself ready to pass the Microsoft exam 70-294. When enrolling on-line, please call 913-469-2323 to inform us of your enrollment so that we can mail the materials to you.

$229.00

XCM 8400

Telecommunications Fundamentals

Explore a wide range of topics that are fundamental to telecommunications. Review the historical background, organizations and institutions that regulate the standards of the industry. Discuss telecommunications both from the perspectives of voice and data communications. The course follows a flow of services, networks, and applications. With this flow, you will study in detail the fundamental concepts of basic telephony, data transmission, and data connectivity. Prerequisite: none

$359.00

XCM 8410

VoIP Fundamentals

Designed to provide students with the fundamentals of Voice over IP (VoIP) networking technology. Concepts covered include an explanation of the national voice and data network, telephony terminology, VoIP protocol analysis and telephony survey techniques.   Prerequisite: CCNA or comparable network experience.

$999.00

XCM 8411

Deploying VoIP Solutions

Work with Cisco Call Manager as you cover the basics of Call Manager from installation to configuration to deployment. Prerequisite: VoIP Fundamentals.

$999.00

XCM 8426

.NET Programming for Wireless Devices

The Microsoft .NET Compaq Framework allows developers to use the power of the .NET Framework to build mobile applications. In this 2-day lecture course students learn to utilize Smart Device Extensions and the Microsoft .NET Compact Framework to build mobile applications for a variety of devices as well as applications that connect and disconnect across wireless networks. Prerequisites: C# Fundamentals or Visual Basic.NET.

$999.00

XCM 8501

Oracle 10g SQL

Students receive a solid foundation for creating databases and strengthen their knowledge in creating queries. To assist students in bridging SQL topics to further studies, students are introduced to SQL tuning, compare Oracle's SQL syntax to other databases, and describe how SQL can be embedded in applications. This is an entry-level course to help students develop SQL, DDL, & DML knowledge and experience specific to Oracle. Prerequisite: Efficient with MS Windows OS and basic knowledge of database functions.

$729.00

XCM 8502

Oracle PL/SQL Advanced

Part of Oracle's 9i SQL exam. As a continuation of the Oracle PL/SQL Fundamentals course, you will create Oracle database objects, manipulate Oracle data, create other database objects, and work with User Access Control. Practice exams are available for self-study. Prerequisite: Oracle PL/SQL Fundamentals.

$349.00

XCM 8503

Oracle 10g Developer Certified Associate Series

Combine your SQL and PL/SQL skills to work toward your Oracle 10gDeveloper Associate Certification. Prerequisite: Understanding of databases and database concepts. Familiarity with SQL.

$1,349.00

XCM 8504

Oracle 10g PL/SQL

Create dynamic client/server applications using PL/SQL. Explore scripting semantics and syntax, and fully detail the PL/SQL functionality of Oracle Database 10g. Learn how to write powerful PL/SQL programs, interact with Oracle databases, perform complex calculations, and handle error conditions.

$729.00

XCM 8506

Oracle 10g Administrator Certified Associate Series

Combine our Oracle 10g: SQL and Oracle 10g: Database Administrator I classes to receive instruction as you prepare for the Oracle 10g DBA Certified Associate certification. Prerequisite: Access VBA and Access Application Development, or Oracle 9i DBA certification or comparable Microsoft certification.

$1,349.00

XCM 8507

Oracle SQL Fundamentals

Receive a solid understanding of Oracle9i SQL and how to use it effectively. Hands-on activities at the end of each chapter, such as review questions, assignments, and a case project, help to reinforce Oracle9i SQL skills. In association with Oracle SQL Advanced, this class maps to exam 1Z0-007. Prerequisite: Basic understanding of databases, familiarity with MS Access or another database highly recommended.

$349.00

XCM 8508

Oracle 10g New Features

Receive an introduction to the new features in Oracle Database 10g Release 2 - the database for Grid computing. Learn how to use Oracle Database 10g new features to increase database availability, to simplify database performance monitoring and tuning through the use of Oracle Database 10g Advisors, and to offer simplified database manageability. The course also covers security changes that students need to understand. This course counts towards the hands-on course requirement for the Oracle 9i Database Administrator and Oracle Database 10g Administrator Certification.

$899.00

XCM 8509

Oracle SQL Advanced

Receive a solid understanding of Oracle91 SQL and how to use it effectively. Hands-on activities at the end of each chapter, such as review questions,

assignments, and a case project, help to reinforce Oracle9i SQL skills. In association with Oracle SQL Fundamentals, this class maps to exam 1Z0-007. Prerequisite: Oracle SQL Fundamentals.

$349.00

XCM 8512

Oracle 10g Database Administrator I: Implementation & Administration

Receive instruction using a real-world approach, combined with topics ranging from initialization parameters and table space storage to data integrity, constraints, and user profiles. Prep for the updated Oracle certification exam, #1Z0-042. Prerequisite: Oracle SQL and Oracle Guide to 10g or comparable knowledge.

$729.00

XCM 8514

Oracle DBA I Advanced

Part of Oracle's Database Administrator Certified Associate program. As a continuation of the Oracle DBA I Fundamentals course, you will work with managing database objects and database users, then complete three practice exams. Prerequisite: Oracle DBA I Fundamentals.

$349.00

XCM 8515

Oracle 10g Database Administrator II: Backup/Recovery & Network Administration

Receive real-world instruction on the use of key tools and techniques for Oracle database backup, recovery and network administration. Prep for the updated Oracle certification exam, #1Z0-043. Prerequisite: Oracle 10g Administrator Certified Associate certification or comparable knowledge.

$729.00

XCM 8516

Oracle DBA Performance Tuning Advanced

Take the second half of the Oracle Database Performance Tuning certification path. Receive instruction in advanced tuning, tuning tools and application tuning. In conjunction with Oracle DBA Performance Tuning Fundamentals, this class prepares students for the Oracle9i Database Performance Tuning certification exam #1Z0-033. Prerequisite: Oracle PL/SQL, Oracle DBA I Fundamentals and Advanced or current Oracle DBA Associates certification.

$349.00

XCM 8517

Oracle 10g Performance Tuning

Get the most out of your 10g Database by learning performance tuning methods that maximize the utility of the database. Students learn how to benefit from Oracle Database 10g automatic tuning features, as well as practicing the manual tuning methods using the statspack tool. After clearly defining the various methodologies one can use to tune an Oracle Database, the course covers the various tunable components of an Oracle Database. Throughout the course, students experience hands-on the tuning of an Oracle Database by practicing through a series of workshops. This course counts towards the Hands-on course requirement for the Oracle Database 10g Administrator Professional Certification. Prerequisite: Oracle 10g Administrator Certified Associate certification or comparable knowledge.

$899.00

XCM 8518

Oracle DBA II Advanced

Take the second half of the Oracle DBA II certification path. Receive instruction in complete and incomplete recovery with Recovery Manager, recovery catalog, Recovery Manager maintenance, loading and transporting data, network administrations and server-side configuration. In conjunction with Oracle DBA II Fundamentals, this class prepares students for the Oracle certification exam #1Z0-032. Prerequisite: Oracle PL/SQL, Oracle DBA I Fundamentals and Advanced or current Oracle DBA Associates certification.

$349.00

XCM 8540

Oracle 10g Administrator Certified Professional Series

Combine our Oracle 10g: Database Administrator II class and Oracle: 10g Performance Tuning classes to receive instruction as you prepare for the Oracle 10g DBA Certified Professional certification. Prerequisite: Oracle 10g Administrator Certified Associate certification or comparable knowledge.

$1,409.00

XCM 8570

Crystal Reports Fundamentals

You will learn the basics of creating reports using Crystal Reports, including sorting, selecting records, grouping, linking, creating formulas, using Report Expert, and distributing data to other users. Prerequisite: Experience with Windows operating systems. Preferred knowledge: Experience with database applications such as Microsoft Access.

$359.00

XCM 8575

Crystal Reports Advanced

This course is designed for users with a basic knowledge of Crystal Reports. You'll learn to use advanced formulas, formatting and cross-tabs, and how to create and modify dictionary files. Topics include conditional formatting, subreports, parameter fields and Crystal SQL Designer. Prerequisite: Crystal Reports Fundamentals course or equivalent knowledge.

$359.00

XCM 8576

Introduction to Data Mining Techniques

Make the most of your data and gain an understanding of the latest data mining techniques. These tools and techniques can assist with customer relationship management, strategic planning, and the development of more effective marketing campaigns. Prerequisite: None.

$399.00

XCM 8600

Java Programming

This course teaches you the syntax of the Java programming language, object-oriented programming with Java, including graphical-user interfaces, exceptions, file input/output, and developing Java applications and applets. This course uses the Sun curriculum and supports the Sun Java certification. Prerequisite: Knowledge of programming principals.

$999.00

XCM 8617

Java Servlets

Begin with an overview of servlets, including architecture and comparisons to programming alternatives (i.e., .NET). You will explore how to configure the development environment, build and run basic servlets, chain servlets, and create beans and Java Server Pages. Prerequisite: Java Programming and HTML or equivalent knowledge.

$599.00

XCM 8618

JavaScript & Ajax Programming Certificate

Javascript forms the base for building interactivity in Web pages. The four day Javascript class uses standard programming techniques to add client-side interaction to Web content. AJAX (Asynchronous Javascript and XML) extends the interactivity of Javascript into applications that use desktop controls delivered in a Web browser. This certificate combines the two courses for a solid grounding in client-side Web programming with one of the newest approaches. Prerequisites: Programming Fundamentals or equivalent, experience with HTML and CSS.

$949.00

XCM 8620

JavaScript

Following a review of HTML, you'll cover JavaScript scripting basics, using variables and functions, validating user-entered data, working with windows and frames, and adding advanced elements to the Web page, including animation, cascading style sheets and cookies. Prerequisite: HTML & Web Page Design, Programming Fundamentals.

$649.00

XCM 8632

SQL: SQL Fundamentals

This course introduces the fundamental concepts of SQL. Work with tables, keys, viewing data and functions. Prerequisite: Any database background, including Access and Crystal Reports. Some exposure to programming is helpful, but not required.

$359.00

XCM 8654

PHP and MySQL for Dynamic Web Sites

When static HTML pages no longer cut it, you need to step up to dynamic, database-driven sites that represent the future of the Web. Explore the way users work with PHP and MySQL to build dynamic sites using Open Source tools. Work with PHP and MySQL separately before going on to cover security, sessions and cookies, and using additional Web tools. Finish the class by creating sample applications. Prerequisite: HTML and Web Page Design, Access Intermediate or working knowledge of database design.

$559.00

XCM 8765

CCNA Certification Series

Ramp up for your CCNA certification as you learn about Cisco routers, switches and other networking devices. Prerequisite: Network+ certification or comparable knowledge. Work in a Cisco environment also helpful.

$1,599.00

XCM 8831

MCTS: Implementing and Maintaining SQL Server 2005 Certification Series

Combine our Implementing and Maintaining SQL Server 2005 classes as you work toward one of Microsoft's newest certifications, 70-431 MCTS: SQL Server 2005 Implementation and Maintenance. Prerequisite: Knowledge of relational databases and database design.

$1,309.00

XCM 8832

SQL: Implementing SQL Server 2005

Receive the product knowledge and skills needed to implement a Microsoft SQL Server 2005 database. Focus on how to use SQL Server 2005 product features and tools related to implementing a database. Part one of the Microsoft Certified Technology Specialist (MCTS) coursework. Prerequisite: Knowledge of relational databases and database design.

$709.00

XCM 8833

SQL: Maintaining SQL Server 2005

Receive the product knowledge and skills needed to maintain a Microsoft SQL Server 2005 database. Focus on how to use SQL Server 2005 product features and tools related to maintaining a database. Part two of the Microsoft Certified Technology Specialist (MCTS) coursework. Prerequisite: Knowledge of relational databases and database design.

$709.00

XCM 8834

SQL Server 2005 New Features

Get full details on all the innovative features and benefits available in SQL Server 2005. Discuss the improved enterprise data management capabilities, developer functions, and business intelligence tools.

$549.00

XCM 8835

70-228: Administering Microsoft SQL Server 2000

Mapped to exam 70-228, this course covers how to install Microsoft SQL Server, understand the system architecture and manage services. You'll also learn to develop Transact-SQL queries, plan database integrity, manage security, back up and restore databases, schedule alerts, monitor and tune database performance, implement replication, and employ ODBC extensibility. Meets MCDBA core and MCSE elective exam requirements. Prerequisite: Networking Fundamentals or Network+ certification, or Windows 2000 Server and Professional experience.

$799.00

XCM 8836

SQL Reporting Services

To be successful in the marketplace, businesses need to extend information beyond the walls of their organization and seamlessly interact with customers, partners, and suppliers in real time. Microsoft SQL Server Reporting Services enables you to do just that. We explore Reporting Services by starting with the included wizards, then we hand-craft reports. We then explore how to deploy your reports to the server where they can be viewed and downloaded by anyone with access rights. Prerequisite: Knowledge of SQL 2005 or previous SQL experience.

$899.00

XCM 8837

Transact SQL

Transact-SQL is central to the use of Microsoft SQL Server. Learn about Transact-SQL statements and how to use them to comunicate with SQL Server. Prerequisite: Knowledge of SQL Server 2000 or SQL Server 2005.

$709.00

XCM 8880

70-229: SQL Server 2000 Database Development

Mapped to exam 70-229, this course covers how to develop applications in a Microsoft SQL Server environment, including data modeling and Microsoft's SQL language. You will learn how to create tables, modify data, use indexes, define views, create triggers and interface with other application tools such as Microsoft Access. Meets MCDBA core and MCSE elective exam requirements. Prerequisite: Knowledge of relational databases and database design.

$799.00

XCM 8925

PMP Test Prep

This course contains topics required for Project Management Institute's (PMI) Project Management Professional (PMP) certification exam. You will cover the application and testing process for PMP as well as key test topics, such as project integration, time, cost, quality, communication and risk. The course will be taught by certified instructors. Prerequisite: industry experience with project management.

$999.00

XCM 8927

Project Management Essentials

Project Management is defined as the process of planning, organizing, staffing, directing and controlling the production of a system. This 3-day course uses lecture, discussion and case studies to provide an overview of project management concepts and principles. Topics include the Project Management Framework, Standards, Process Groups, and Knowledge Areas. Specific issues such as project authority, leadership, people skills, and stakeholder communication strategies will also be covered.

$829.00

XCM 8928

Estimating and Managing Project Costs

The successful management of project cost is essential for the success of an organization. Realistic estimates are required to make informed decisions about funding projects. During project execution the estimate provides a basis for tracking and controlling project costs. This one-day course ensures that a comprehensive process is used to estimate project costs with an appropriate level of detail. Technical professionals are presented with financial concepts that will improve communication and teamwork with business and financial managers. Practice in developing estimates, creating estimate forms, and analyzing cost reports ensure participants leave the course ready to apply what they have learned. Prerequisite: Project Management Essentials or equivalent experience.

$279.00

XCM 8929

Project Risk Management

Identifying, analyzing, and responding to risk are crucial elements for the successful management of projects. In this one-day course, students will gain an understanding of risk management and the role and elements of a risk management plan (RMP). Other topics include identifying risks, methods and

tools for analyzing risks and determining risk impacts, risk prioritizaton and mitigation techniques, and methods to track, control, and communicate risks throughout the project life cycle. Prerequisite: Project Management Essentials or equivalent knowledge.

$279.00

XCM 8931

Effective Project Scheduling and Control

Project managers are charged with developing and managing project schedules. On-time delivery is often critical to project success, and also contributes to controlling project cost. This 2-day course ensures students have a foundation of critical path method (CPM) scheduling concepts, and the ability to build a workable project plan. Participants practice developing and analyzing schedules using Microsoft Project as a software tool. Prerequisite: Project Management Essentials or equivalent experience.

$559.00

XCM 8932

Effective Communication for Project Managers

Internal and external client communication skills are the trademark of successful project personnel. Managing project communications is one of the most important duties of a project manager. This two-day workshop emphasizes the importance of communication skills in building strong partnerships between technical professionals, project managers and their customers. Along with providing models for diagnosing and reducing existing barriers to effective communication, enrollees learn how to match the mode of communication to the message. Through case studies and role-plays, this course builds specific skills for active listening, one-on-one and group meetings, telephone calls, and written communications. This course also helps project managers assess their project communication needs, plan for meeting those needs, and discusses effectively communicating project status and forecasts. Prerequisite: Project Management Essentials or equivalent experience.

$559.00

XCM 8933

Project Leadership and Team Motivation

Effective leadership and team motivation are critical for the success of any project. In this two-day seminar students are introduced to the elements and methods of leadership in a technical environment as well as the tools and techniques for team development and motivation. Other topics include resolving conflict and managing personnel issues, analyzing stages of team development and maximizing team effectiveness. Prerequisite: Project Management Essentials or equivalent experience.

$559.00

XCM 8934

Project Quality Management

Project Quality Management focuses on overseeing product quality and ensuring process quality when creating project deliverables. In this one-day course, students master the quality planning process, quality planning tools and metrics, and quality assurance. Prerequisite: Project Management Essentials or equivalent experience.

$279.00

XCM 8935

Project Management Workshop

This course is designed, but not limited to, as a capstone for the Certificate of Project Management. In this 3-day workshop students gain experience and

reinforce concepts learned in previous project management seminars by putting their knowledge into practice by simulating managing a real-world project. Prerequisite: Completion or equivalent experience of all other requirements for the Certificate of Project Management.

$829.00
XCM 8937

Performance Management

Performance Management is an integral part of Project Quality and Project Human Resources Management. This 1-day course focuses on effective performance management. Topics include performance diagnosis, evaluation, communication, and reporting. Prerequisite: Project Management Essentials or equivalent experience.

$279.00
XCM 8938

Software Testing

This 2-day workshop defines a process to implement a structured testing environment for all phases of the Systems Development Life Cycle (SDLC). It covers the four techniques of structured testing and the application of those techniques during the phases of the SDLC. Topics include risk assessment, creating functional and structural test plans, test scripts, and test cases. Break-it testing, complexity testing, and basis path testing are also introduced. Prerequisite: Project Management Essentials or equivalent experience.

$559.00
XCM 8939

Project Quality Management

A description is not available for this course.

$299.00
XCM 9001

Web-Based Introduction to Networking

This class explains computer networking basics in terms that you can easily understand, using concepts common to everyday, non-computer experience. A brief introduction to networking history provides context, explaining how networks have become so important to businesses and individuals. The course emphasizes networking fundamentals, explaining the software and hardware that makes networking possible. The course stresses understanding how and why networks work, rather than focusing on memorization of terms and numbers. Note: Please confirm computer requirements before registering for this course and Web registration is not available. After you register, complete the required on-line orientation at www.ed2go.com/jccc.

$110.00
XCM 9004

Web-Based Java for the Absolute Beginner

If you want to learn Java, but don't have any prior programming knowledge, you'll enjoy this course. A Java programmer with more than nine years of real-world corporate programming experience teaches you almost every important Java topic at a leisurely pace, using clear and easy-to-understand language. Practical exercises and examples will help you feel comfortable with the most important Java concepts, including databases and Java Server Pages. Note: Please confirm computer requirements before registering for this course and Web registration is not available. After you register for this course complete the required on-line orientation at www.ed2go.com.

$104.00

XCM 9005

Web-Based Intermediate Networking

Learn real-world applications for the concepts you learned in "Introduction to Networking." You'll gain a full understanding of almost every aspect of networking technology, including hot topics such as virtual private networks, security, and Internet connectivity. Completion of this course and its prerequisite should serve as a springboard for a career in computer networking or training for CCNA certification. Note: Please confirm computer requirements before registering for this course and Web registration is not available. After you register, complete the on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 9006

Web-Based Introduction to PC Troubleshooting

This course takes you through the typical hardware and operating system problems encountered by technicians and teaches you troubleshooting techniques to decipher any problem and gives you the skills to solve them. Note: Please confirm computer requirements before registering for this course and Web registration is not available. After you register, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 9008

Web-Based Introduction to Oracle

This course will introduce you to the Structured Query Language (SQL), Oracle's SQL *Plus, and other valuable tools used to develop, manage, and reference an Oracle database. Note: Please check computer requirements before registering for this course and Web registration is not available. After you register, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 9009

Web-Based Introduction to Database Development

This course will guide you step-by-step through all the phases of a system development project to guarantee that the resulting project will not only work as it was designed, but also that the design truly responds to user needs. Note: Please confirm computer requirements before registering for this course and Web registration is not available. After you register, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 9010

Web-Based Introduction to SQL

Learn the key concepts of Structured Query Language (SQL) and gain a solid working knowledge of this powerful and universal database programming language. You will learn the basic structure of relational databases, how to read and write simple and complex SQL statements, and advanced data manipulation techniques. Note: Please confirm computer requirements before registering for this course and Web registration is not available. After you register, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 9011

Web-Based Introduction to Perl Programming

Learn Perl, a powerful and easy to use scripting language used on PCs, servers,

and on the Internet for a wide range of programming problems. Perl is a capable as C, C++, and Java, but is easier to learn and does not require the software development tools and environments required by those languages. Note: Please confirm computer requirements before registering for this course and Web registration is not available. After you register, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 9012

Web-Based Creating User Requirements Documents

Your success as a developer depends almost entirely on your ability to meet or exceed your customer's every expectation. This course will show you, step by step, how to discover and document precisely what your customer wants. You will learn how to gather, manage and document user requirements for any type of project in any industry. Note: Please confirm computer requirements before registering for this course and Web registration is not available. After you register, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 9013

Web-Based JavaScript Programming for the Web

Learn how to spiff up your pages with cool effects like mouseOvers, popUps, and alerts and hot links, scrolling messages, navigation enhancements, basic forms, and more, with JavaScript! Note: Please confirm computer requirements before registering for this course and Web registration is not available. After you register, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 9015

Web-Based C++ for the Absolute Beginner

Create programs for Microsoft Windows using Borland C++ Builder. Learn Object-Oriented techniques, how to create windows and forms, and how to program in a step-by-step nature. This course is ideal whether you are an enthusiast, business person hoping to advance your career, or someone who already knows how to program but wants to move ahead to C++ and Object-Oriented Programming. Note: Confirm computer requirements before registering for this course. Web registration is not available. After you register, complete the required on-line orientation at www.ed2go.com/jccc. C++ Borland software is available through amazon.com for $72.99.

$104.00

XCM 9016

Web-Based Creating a Small Office Network

Create your own home office or small office network using Windows XP. Slash expenses and improve efficiency by learning how to share printers, Internet connections, drives and documents. You will learn what hardware you will need, how to configure Windows XP to run your small network, how to configure your printers and other peripherals and how to manage and maintain your network and keep it secure. Note: Confirm computer requirements before registering for this course. Web registration is not available. After you register, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 9017

Web-Based Introduction to Visual Basic .Net

Visual Basic .Net is the most widely used programming language and development tool for creating Windows applications. The Visual Basic .Net programming language is easy to learn, and the Visual Basic .Net development

environment enables you to rapidly build Windows applications with little more than a few clicks of your mouse. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After you register, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 9018

Web-Based Introduction to VBA

Discover the time saving power of document automation. Cut through the mystery of object-oriented programming, the Word object model and the logical structure of the Visual Basic for Applications language by developing a customized document automation program one lesson at a time. Note: Please confirm computer requirements before registering for this course and web registration is not available. After registering, please complete the on-line orientation at www.ed2go.jccc.com.

$104.00

XCM 9019

WB: Interm. Visual Basic .Net

Gain in-demand skills writing sophisticated Windows programs that access and modify business databases and implement SQL. This course will be ideal if you are a Visual Basic .NET programmer and you want to upgrade your programming skills or prepare yourself for a new and exciting line of work. Note: Please confirm computer requirements before registering for this course and Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 9020

WB: Intermediate Oracle

This course will give you the skills you need to write powerful and flexible programs using SQL. Learn the building blocks and core features of PL/SQL and begin building fully functional PL/SQL programs with procedures, packages, debugging routines, database structures, triggers and cursor processing. Note: Please confirm computer requirements before registering for this course and Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 9021

Web-Based C# Programming for the Absolute Beginner

Learn the fundamentals of computer programming with the hot new C# programming language. Note: Please confirm computer requirements before registering for this course and Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 9022

WB: Wireless Networking

Industry experts show you how wireless networking works, as well as how to plan, deploy and connect to wireless networks.

$104.00

XCM 9023

WB: Intro to PC Security

Security expert teaches the fundamentals of PC and network security.

$104.00

XCM 9024

Web-Based Introduction to PHP & MySQL

Gain skills that are highly in demand by learning to build dynamic, data-driven Web sites using two of the most popular open source technologies available: PHP and MySQL . In this result -oriented, hands-on class, you'll master essential programming concepts by designing and building a full-featured Web site powered by PHP and MySQL. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 9025

Web-Based Introduction to FreeHand MX

Harness the power of Freehand MX to create stunning logos, brochures, book covers, flyers, Web graphics, and more! Gain an understanding of the dramatic differences between creating designs for onscreen viewing and creating images for printing. Quickly convert your printable artwork into Web-compatible designs. Integrate Freehand with Fireworks, Flash, and Dreamweaver for a total Web development solution. Learn how to publish your illustrations in a variety of formats, including print, Web, Adobe PDF, and Macromedia Flash. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 9026

Web-Based Introduction to Photoshop CS2

If you want to work with graphics, Photoshop is the program you will most need to learn. This hands-on, project-oriented course is filled with detailed step-by-step instructions you'll have no trouble following as you learn how to edit photos, create basic paintings, and prepare your images for printing. Discover how to improve photographs by removing flaws, correcting for poor exposure, or adding new elements. You'll even learn how much fun it can be to paint again without the mess to clean up. And, best of all, no prior artistic ability is required to take this course. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 9027

Web-Based Creating a Home Network

Create your own home network so that your computers can easily share printers, Internet connections, drives, documents, photos, and other resources. You'll learn what hardware you need, how to configure Windows XP to run your small network, and how to configure printers and other peripherals. By the end of the course, you'll know how to manage and maintain your network, and how to keep it secure. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 9028

Web-Based Making Movies with Windows XP

If you have Windows XP, you already have Microsoft Movie Maker, the program that makes creating professional-quality movies fun and easy. You can edit your

existing video to show only the best parts, and leave out the not-so-good parts. Add special effects, titles, credits, photos, background music, sound effects, and more to turn your home video into truly entertaining digital movies. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 9029

Web-Based Introduction to Linux

Learn how to navigate through the world of Linux, and use the free office productivity, multimedia, and Internet software packages provided by Linux. Also learn how to use your Linux desktop to access the Internet to browse web sites, download files, chat with friends, and work with e-mail.   Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 9030

Web-Based Intermediate C# Programming

Build upon your current knowledge of programming logic by writing Graphical User Interface applications in the C# programming language. Learn how to write applications with menus, toolbars, and files, and find out how to interact with databases and write SQL queries. Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 9031

WB: Advanced PC Security

When is hacking legal? When you use it to secure your own network. This new method of hacking, called ethical hacking or white-hat hacking, uses common and readily available hacking tools and techniques to audit your network so you can locate and close security holes. Note: Please confirm computer requirements before registering for this course, web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 9032

Web-Based Introduction to Alice 2.0 Programming

Learn how to write three-dimensional animation and game programs while learning object-oriented programming principles at the same time. If you're a novice programmer who wants to master programming concepts like decisions, loops, methods, and arrays, this course is for you! While building fun interactive worlds (including a flight simulator), you'll also learn more advanced programming concepts like arrays and event-driven programming. When you're finished, you'll be able to apply these concepts to other programming languages, like Java, C++, C#, or Visual Basic.   Note: Please confirm computer requirements before registering for this course. Web registration is not available. After registration, complete the required on-line orientation at www.ed2go.com/jccc.

$104.00

XCM 9400

Outlook Fundamentals - 2003

Outlook is much more than just an e-mail application. Create and use messages, contacts, appointments, tasks, and other Outlook items as you explore many of Outlook's rich features. Prerequisite: Knowledge of Windows, keyboard and

mouse.

$169.00

XCM 9401

Outlook Advanced - 2003

Explore activities such as customizing Outlook and managing the mailbox. Search and filter messages while setting rules. Work with folders, templates and forms, importing and exporting data, public, shared, and offline folders. Prerequisite: Outlook Fundamentals - 2003 or comparable knowledge.

$169.00

XCM 9402

SharePoint Server: Site Administration for Site Owners

Work with SharePoint to share information and collaborate on projects in an efficient and cost-effective manner. Use Windows SharePoint Services to create virtual team Web sites to enable information sharing and collaboration between project team or department members. Prerequisite: Proficiency with Windows, keyboard and mouse.

$359.00

XCM 9403

SharePoint: Installation and Implementation

Expand your SharePoint solution to include a variety of teams with different needs and manage the sites and servers. Create virtual Web-based meeting and document workspaces, as well as administer, maintain, and extend the functionality of a team Web site. Prerequisite: SharePoint Services: Collaborative Solutions.

$359.00

XCM 9404

InfoPath: Creating InfoPath Forms

You're a person who has information that needs to be gathered and shared. InfoPath is a product that does just that. Discover how to use InfoPath to gather and share information by creating and implementing XML-based forms. Prerequisite: Advanced Microsoft Office experience, HTML and Web Page Design.

$179.00

XCM 9405

OneNote

Capture, organize, and reuse your notes on laptop computer, desktop computers, or Tablet PCs. OneNote gives you one place to store all your notes and the freedom to work with them however you want. It helps you capture information in multiple ways and then organize and use it according to your needs. OneNote combines the freedom and flexibility of paper notes with the efficiency and power of digital organizational tools. Prerequisite: Familiarity with Windows and Microsoft Office applications.

$149.00

XCM 9406

Business Skills for the IT Professional

Developing as a Professional is key to your success in business and social situations. Explore what qualities define a professional and what you can do to gain recognition as a true professional in your workplace. Discuss everything from developing good work habits to minding your cubicle manners, as well as

networking and scheduling your time effectively. Finally discover new ways to cope with workplace challenges such as defusing conflict and managing pressure and stress.

$169.00
XCM 9408

Outlook 2007 Fundamentals

Create e-mail accounts and send e-mail messages using several techniques. Learn how to manage e-mail messages, contacts, tasks, and meeting requests. Finally, students will customize Outlook for maximum efficiency. Prerequisite: Familiar with Windows, keyboard and mouse.

$169.00
XCM 9409

Outlook 2007 Advanced

Learn advanced techniques for managing stored e-mail messages. Create and work with notes and Journal entries, schedule and manage meetings, share Outlook content, and customize templates and forms. Prerequisite: Outlook Fundamentals

$169.00
XCM 9450

Building Web Sites Using SharePoint Designer

SharePoint Designer is the web design program that replaced FrontPage. This class explores how to build web sites. (If you want to administer a SharePoint site, or install SharePoint Server, you?ll want to attend our SharePoint Administration classes). In this class, we?ll use SharePoint Designer to build web sites. We'll begin with an overview of the Designer interface, and consider web design fundamentals. We'll then create basic web pages by adding text and other SharePoint Designer elements. Once we've created web pages, we'll expand our site by creating a site, and modifying the structure of the site by adding folders to store pages for our site visitors. Then we'll return to text formatting by using text formatting, and then add graphics to enhance the design. Linking web pages makes the web what it is and we'll explore the linking tools available to us in SharePoint Designer. We'll then build templates to assure a consistent look and feel for the site, and then finish our session by working with page views to get an overall look at the structure of the site. Prerequisites: Competent with Windows, mouse and keyboard, and HTML.

$299.00
XCM 9451

SharePoint Administration Certificate

The SharePoint Services Administration certificate provides a solid platform to build, administer, and maintain SharePoint Services sites. The SharePoint Server: Site Administration for Site Owners two-day class sets out the skills needed to add content to a SharePoint Services site, working with document libraries, workspaces, wikis, and blogs, as well as integration with Office 2007 applications. The SharePoint Services: Installation and Implementation two-day class takes you into the server-side installation and configuration of SharePoint Services and Microsoft Office SharePoint Server. Prerequisites: Knowledge and experience with Windows OS and Internet Explorer.

$695.00
XCM 9460

SharePoint Designer Advanced

(If you want to administer a SharePoint site, or install SharePoint Server, you'll want to attend our SharePoint Administration classes). We'll begin our exploration of advanced topics by working with Cascading Style Sheets in SharePoint

Designer. CSS allows us to easily build consistent sites that are simpler to update and manage. Using tables for layout is a long-standing approach, and we'll use tables to format web pages. SharePoint Designer allows us to use data from external databases in our web pages, and we'll use the built-in tools to make connections to databases. To enhance our audience's experience of the site, we'll add components and interactive buttons using SharePoint's built-in .NET controls. We'll then look at the code tools in SharePoint Designer, as well as work with scripts. Prerequisites: SharePoint Designer Fundamentals, or equivalent knowledge.

$299.00

XCM 9463

Dreamweaver: Designing Websites

Discover how to design and build a website as you explore the features and functions in Dreamweaver. From novice to advanced, there is something for everyone in this class. In two days you will move from basic web design to professional-looking websites ready for upload. Prerequisite: HTML and Cascading Style Sheets, or comparable knowledge.

$299.00

XCM 9469

Dreamweaver: Database Connections

Learn to create web applications that change dynamically. Use Dreamweaver to create and administer database-driven sites, establish server connectivity, and create and manage database records. Receive an in-depth understanding of techniques used to create dynamic web applications. Prerequisite: Dreamweaver: Designing Websites.

$199.00

XCM 9470

Flash Fundamentals

A website can be made to look more inviting with interactive graphics and animations. Discover the basic features and functions of Flash as you create different types of animations and publish them on the web. Prerequisite: Proficiency with Windows, keyboard and mouse.

$299.00

XCM 9477

Flash Level 2: Building Interactivity with ActionScript

This Flash class focuses on writing ActionScript to control Flash documents. We'll create forms with interactive components, and build conditional logic to control the flow of content through the form. We'll then script a Flash document to allow a site visitor to drag and drop objects in the Flash document, and control how and where they are dropped. The course covers the use of built-in classes and function creation by building a web page layout with Flash and adding interactivity to the objects we build. Finally, we manage data captured in a form on a Flash-driven web page by controlling dynamic content. Prerequisites: Flash Fundamentals.

$299.00

XCM 9478

Flash Level 3: Delivering Video with Flash

This class focuses on using Flash to deliver video to our web sites. We begin with a discussion of techniques to produce good video content, and discuss video encoding techniques. The course covers three different methods to encode video for use in Flash, and then moves to setting cue points to add additional information for our site visitor. We then build a customized Flash video player, and then explore transparency, masking and blend modes for Flash video. The course then explores deploying Flash video content and enhancing it with closed

captions, cue points and playlists. Prerequisites: Flash Fundamentals and Flash Level 2: Building Interactivity with ActionScript.

$299.00
XCM 9515

Building Web Sites: Integrative Workshop

The Web Site Workshop offers you the opportunity to fine-tune your web site in a classroom setting with the assistance of the Center for Business's web design curriculum instructors. Bring in your code, content, and supporting files for a day of hands-on work on your site.

$169.00
XCM 9525

Cascading Style Sheets

Cascading Style Sheets (CSS) is the professional approach to web site design. CSS can more efficiently control color, typography, and layout techniques than relying on HTML alone. We begin with techniques to specify color and font information in a single web page. We then improve our management and workflow by moving our formatting rules to a .css file and link multiple pages to a single set of formatting rules. We then explore the use of borders, margins, and padding to control the layout of a web page, as well as consider four different CSS layout tools. We finish by styling HTML forms, and improve the experience of our site visitors by building a print style sheet. Prerequisite: Experience with Windows, mouse and keyboard, HTML, and comfortable working with a text editor and simple code.

$359.00
XCM 9526

Ajax Web Applications

Ajax offers highly interactive, desktop-like Web applications that can be deployed through any modern Web browser without the need for special plug-ins. Ajax is built on existing Web technologies such as JavaScript, HTML, and CSS, and it is used in conjunction with your favorite server-side language. Foundations of Ajax explains how to combine these technologies effectively to implement Ajax into your new or existing Web applications. Prerequisite: CSS and JavaScript or equivalent experience.

$399.00
XCM 9540

HTML Fundamentals

Examine the basic concepts of Hypertext Markup Language (HTML), write source code, place text on the page, format text, and create headings and horizontal rule lines. Display lists, color Web pages, use graphics, add hypertext links and create graphic hyperlinks.

$299.00
XCM 9541

Search Engine Optimization Fundamentals: Building Findable Sites

This course is meant for site builders, and others wanting to attract and reach their audiences. Rather than a marketing approach, we'll consider web standards, accessibility, microformats, and server-side strategies to make sites more findable. We'll work with custom 404 pages, content strategies, RSS deployment, and building search into the site. The use of Flash, JavaScript, and AJAX present unique challenges to findability. We'll consider coding that will help mitigate and improve the searchability of sites using these newer techniques. Finally, we'll consider troubleshooting and discovery techniques to find the spots in our site strategy that need fixing. Prerequisites: HTML, web site building experience, and not intimidated by code. Experience with Flash, JavaScript, AJAX is helpful but

not required. Access to your web server will be helpful.

$299.00

XCM 9544

XML

Put the latest XML technology and standards to work--one step at a time. Discover how to write well-formed and valid XML documents based on W3C specifications. Work with DTDs, Schemas, and Document Object Model. Prerequisite: HTML & Web Page Design or comparable experience.

$429.00

Cosmetology Training (XNCO)

XNCO 114

Cosmetology

A description is not available for this course.

$105.00

XNCO 118

Esthetics - Missouri Hours

This course gives esthetics students the additional 100 hours required by the Missouri State Board of Cosmetology in order to sit for the exam.

$1,000.00

XNCO 119

Esthetics Directed Study

A description is not available for this course.

$585.00

XNCO 120

Nail Tech Directed Study

A description is not available for this course.

$400.00

XNCO 9996

Clinical Cos with Est Lic

A description is not available for this course.

$569.60

XNCO 9997

Cosmetology Instr Training

A description is not available for this course.

$300.00

XNCO 9998

Advanced Nail Technology

A description is not available for this course.

$400.00

XNCO 9999

Instructor Training Completion Class

A description is not available for this course.

$270.00

Dance and Exercise (XYD)

XYD 1000

Ballroom Dancing, Beginning

Have fun learning the steps to traditional ballroom dances, including the foxtrot, waltz, swing and rumba. Shoes worn for class must be non-scuffing, soft-soled shoes. Leather soled shoes preferred. This class is for couples only. Couples must register together/concurrently; however listed fee is for per person.

$55.00

XYD 1005

Basic Self-Defense

You will learn the most simple and basic self-defense techniques and moves that are easy to learn: body positioning, blocking, hand strikes, kneeing and kicking. By practicing these moves in repetition during class, you will develop better confidence and awareness while learning self-protection techniques.

$45.00

XYD 1010

Ballroom Dancing, Intermediate

If you've taken "Beginning Ballroom Dancing" at JCCC you are ready to learn the more advanced steps, including the rumba and the cha-cha. Shoes worn for class must be non-scuffing, soft-soled shoes. Leather soled shoes preferred. This class is for couples only; must register together concurrently. The listed fee is per person.

$55.00

XYD 1015

Salsa Dance

Enjoy Salsa dancing which combines exercise with ballroom-dance elegance. Learn different Cuban rhythms as tools for interpreting Salsa, it's footwork and performance. The dances covered include Rumba, Mambo and Cha Cha. Wear comfortable, leather sole shoes, no tennis shoes. You can enroll with a partner or as an individual dancer. Class fees are per person.

$49.00

XYD 1030

International Folk Dance

Learn to dance at Greek weddings, Jewish Bar Mitzvahs or step into one of several local folk dance circles that gather weekly to dance, sing, laugh, and burn calories. No partners needed for these circle/line dances that are easy to learn regardless of dance background or ability. Wear comfortable clothing and shoes.

$15.00

XYD 1040

Latin American Dancing

Learn Latin American dances including merengue, rumba, samba, cha cha, and mambo/salsa. Practice dance etiquette and lead/follow techniques, perfect dance positions and gain confidence on the dance floor. Please enroll with a partner. Wear non-scuffing, soft-soled shoes, leather-soled shoes are preferred. Fee is per person.

$55.00

XYD 1055

Country Western Dancing

Grab a partner and get ready to kick up your heels when you learn country western partner dancing. You will learn dance sequences in the country style two-step, polka, waltz, cha cha, east coast swing, west coast swing, and night club two step. Pleas enroll with a partner and wear non-scuffing soft-soled shoes. Fee is per person.

$55.00

XYD 1095

Jazz and Tone

You will learn a basic jazz warm up, toning and stretching exercises and jazz dance combinations. Exercise, burn calories and have fun. Wear comfortable, close fitting clothing and non-scuffing, soft-soled shoes.

$55.00

XYD 1100

Lifetime Fitness Center

JCCC's Lifetime Fitness and Wellness Center is designed to improve fitness levels through physical activity. For this program, all participants must have a fitness assessment. Workout clothes must be worn for your assessment and for center activities. Individuals taking Lifetime Fitness will be required to purchase the Lifetime Fitness and Wellness Manual that is available at the JCCC Bookstore and will need to bring this with them to the initial assessment. (The full assessment will take 1 1/2 hours to complete). The center has a cardiovascular circuit, consisting of stationary bicycles, stair climber and hydraulic resistance equipment. Strength training equipment is also available. A professional physical educator is on duty at all times to answer questions. After you enroll, call 913-469-4432 to schedule an assessment with other enrollees. You may complete the first portion of the assessment online through Blackboard (http://webct.jccc.net) with access to the assessment one week prior to the start of the semester. After the assessment is completed, you may then attend the center at your own pace during any of our open hours. Note: Hours of operation change somewhat when credit classes are not in session.

$99.00

EMT Training (XNT)

XNT 1000

Streetsense

Every health care professional needs to know much more than clinical medicine. Go beyond what you learned in school! Topics of great concern to savey medical providers, education and administration of fieldr providers include: effective interpersonal communication, safety on the streets, weaponry and harmful intention, self-awareness, stress and wellness and much more. This class is taught by the author of "Streetsense", covers material pertinent to all medical and emergency providers.

$80.00

XNT 2000

BASIC TRAUMA LIFE SUPPORT

$149.00

XNT 5000

Pediatric Advanced Life Support and Trauma Course

A description is not available for this course.

$210.00

XNT 5010

First Responder/EMT Recertification

Recertification is necessary for professional EMTs. This recertification course will focus on EMS service delivery ,infectious disease update, effective assessment practices for the pediatric and geriatric patient along with practical patient assessment labs. This course is approved by the Kansas Board of EMS for 14 hours of CEU credit. Any Kansas Certified First Responder, EMT, EMT I, EMT-D, or MICT can attend. National regsitry hours may be earned by attending this course.

$150.00

XNT 5013

EMT "B" Refresher

This is a National Registry and Kansas recertification course for EMT's.

$300.00

XNT 5014

EMT-P Refresher

A description is not available for this course.

$319.00

XNT 5016

EMT-B Refresher

EMT-B REFRESHER This course has been approved for Kansas state recertification for EMT and First Responders and has met the EMT-B refresher requirements in Section 1A of the National Registry Renewal Application. (4 sessions)

$300.00

XNT 5017

CPR Recertification

This course is designed for those currently certified.

$39.00

ESL Adv. and Prof. Courses (XGF)

XGF 1575

ESL Private Tutoring
ESL Private Tutoring Materials

$200.00

XGF 1650

Conversational English A

Speak and be understood with greater confidence, using correct grammar, pronunciation and vocabulary. You will practice speaking in groups about American everyday life and how if compares/differs from other countries and their cultures. Conversational English A or B can be taken in any order. Please check the JCCC bookstore for the textbook for this class.

$99.00

XGF 1651

Conversational English B

Speak and be understood with greater confidence, using correct grammar, pronunciation and vocabulary. Conversational English A or B can be taken in any order since the topics covered will not be repetitious. Prerequisite: Intermediate or Advanced knowledge of English.   Please check the JCCC bookstore for the textbook for this class.

$99.00

XGF 1660

Pronunciation Improvement I

This class is for individuals who are interested in improving their pronunciation. Increase your self-confidence on the job and in social situations by improving your pronunciation, clarity of speech, use of idioms, slang, quick speech and fluency. Please check the JCCC bookstore for the textbook for this class.

$165.00

XGF 1661

Pronunciation Improvement II

This class is for advanced individuals interested in continuing improvements of their pronunciation skills to gain increased self-confidence on the job, and in social settings. The class provides training in improving, clarity of speech, use of idioms, slang, and fluency.

$165.00

XGF 1665

Personalized Pronunciation Program

This program provides an individualized pronunciation refinement method designed especially to assist non-native English speakers to improve their business, professional and social speaking skills. The Compton P-ESL instructional method will be used. A serious commitment of daily practice is required.

$995.00

XGF 1666

Private Tutoring

Private Tutoring $75.00 per hour/ 10 hours

$750.00

XGF 1667

ESL Private Tutoring

Private ESL tutoring, 13 hours, 3 hours assessment, 10 hours individual tutoring.

$1,700.00

XGF 1668

ESL Private Tutoring

ESL English Language Training

$2,450.00

XGF 1669

ESL Private Tutoring

ESL Private Tutoring 20 hours

$1,500.00

XGF 1670

ESL Private

ESL private tutoring. Assesment plus 10 hours.

$900.00

XGF 1671

ESL Private Tutoring

Private ESL tutoring, includes assesment, 10 hours private tutoring and Compton Materials.

$1,200.00

XGF 1672

ESL Private Tutoring

ESL Private Tutoring inculdes assessment, 20 hours private tutoring and Compton material.

$1,950.00

XGF 1673

ESL Private Tutoring

ESL Private Tutoring, Assesment, 10 hours and a dictionary.

$1,000.00

XGF 1674

ESL Private Tutoring

10 hours Private Tutoring, book and dictionary.

$840.00

XGF 1690

ESL Grammar Development I

This course is for non-native English speaking individuals who have a basic working knowledge of English grammar and wish to improve their grammar skills. Students will practice spoken grammar through oral exercises, partner and group interaction.   Please check the JCCC bookstore for the textbook for this class.

$99.00

XGF 1691

ESL Grammar Development II

This course is for high intermediate to advanced non-native speaking students who are interested in refining their grammar. Students will concentrate on

improving both written and spoken grammar.   Please check the JCCC bookstore for the textbook for this class.

$93.00

XGF 1692

ESL Business Writing

Acquire the skills needed to succeed in business situations using written English for letters, faxes, memos, reports and email messages. These skills can help you provide better customer service and improved customer relations. The course is designed for intermediate/advanced level.

$99.00

XGF 2000

Individual Grammar Writing Rev

Individual Grammar Writing Review tutoring.

$75.00

XGF 2001

Individual Grammar Review

Individual Grammar Review Tutoring

$750.00

XGF 5001

Grammar for ESL - Web Based

This course prepares the ESL student for regular mainstream English classes. Topics include a review of all tenses, the use of modals, the adjective clause, the noun clause, the adverb clause, phrases, count and non-count nouns and some English terms.

$98.00

XGF 5002

Writing for ESL

Many ESL learners have excellent training and skills in their native languages but find their academic or career progress slowed by the challenges of writing in English. This course will take you through each step of the writing process.

$98.00

XGF 5003

Introduction to Teaching ESL/EFL

English language teachers enjoy a wide range of opportunities and face a daunting set of challenges. This course will show you innovative ways of teaching vocabulary and grammar, listening and speaking, and reading and writing.

$98.00

XGF 5004

Communicating Like a Leader

Your style of communication can make the difference between succeeding and failing in almost any endeavor. You'll build up your listening skills, learn to read body language, become more artful at providing feedback, and more.

$98.00

XGF 5005

Interpersonal Communication

You'll explore clear examples of verbal and nonverbal habits, effective listening, self-concept, differences in cultural and gender conversation styles, and conflict management. You'll also gain practical strategies you can use to improve communication at home, social situations, and workplace.

$98.00

Education (XNE)

XNE 0290

Leadership in Early Childhood Education (5 CR)

You will study how program directors lead programs and create quality environments for children, family and staff. Leadership topics include: leadership styles; developing mission statements, program philosophies, procedures, manual and handbooks; assessing and planning for program improvements; recruiting and retaining qualified early childhood teachers; creating professional growth opportunities; developing effective staff meetings; implementing a shared decision making process; utilizing conflict resolution strategies; and developing partnerships with families and community agencies.

$189.00

XNE 1104

Early Childhood Mentoring I

You will be provided with the basic foundation needed for developing mentoring relationships, which includes the opportunity to develop communication skills, leadership skills and the application of adult education theory. This course will provide practical and supportive ways to learn and grow on the job and is designed to help managers and supervisors plan, implement and evaluate mentoring techniques. This course has been approved for one undergraduate credit through St. Mary's College's Child Development Education. This requires an additional registration fee of $60 payable to St. Mary's College the 1st night of class.

$99.00

XNE 1105

Early Childhood Mentoring II

You will learn the foundation needed for developing mentoring relationships. This course provides practical and supportive ways to learn and grow on the job and is designed to help managers and supervisors plan, implement and evaluate mentoring techniques. This class is available for any experienced early education teacher or director who is designing better methods to encourage less experienced teachers. Note: This course has been approved by St. Mary's College for one undergraduate credit in Child Development Education. This requires an additional registration fee of $60 payable to St. Mary's College the 1st night of class.

$99.00

XNE 1156

Begin With the Brain

Experiences and interactions with the outside world literally shape how the brain develops. You will learn how early experiences have a decisive and long lasting impact on the growing brain. Furthermore, you will gain in sight into how you can contribute to providing children with a healthy start.

$15.00

XNE 1160

Summer Fun With Art

Young children's artwork reflects their own unique response to the world. This informative workshop will focus on the child's process of art rather than the final product. You will have the opportunity to explore processing-oriented art materials throughout the store! KS/MO Core Content Area II - Level 2, CDA Subject Area 2.

$19.00

XNE 1165

Sand & Water Play for Infants/Toddlers

When warm weather arrives, children want to play outside. Come to this fun-filled class to explore ways to incorporate sand and water play into your early learning environments. You will have the opportunity to explore sand and water materials throughout the store.

$15.00

XNE 1170

Redirecting Children's Behavior

Do you need to review your discipline techniques? You will learn a developmental approach to discipline that promotes positive guidance techniques that emphasize the adult's responsibility for guiding children. You will learn how to use modeling, inductive reasoning and reinforcing desired behaviors. KS/MO Core Content Area VI - Level 3 , CDA Subject Area 3.

$19.00

XNE 1175

Designing Preschool Enviornments That Facilitate Learning

Come and learn how to set up environments that support active learning, including the keys to managing learning centers, organization methods for supporting independent learning, and the principles for developing classrooms that eliminate common negative behaviors. You will learn how daily schedules and routines support independent learning.

$15.00

XNE 1180

Every Child Ready to Read

Current research has proven the critical role of parents and caregivers in developing language and early literacy skills. Come learn appropriate and enjoyable activities to promote the varying stages of development and strategies for getting the most out of the time spent sharing books and stories.

$19.00

XNE 1185

The Creative Curriculum - Blocks

Do you have a Block Area? Come to this informative class based upon "The Creative Curriculum" to discover first-hand the value of block play and how to support children's development and learning while they are constructing and creating.

$19.00

XNE 1190

Holiday Art

In this course you will focus on the child's process of art rather than the final product. Holiday "process oriented" hands-on art projects will be presented. Come

ready to dig in and have some fun! You will also have the opportunity to explore process-oriented art materials throughout the store!

$19.00
XNE 1195

An Introduction to Room Arrangements

Since your children learn best through their interactions with objects, materials, and people, the physical environment serves as the setting for learning. This course will show you how to create a developmentally appropriate room arrangement.

$19.00
XNE 1200

Building Classroom Community

One of the hallmarks of a quality early childhood program is that it gives children and families a sense of belonging. In this course you will learn techniques that encourage children to care for one another. You will discover ways to create a peaceful community of learners and learn activities that help each child feel like an important member of the class.

$19.00
XNE 1205

Learning to Read and Write: DAP for 3-5 year olds

You will learn how three to five-year-old children view literacy, hear about the stages of literacy development, and discover ways to go beyond the ABC's to promote literacy development in the preschool classroom.

$19.00
XNE 1210

1, 2, 3 - It is More Than Counting

The class will focus on how young children learn basic mathematical knowledge and problem-solving skills. Come discover what kinds of materials to include in the classroom environment, as well as what kinds of games challenge children's thinking. You will learn how to respond to children's mistakes and turn them into opportunities for children to construct their own knowledge. KS/MO Core Content Area II - Level 2 , CDA Subject Area 2.

$19.00
XNE 1215

How Young Children Think and Learn

Come explore how children's ways of thinking and learning are different from adults. You will have the opportunity to analyze the kinds of activities you do with young children and evaluate sample activities according to ways young children learn and think.

$19.00
XNE 1220

Anger Management and the Effective Use of Power

Anger is a normal emotion. Anger management techniques, including "REACH" and "RETHINK", will be discussed to help you understand anger and ways to help children deal with their feelings.

$19.00
XNE 1225

Managing Stress

Come to this class to learn how to recognize factors that contribute to stress. You will practice relaxation activities and set personal goals for well-being. You will also discover ways to help children cope with stress.

$19.00

XNE 1230

Communicating Effectively with Parents

Communication is critical to the parent-child-caregiver/teacher relationship. During this course you will learn strategies for communicating with parents to exchange information, share messages, and deal with problems.

$19.00

XNE 1235

Caring for Children of Non-Traditional Families

Children may come from families consisting of biological parents, step parents, adopted parents, or a combination. You will discuss various family structures and their effects on child care. You will also learn strategies for keeping communication consistent with all parties.

$19.00

XNE 1240

A Teacher's Most Powerful Tool

The relationship you develop with the families of the children in your care is your most powerful tool. You will have the opportunity to look at your philosophy of teaching as it relates to parent-teacher relationships. Come to this class to learn practical ways to develop good relationships and create shared power and mutual respect with families.

$19.00

XNE 1245

The Creative Curriculum - Dramatic Play

Dramatic play is central to children's healthy development and learning. You will discover ways to set up and equip the Dramatic Play area so that it becomes a stage where children can enter and immediately take on a role and pretend. You will have a hands-on experience investigating props throughout the store.

$19.00

XNE 1250

Setting the Stage...Creative Learning Centers

Children learn through active exploration of their environment. By "setting the stage" with learning centers filled with developmentally appropriate materials, you create a role in which children explore opportunities within their environment. Come learn how to make your environment inviting and engaging. You will have a hands-on opportunity to investigate props throughout the store. KS/MO Core Content Area II - Level 2, CDA Subject Area 1.

$19.00

XNE 1255

Spring Art: Process vs. Product

In this course, you will focus on the child's process of art rather than the final product. Spring time "process-oriented" hands-on art projects will be presented. Come ready to dig in and have some fun! You will also have the opportunity to explore process-oriented art materials throughout the store.

$19.00

XNE 1260

Let's Play Outdoors

Outdoors allows children to become aware of important sensory aspects - to play without rigid direction. If set-up correctly, the outdoor environment leads children to be risk-takers and confident in their abilities. Come explore ways to add richness and imagination to your outdoor play experiences. You will have a hand-on experience investigating props throughout the store.

$19.00

XNE 1265

Social and Emotional Stages in Lesson Planning

This class will focus on the tangible relationship between Piaget's cognitive learning theory and Erickson's 8 stages of emotional intelligence. How do children learn? What materials do they need to learn? Why do they do what they do at certain ages? Do not be afraid of a class on theory, this will be very hands on. Learn what materials to have in the classroom and how to create lesson plans that truly reflect the needs of children. You will also focus on age appropriate behaviors and how to help children through "challenging behaviors."

$19.00

XNE 1270

Documentation and Assessment - How to Effectively Use Them

What does documentation really mean? Why do we create lesson plans? Why do we collect samples of children's work and how do we decide what to collect? Yes, there really is a method to our "madness." This class will guide you in the four domains of learning, the milestones that occur, what you should collect and what these samples might look like. KS/MO Core Content Area III - Level 2, CDA Subject Area 3.

$19.00

XNE 1275

Communication Techniques for Adults

Communication techniques for all people can be challenging, but it is especially so when you work with someone for 8-10 hours a day. You will focus on how to talk to be heard, how to listen, how to problem solve and how to create a work environment that works for everyone. Creating a team is not easy but through reflective listening and problem solving solid teaching teams can emerge. You will have the opportunity to role play and problem solve real situations. KS/MO Core Content Area VIII - Level 1, CDA Subject Area 6.

$19.00

XNE 1280

Observation, Documentation and Child Portfolios

Do you need help developing or organizing a system to complete child observations, documentations and portfolios? Come to this class to learn different ways to accomplish all of this as well as find a way that works best for you in your classroom. You will also learn ways to communicate observations through Family/Teacher Conferences. KS/MO Core Content Area III - Level 2, CDA Subject Area 7.

$19.00

XNE 1285

Early Childhood Programs and Family Relations

Where are the parents, grandparents, aunts or uncles? In this class you will learn techniques to better incorporate families into your early learning program.

Research supports the fact that if a family is involved in a child's education, the child will be more successful. You will also learn ways to keep lines of communication open. KS/MO Core Content Area IV - Level 2, CDA Subject Area 4.

$19.00
XNE 1290

What is Professionalism in the Early Childhood Environment?

As the field of Early Learning is striving to become recognized as a profession in the general community, we as educators must look at what we are doing and how we are presenting ourselves to children, parents and families, and community members. Come to this class to create or further develop your own personal philosophy of early learning based on Child Development and Developmentally Appropriate Practices. Additionally, we will discuss the implementation of the NAEYC Code of Ethics to decision making in the classroom as well as in every day life.

$19.00
XNE 1295

Types of Attachment and Implications for the Classroom Teacher

Knowing and understanding the different types of child/guardian attachments is essential for creating a safe and secure environment. You will learn the different types of attachment and how to adapt and adjust to meet the different needs of your children.

$19.00
XNE 1300

Making Brain Connections with Music

Come learn how singing, dancing, laughing and learning go "hand in hand" in the early learning environment. You will learn information on brain research and the importance of music in a young child's life. Come prepared to have fun!

$19.00
XNE 1305

The Learning Power of Laughter

You will experience joyous activities to develop important skills in young children through humor, laughter and fun. Come explore creative and fun activities that will enrich any classroom experience.

$19.00
XNE 1310

Portfolio: A Picture of a Child's Development

Learn how to give parents a graphic look at their child's development. Learn how to develop portfolios that give parents a picture of their child's development over an entire year. Develop procedures for developing children's portfolios that help you manage your time. See samples of preschool portfolio entries and design ways to begin this process. Learn the skills you will need to make this process important and interesting to preschool children. KS/MO Core Content Area III - Level 3, CDA Subject Area 7.

$19.00
XNE 1315

Listen to the Children: Strategies for Dealing with Superhero Play

Learn why super-hero play fascinates and motivates children. Discover appropriate strategies for respecting and supporting children's make-believe play.

Explore ways to extend this play beyond mere imitation of current super heroes.

$19.00

XNE 1320

Literacy Begins at Birth

Literacy, like all language, begins in infancy when adults speak, sing and read to their newborn babies. These early experiences build a foundation for a child's ability to read and write. This class will offer you ideas on how to enhance the early childhood classroom to promote language and literacy development. KS/MO Core Content Area II - Level 3, CDA Subject Area 3.

$19.00

XNE 1325

Emotional Intelligence and Its Impact on Learning

Providing environments that strengthen relationships of mutual trust and respect between children, teachers and families has a powerful impact on learning and problem solving. You will outline what Emotional Intelligence is, how it affects learning, and what you can do to support children's development in this area.

$19.00

XNE 1330

Academics or Not? Teaching that Promotes School Readiness

"They are just playing" is the age-old rhetoric that leads many preschool teachers and parents to believe that an emphasis on academics (getting kids ready for school) is essential for older preschoolers. You will learn how to incorporate "academic" learning into everyday routines and discover how to help children become successful in school.

$19.00

XNE 1335

Play with Me: Interactions that Help Children Learn

You will discover that children really do learn best through play. Come learn how to design intentional situations for children to solve problems as they explore math, science, literacy and everyday relationships in meaningful ways. KS/MO Core Content Area II - Level 3, CDA Subject Area 2.

$19.00

XNE 1340

Positive Guidance as a Teaching Strategy

Do you spend more time trying to control children's behavior than you do supporting their learning? Come learn six techniques that are proven to help children learn to control their own behavior. You will learn how to implement these techniques and use behavior problems as opportunities for learning. KS/MO Core Content Area VI - Level 3, CDA Subject Area 3.

$19.00

XNE 1345

Teachers as Decision Makers

Do you know "why" you teach as you do? Where did you learn the teaching practices that you use? You will learn the definition of developmentally appropriate practice and decide how this can enhance your teaching. You will analyze various teaching practices according to the principles of child development.

$19.00

XNE 1350

Math, Science and Nutrition for Young Children

Teachers support children's innate sense of wonder within science, math and nutrition by introducing experiments, exploring items from nature and through cooking activities. Come learn new ways to present materials that will extend the discoveries that children make. In addition, you will have the opportunity to explore materials and ideas that help support this process.

$19.00

XNE 1355

Working with Children With Special Needs

You will participate in a variety of scenarios that cover several disabilities. In addition, you will learn simple ways to integrate even the most challenging children into your everyday activities. KS/MO Core Content Area VIII - Level 2, CDA Subject Area 8.

$19.00

XNE 1360

Fostering Language in the Early Childhood Classroom

Language is a child's ability to communicate with the world around him. You will visit what is developmentally appropriate for the preschool aged child. You will also look at strategies to foster good language skills in a variety of activities throughout your typical routine. Alternative communication systems will be introduced. KS/MO Core Content Area II - Level 3, CDA Subject Area 2.

$19.00

XNE 1365

Managing Time

This course will help you identify ways to maximize your productivity while reducing stress projected on children and staff. You will identify your "prime" time and learn productivity tips to increase the time you can spend on educational goals and relaxation.

$19.00

XNE 1370

Supporting and Engaging Families in Early Learning

When programs are designed with parents rather than to parents, the results are more successful and have a greater impact. You will identify practical strategies that can be used to create an environment that supports and engages families both in the classroom and throughout the program. KS/MO Core Content Area IV - Level 3, CDA Subject Area 4.

$19.00

XNE 1375

Is it Safe?

Child care programs are faced with serious concerns regarding the safety of children. In this course you will learn and discuss protocols to update and enhance your classroom safety. KS/MO Core Content Area V - Level 1, CDA Subject Area 1.

$19.00

XNE 1380

Creative Thinking During Childhood

Teachers are often advised to "work to children's strengths." In this class you will

explore how an understanding of children's creativity enables you to do this. You will also examine the characteristics of schools that nurture creativity and the role of the teacher in fostering creativity. Come learn how to provide an environment that helps all children develop their creative potential to the fullest extent. KS/MO Core Content Area II - Level 4, CDA Subject Area 2.

$19.00
XNE 1382

Leadership or Management: Which Should it Be?

If you direct a program or have management responsibilities, this workshop is for you. You will learn the difference between leadership and management, discover when to use one style over another, and become familiar with the skills and competencies required for effective leadership. Learn what kind of power effective directors use. Discover ways to get your staff to do their jobs effectively. Learn the values and beliefs that shape your leadership behavior and begin a plan of action that leads your program to realize their dreams for young children.

$19.00
XNE 1384

You Can Make a Difference

Come experience a combination of child development information and philosophy mixed with a liberal dose of singing, laughing and fun. You will return to your classroom with a new appreciation of yourself and the children that you teach. KS/MO Core Content Area II - Level 2, CDA Subject Area 3.

$19.00
XNE 1386

Laughing and Singing Make Way for Good Reading

Come to this class to learn games, rhymes, and songs that develop alphabet recognition, alliteration, story-telling, phonemic awareness and the necessary skills for learning to read. You will explore the importance of listening skills, order, sequence, memory, vocabulary and all the necessary language skills for creating readers. KS/MO Core Content Area II - Level 3, CDA Subject 2.

$19.00
XNE 1388

Normal Sexual Development in Children

Children exhibit a host of behaviors that leave many adults stumped at how to respond. When children act out sexually or have questions about bodies, babies and more, again, adults aren't typically equipped to respond. This interactive and entertaining workshop addresses normal sexual development in children, how to talk with children and assist them in safety and esteem around their growing bodies. Both sessions must be attended to receive credit. KS/MO Core Content Area I - Level 2 & 3, CDA Subject Area 8.

$38.00
XNE 1390

Shared Power? You Must Be Kidding!

If you direct a program or have management responsibilities, this workshop is for you. Learn how to analyze different kinds of decisions that are made in child care programs and discover ways that you can move toward a more participative process for solving problems and achieving program goals. Learn how to create a climate where individuals can openly discuss highly charged topics, how issues are decided, and how work in your program is carried out. Discover your leadership style and learn how to use it to benefit your entire program.

$19.00

XNE 1392

Winter Holidays/Family Traditions

When you think of your favorite winter holiday, what comes to mind? Thoughtfully planned, holiday activities, if used sparingly, can contribute to anti-bias curriculum and broaden children's awareness of their own and other culture's experiences. Participating in celebrations and rituals enhances children?s feelings of being part of a close-knit group. Through music, art, literature, and cooking activities, we will explore ways to bring a part of the children's lives at home into the child care setting and introduce children to their classmates' family holiday traditions.

$19.00

XNE 1394

The Influence of Culture on Caregiving

As the early care and education field becomes increasingly diverse, the ability to collaborate effectively with parents and children from different backgrounds is increasingly critical to providing quality service to families and care to infants and toddlers. Participants who attend this training will have the opportunity to explore how one's own culture influences routines, caregiving style, and parenting choices.

$19.00

XNE 1396

Understanding Temperament and Attachment

Understanding Temperament and Attachment in a child is a key to understanding the whole child. A child's temperament influences not only their style of interactions, but the very way they understand and experience the world and the people in it. Come to this class to learn the importance of temperament and attachment with children birth to three.

$19.00

XNE 1398

Making Families Feel at Home

Relationships with parents are primary indicators of a quality early childhood program. You will explore how to design environments that make parents feel welcome and comfortable, and learn strategies for creating and maintaining reciprocal relationships with parents. You will discuss the reasons and goals for parent involvement activities and plan strategies for how to include these in your program.

$19.00

XNE 1400

Writing Your World: Literacy in the Early Childhood Setting

In this course you will review what NAEYC has to say about developmentally appropriate practices in the area of literacy. You will use an observation tool to look at what characteristics indicate a strong literacy based environment. Emphasis will be on developing hands-on, practical applications that can be used in your setting.

$19.00

XNE 1402

Building Blocks to Children's Development

Children's development can be difficult to describe, yet accessing development must be a part of everything you do. You will learn how to asses your daily activities and examine several methods for documenting observed learning. The goal is to embed assessment into everything you do.

$19.00

XNE 1404

Creative Drama

This class will focus on dramatic play and story drama. You will learn strategies for enhancing role play be exploring various props, puppets and themes to use. In small groups you will brainstorm how to adapt a story to dramatize. Come prepared for a fun learning experience.

$19.00

XNE 1406

Helping Preschool Children Develop Friendships

Is it possible for preschoolers to treat others with respect and kindness? Come learn strategies for helping your class become a caring, respectful community. You will also learn methods for encouraging children to be friends.

$19.00

XNE 1408

Music: The Universal Language

In this class you will look at why music is important. You will learn how to create an environment that fosters music and movement in children. You will have a hands-on experience with music, as you engage in listening, singing, playing, moving and creating.

$19.00

XNE 1410

Is It a Playground or an Outdoor Classroom?

Do you have a playground or an outdoor classroom? You will examine the qualities of a well-planned outdoor learning environment that allows children to explore and create. Nature provides a convenient supply of materials and subject matter for children. We will discuss the teacher's role, how to plan outdoor learning centers, storage and organization, activity files, gardening, safety and discipline. KS/MO Core Content Area II - Level 3, CDA Subject Area 3.

$19.00

XNE 1412

Building Family Relationshps

You will learn how to effectively communicate with parents and develop strategies to establish and maintain partnerships with families. Come discover what family empowerment means. KS/MO Core Content Area IV - Level 1, CDA Subject Area 4.

$19.00

XNE 1414

Language and Literacy in the Preschool Years

Language and literacy is everywhere in a classroom environment. You will explore the diversity in language and literacy within the preschool years. You will explore ideas for implementing and supporting your language and literacy goals. KS/MO Core Content Area II - Level 3, CDA Subject Area 2.

$19.00

XNE 1416

Loving and Learning Language

You will have the opportunity to discuss appropriate language milestones of

children birth to 5 years of age. You will also develop practical activities for children to encourage and enhance language development in the classroom and home. KS/MO Core Content Area I - Level 2, CDA Subject Area 8.

$19.00

XNE 1418

Curriculum from Children's Interests: Is it Possible?

You will learn how to analyze curriculum to find those that support how children learn as well as how to develop curriculum that supports children's & teachers' interests. In addition, you will learn how to begin a new way of teaching that will require less structured teacher preparation. KS/MO Core Content Area II - Level 4, CDA Subject Area 1.

$19.00

XNE 1420

Taming the Transition Monster

Do you ever feel like your experiences with children would be more fun were it not for the horrible thing we call transitions? You will learn how to respond to children's behavior during difficult times, evaluate daily routines that add to transition nightmares, analyze transition scenarios and plan effective strategies, and learn strategies that will lessen transition struggles. KS/MO Core Content Area VI - Level 2, CDA Subject Area 3.

$19.00

XNE 1422

What's Your Next Move?

Have you ever had a problem with a parent or co-worker that was difficult to solve? In this workshop you will learn the principles for solving difficult problems; practice applying these principles to everyday problems you encounter in your child care setting, and learn how to use NAEYC'S code of ethics to solve classroom problems and other situations where a center's policies may conflict with parent expectations and concern. KS/MO Core Content Area VIII - Level 4, CDA Subject Area 6.

$19.00

XNE 1424

Structure Your World for Success

Taking the time to greet each child individually everyday can have a dramatic impact on the success of your environment! Arranging your space so there is a place for "alone" time can also make a difference. Normal development and developmentally appropriate practice will be considered as we explore the social world of the early childhood setting. KS/MO Core Content Area II - Level 2, CDA Subject Area 3.

$19.00

XNE 1426

Meet All Children's Intelligences

The theory of multiple intelligences suggests that intelligence extends beyond the traditional notion of I.Q. to eight areas: linguistic, logical/mathematical, spatial, body/kinesthetic, musical, interpersonal, intrapersonal, naturalist. You will explore how to understand and identify all eight intelligences in yourself and the children in your classroom. Furthermore, you will learn how to ensure that all children's intelligences are met through the activities and materials you provide. KS/MO Core Content Area II - Level 3, CDA Subject Area 2.

$19.00

XNE 1428

Planning Your Infant/Toddler Care Setting

How an environment is organized has a powerful influence over the way children and adults behave and interact. The environment's ability to meet the growing child's physical, emotional, social, and cognitive needs is critical. You will focus on how the use of clearly-defined activity areas is important to children's cognitive development and growing ability to make appropriate choices. You will also have the opportunity to design an infant/toddler care environment. KS/MO Core Content Area II - Level 2, CDA Subject Area 2.

$19.00

XNE 1430

It's Not Just Routine, Part 1

Caregiving routines provide opportunities to build a close personal relationship with each child while attending to the child's individual physical, emotional, and developmental needs. You will address the importance of routines in creating intimate bonds between child and caregiver and in providing opportunities for physical, language, and cognitive development. KS/MO Core Content Area VI - Level 2, CDA Subject Area 3.

$19.00

XNE 1432

Give Kids Control Without Losing Control

You will discuss the idea that the more involved children are in program planning, implementation and evaluation, the more effective the program will be. We will focus primarily on school-agers and older preschoolers, but there are ways for all programs to work more effectively with all age groups in giving kids more control while still maintaining the appropriate degree of control for adults. KS/Mo Core Content Area IV - Level 3, CDA Subject Area 3.

$19.00

XNE 1500

Child Development Associate (CDA) Credential

You will acquire the knowledge and skills to become a professional teacher of young children in an early education center or as a family care provider. This course is designed as an intensive integration of study and professional preparation experience that emphasizes the application of knowledge to practice. At the end of the course you will be prepared for your assessment to earn a professional CDA credential that is recognized by early childhood educators nationwide.

$199.00

XNE 5000

Early Childhood Education Symposium

A description is not available for this course.

$60.00

Fire Science (XNF)

XNF 1000

Essentials of Firefighting

This course fulfills the requirements of the National Fire Protection Association competencies identified in NFPA 1001 at the Firefighting I level and follows the IFSTA manual. Successful completion of the course results in eligibility for the KU/FST Firefighter examination. Firefighter I exam fee is an additional $60 paid

directly to K.U. Evidence of completion of EMS First Responder or equivalent EMS training is also required to take the KU/FST Firefighter I exam. The fee for the Firefighter I exam is paid directly to the University of Kansas. The exam is administered at the college as a final exam. (6 Saturday labs) Instructor: Benjamin

$239.00
XNF 1010

Hazardous Materials Awareness Level

This course is intended for those persons who, in the course of their normal duties, are likely to witness or discover the release or potential release of a hazardous substance. It fulfills the requirements identified in (OSHA) 29 CFR Part 1910.120 and (EPA) 40 CFR Part 311, for hazardous materials responders at the awareness level. Instructor: Benjamin

$49.00
XNF 1020

Hazardous Materials Operations Level

This course is intended for those persons who are part of the initial response to releases or potential releases of hazardous substances for the purpose of protecting people, property and the environment from the effects of (OSHA) 29 CFR Part 1910.120 and (EPA) 40 CFR Part 311, for hazardous materials responders at the operations level. Persons enrolling in this course shall have successfully completed the Hazardous Materials Awareness Level course or equivalent, documented, training. Instructor: Benjamin

$149.00
XNF 1025

IBC Hazardous Materials Seminar

This seminar will be presented to meet the learning needs of those with intermediate to advanced knowledge, skills and experience in understanding and enforcing applicable code restrictions.

$199.00
XNF 1030

Building Construction: Noncombustible, Fire Resistive Construction

This course describes the characteristics of noncombustible and fire-resistive construction as they pertain to the fire service. The primary emphasis is on improving the fir eofficer's knowledge of building construction to ensure fire fighter safety. The course will improve the fire officer's ability to predict the reaction of a building to fire. Participants completing this course will recieve a National Fire Academy certificate. This course is part of a three course series that addresses building construction for fire suppression. Students successfully completing all three courses may be eligible to receive college credit. Students interested in acquiring college credit should contact the Humanities and Social Sciences Division at JCCC.

$33.00
XNF 1040

Building Construction: Principles of Wood and Ordinary Construction

This course describes the characteristics of wood and ordinary construction as they pertain to the fire service. The primary emphasis is on improving the fire officer's knowledge of building construction to ensure fire fighter safety. The course will improve the fire officer's ability to predict the reaction of a building to fire. Participants completing this course will receive a National Fire Academy certificate. This course is part of a three course series that addresses building construction for fire suppression. Students successfully completing all three courses may be eligible to receive college credit. Students interested in acquiring college credit should contact the Humanities and Social Sciences Division at

JCCC.

$33.00

XNF 1050

Building Construction: Principles of Construction for Garden and High Rise Buildings

This course describes the characteristics of garden apartments and high rise buildings as they pertain to the fire service. The primary emphasis is on improving the fire officer's knowledge of building construction to ensure fire fighter safety. The course will improve the fire officer's ability to predict the reaction of a building to fire. This course is part of a three course series that addresses building construction for fire suppression. Students successfully completing all three courses may be eligible to receive college credit. Students interested in acquiring college credit should contact the Humanities and Social Sciences Division at JCCC.

$33.00

XNF 1060

5 Alarm Leadership/Pride & Ownership

This program takes the strategy and tactics used by today's fire service leaders and applies them to the business community.

$99.00

XNF 2000

Introduction to Fire Services

A description is not available for this course.

$59.00

XNF 3000

Candidate Physical Ability Test (CPAT)

The Candidate Physical Ability Test (CPAT) is designed to identify people who are physically able to perform essential job tasks at fire scenes. Successful CPAT participants will be given a certification verifying successful completion of the test. This certificate will facilitate the hiring process for departments requiring successful CPAT completion. A photo I.D. will be required to take the CPAT. (2 sessions)

$75.00

XNF 3001

Fire Service Entrance Examination

The Fire Service Entrance Exam is offered to people seeking positions with fire departments or any entity that requires completion of the FSEE before submitting an application. The FSEE is a standardized test for assessing a person's basic aptitude for the position of firefighter. The test does not assess a person's knowledge of the fire service or firefighting. People who take the test will receive a certificate indicating their score. Bring two #2 pencils with clean erasers. Calculators are not permitted. A study guide is available for purchase at the JCCC Bookstore.

$45.00

XNF 3002

CPAT + Fire Service Entrance Exam

This section includes the Candidate Physical Ability Test (CPAT) and the Fire Service Entrance Exam (FSEE).

$99.00

XNF 3010

Code Fooprint: Roadmap to Fire and Life Safety
A description is not available for this course.

$69.00

XNF 3015

Inspection, Text, and Maintanance of Automatic Fire Sprinkler Systems
A description is not available for this course.

$525.00

XNF 3020

Fire Pump Applications, Inspection, and Testing
A description is not available for this course.

$525.00

XNF 3025

Ventilation Methods & Techniqu
A description is not available for this course.

$109.00

XNF 3026

Fire Service Fitness Specialist
This 5-day course is designed specifically for the fire services and public safety professional who is invloved in developing and delivering physical fitness programs in their academy or department.

$649.00

Food and Wine (XPE)

XPE 1010

Cake Decorating I
Learn to create and decorate like a professional. You will explore various methods of cake decorating and confectionary design. Supplies: basic decorating kit available at most hobby stores.

$35.00

XPE 1033

Hors D'Oevres
Repeat of 2007 Hors d' Oeuvres class. Make Cheese mold with Jalapeno, Cranberries and Apricot, Savory Cheesecake Puffs, Bakes Potato Skins with various toppings, Hummus three ways with Pita Chips, Green Onion Rolls with Silky Beef, and Mud Puddles for dessert.

$36.00

XPE 1042

Make Ahead Brunch
Prepare these easy and delicious recipes the night before and bake in the morning for your overnight guests: Berry Punch, Apple Streusel Muffins, Lemon

Blueberry Poppy Seed Bread, Sausage Egg Casserole and Peach French Toast Casserole.

$36.00
XPE 1065

Quick and Easy Casseroles

Are there enough hours in your day? Introducing time saving casseroles which you can pop in the oven when you get home. Have time to relax or play with the kids. Will feature chicken, pork chop, tater tot, beef rice and enchilada casseroles.

$36.00
XPE 1075

Crock Pottery

Have dinner ready when you get home. Time saving recipes you prepare in your crock pot with minutes preparation the night before or that morning. No fuss and tastes delicious. Will feature Crock Pot Lasagna, Chili, Beef Stew and Fruit Chicken.

$36.00
XPE 1076

Cooking for Singles

Planning and shopping tips on how to cook smaller quantities and prepare and store extra servings while saving you time and money. Will feature Easy Lasagne, Mini-Meat Loaf and Quadruple layer chocolate cakes.

$36.00
XPE 1079

Wine Discoveries-Shiraz/Syrah

Come tantalize your palate with some wonderful shiraz and syrah wines, including some Australian wines. The class is open to both novice and seasoned wine tasters. Participants must be at least 21 years old. Fee includes wine and food costs.

$30.00
XPE 1087

Wine Discoveries-White Wines

Discover unusual white wine varietals. The class is open to both novice and seasoned wine tasters. Participants must be at least 21 years of age. Fee includes wine and food costs.

$30.00
XPE 1098

Beginning Cooking: Yeast Breads

Have you ever wanted to learn how to make yeast breads like a bakery? We will make Traditional Yeast Rolls, a Braided Challah and the Ultimate Cinnamon Rolls. Students may participate to learn the techniques involved. Class limited to 16 students.

$36.00
XPE 1099

Mid Eastern Cuisine

Enjoy unique Med Eastern Cuisine which has become family favorites. You'll

enjoy tasty dishes such as Tuskabob, Shiskabob, Badem-jan, Cutlet, and Rice served with fresh pita.

$36.00

XPE 1100

Cooking with Tomatoes

A description is not available for this course.

XPE 1114

Vegetarian Delight

Explore the interesting and exciting world of vegetarian cooking. We will cook healthy vegetarian dishes using easily available vegetables and common ingredients. Class limited to 12 students.

$36.00

XPE 1124

Taste of India

Come and enjoy your evening by cooking and eating a delicious Indian three course meal with "chai" and good company! We will make scrumptious lamb curry with Biriyani accompanied by Raitha and Potato Bondas. Limited to 10 students.

$36.00

XPE 1129

Quick and Easy Meals

Do you want to eat good, home-cooked food without spending much time in the kitchen? Come try some simple recipes using simple ingredients. Each recipe will include only 5-6 ingredients and nutrition information will be given. Limited to 12 students.

$36.00

XPE 1133

Southwest Cooking

Kick up your winter with some Southwest cooking! Tonight we will prepare Southwestern Egg Rolls, Spicy Chicken Chili, Layered Enchilada Platter and Sweet Corn Cakes. For dessert we will have Cinnamon Chips with Fruit Salsa.

$36.00

XPE 1152

Crescent Rolls

Oh the things you can do with Cresent Rolls - Mushroom Bites, Asparagus Ham Bundles, Stuffed Ruben Ring, Mini Cinnamon rolls and Mama Mia Veggie Pizza.

$36.00

XPE 1153

Fall Soups and Chili's

We are going to get ready for the cold weather by stirring up some tasty and comforting foods: Grandma's No Fuss Chili, Creamy White Chili, Chicken Noodle, Steak Soup and French Onion Soup. Of course I bring dessert, I always do!

$36.00

XPE 1154

No Fuss Desserts

Always on the lookout for simple desserts? These are quick and easy. Tiramisu Brownie squares, Apple Pie Bundles, Ultimate Banana Cream Dream and Cream Filled Strawberries.

$36.00

XPE 1156

Uptown Brunch

Breakfast done right! Simple and creative brunch ideas that make easy entertaining that looks like you worked for hours: French Toast Casserole, German Coffee Cake, Hash Brown Casserole and Sunrise Punch.

$36.00

XPE 1157

Tea Time

Want to have a tea party with friends? Come and enjoy making English Breakfast tea, Chai, green tea and other herbal teas. Also learn to make scones of various kinds with a basic healthy simple recipe. Limited to 12 students.

$36.00

XPE 1158

Taste of India - Vegetarian

Come and try some vegetarian Indian dishes. We are going to cook Dhal Makhani, Vegetable Kofta Curry, Palak Paneer and Mango Chutney. Come, eat, and enjoy! Limited to 10 students.

$36.00

XPE 1161

Perfectly Grilled

Come learn all the details of how to achieve perfection in grilling. Enjoy a crusty, juicy T-Bone Steak, Grilled Orange Marinated Pork Chops and Sweet Potatoes, Quinoa with Cranberries and Pecans, Marinated Vegetable Platter and Chocolate Strawberry Trifle.

$36.00

XPE 1178

All New Hors d'Oeuvres

This will be the best of the hors d'oeuvres recipes collected, tasted and tried throughout 2008. We will have wine experts offer suggestions for wine to compliment each hors d'oeuvre.

$36.00

XPE 1186

Light and Delicious

This class really cuts the calories without sacrificing appearance or flavor. Pork Tenderloin with Goat Cheese Cream Sauce, Turkey Veggie Burgers, Stir Fried Asparagus, Wild Rice and Orzo, Whole Wheat Flat Bread and Daiquiri Pie.

$36.00

XPE 1240

Whole Grain Bread 101

Make healthy, delicious, homemade breads, up to 6 loaves in just 75-90 minutes,

plus ideas for 20+ variations. Topics include: whole grains & milling flour, types of mixers & machines, four secrets of perfect dough, and the mystery of gluten.

$36.00
XPE 1278

Cooking With Whole Grains

Learn how to make five uncommon grains (spelt, kamut, quinoa, millet, barley) a simple part of your daily menu. Topics include buying and storing, grinding fresh flour, main & side dishes, cereals, homemade tortillas, plus convenient pancake and muffin mixes.

$36.00
XPE 1332

Tour of America: Miami & the Florida Keys

Enjoy the cuisine from one of the hottest spots in America: Miami and the Keys. We will indulge on Tilapia with a Mango Salsa, Coconut Shrimp, Black Beans with Rice, Fried Plantains and Key Lime Pie.

$36.00
XPE 1334

Holiday Brunch

How about a brunch to satisfy your family this holiday season? We will begin by enjoying Mimosas, then, preparing Blueberry Pancakes with a Blueberry sauce; Chocolate Chip Pancakes with Homemade Syrup; Homemade Sausage Patties; Bacon, Spinach and Red Pepper Strata and a quick Lemon Curd.

$36.00
XPE 1397

Cake Decorating II

Learn the art of the wedding cake with hands on creation. Using different frostings and decoration application, the amateur and the culinary student will benefit from this course. Supplies: basic decorating kit. Prerequisite: Cake Decorating I.

$35.00
XPE 1398

Italian Favorites

Italian cooking brings people together at the dinner table. Tonight we will prepare a Torta Appetizer (Pesto, Cream Cheese, Sundried Tomatoes, etc); Spicy Penne Pasta in a Vodka Tomato Cream Sauce; Double Stuffed Garlic Chicken; ending with a delicious Tiramisu.

$36.00
XPE 1399

Asian Invasion III

Tonight we will enjoy more Asian delights. Starters include a Lettuce Salad with Delicious Japanese Dressing and Lumpia (Pilipino Spring Roll). Our main entree will be Orange Chicken accompanied by Fried Rice; finishing with delectable Coconut Macaroons.

$36.00
XPE 5000

Secrets of the Caterer

Do you love to cook and plan parties? Then start your own catering business and make money doing what you love! In this course, you learn how to become an effective and reputable caterer. Learn the business and the tricks of the trade, including many delicious catering recipes.

$85.00

XPE 5001

Wine Appreciation for Beginners

Master the secrets of wine appreciation and never be intimidated by a wine steward again. Learn how to order wine, taste it properly, and how to choose the single variety that will best complement your meal.

$85.00

Foreign Language (XPL)

XPL 1010

Italian for Travelers I

Learn basic Italian phrases and conversation with emphasis on practical usage while traveling. Topics will include how to get around, cuisine, shopping, culture and regions of Italy.   Please check the JCCC bookstore for the textbook for this class.

$89.00

XPL 1015

Italian for Travelers II

In this continuation of Italian for Travelers I, you will learn new, practical conversational skills as well as reading and writing. Additional verb tenses will be introduced. Prerequisite: Italian for Travelers or other introductory Italian class. Please check the JCCC bookstore for the textbook for this class.

$89.00

XPL 1017

Italian for Travelers III

This class is a continuation of Italian for Travelers II. Emphasis will be on improving your reading, writing and speaking skills.   Please check the JCCC bookstore for the textbook for this class.

$89.00

XPL 1100

French for Travelers

This class will teach "survival" French for traveling abroad. Learn handy phrases to use when greeting people, shopping, ordering a meal or asking directions. You'll also learn about French culture.   Please check the JCCC bookstore for the textbook for this class.

$89.00

XPL 1105

French I, Beginning

This course is an introduction to the fundamentals of the French language taught in an informal and fun environment. You will learn to read, write, and speak in simple French sentences and learn aspects of French culture.

$89.00

XPL 1110

French II, Beginning

This follow-up course continues to focus on the study and use of basic French grammar, vocabulary development, word pronunciation and common phrases.

$89.00

XPL 1115

French for Travelers IV

This class is a continuation of French for Travelers III. Emphasis will be placed on conversational French related to travel. Students will learn how to use the past and future verb tenses. Students will also learn about French culture. Prerequisite: French for Travelers III or a previous French class. The textbook, "French Without the Fuss", can be purchased at the JCCC bookstore.

$89.00

XPL 1116

French, Conversational

Increase your vocabulary and improve pronunciation in this conversational French class conducted entirely in French. This course is designed for students with a high intermediate to advanced level of French. You'll learn about French culture while improving your French.

$89.00

XPL 1120

French Pronunciation Improvement I

Do you want to improve your speaking and reading in French? Reading rules and practice, phonetic drills followed by short dialogs and poems will help you polish your pronunciation and feel more confident in French-speaking situations.

$109.00

XPL 1130

French Pronunciation Improvement II

This course is a continuation of French Pronunciation Improvement I. It is designed to help you gain self-confidence in a French-speaking environment. Prerequisite: French Pronunciation Improvement I or appropriate level of knowledge of French approved by the instructor.   Please check the JCCC bookstore for the textbook for this class.

$89.00

XPL 1131

French Grammar Review

Come for additional practice to refine and improve your French communication skills. Grammar topics important to express your thoughts, speech and writing will be emphasized. Advanced knowledge of French required.   Please check the JCCC bookstore for the textbook for this class.

$165.00

XPL 1132

French Pronunciation Improvement III

This course is a continuation of French Pronunciation Improvement II. It is designed to help you gain self-confidence in French speaking environments. This is for advanced French students who have taken French Pron Imp II or with instructors permission.

$109.00

XPL 1133

French Pronunciation Improvement IV

This is a continuation of French Pron Imp III. This is an advanced level of French class prerequisite French Pron Imp III or instructors permission.

$109.00

XPL 1200

German for Travelers

Learn to ask directions, order meals, figure money and conduct basic conversations. An informal conversational approach will be used.   Please check the JCCC bookstore for the textbook for this class.

$99.00

XPL 1300

Japanese, Conversational I

Learn the basic elements of spoken and some written Japanese (as time allows) in an informal and fun environment.   Please check the JCCC bookstore for the textbook for this class.

$123.00

XPL 1305

Japanese, Conversational II

Continue the development of skills learned in Conversational Japanese I with an emphasis on conversation and writing. Prerequisite: Conversational Japanese I or equivalent. The textbook can be purchased in the JCCC bookstore.

$89.00

XPL 1350

Chinese, Beginning I

Learn the basic elements of spoken and some written Chinese in an informal and fun environment. The course will focus on vocabulary development, word pronunciation and common phrases. The course will stress the practical and everyday use of Chinese.   Please check the JCCC bookstore for the textbook for this class.

$89.00

XPL 1355

Chinese, Beginning II

Continue study of Chinese by improving your pronunciation, common expressions and basic conversations. You will learn basic strokes of Chinese characters and recognize a list of frequently used words. Learn more Chinese etiquette and cultures.   Please check the JCCC bookstore for the textbook for this class.

$89.00

XPL 1400

Russian for Beginners I

In this course, you will master the Russian alphabet and learn to read, write and speak basic Russian.   Please check the JCCC bookstore for the textbook for this class.

$89.00

XPL 1405

Russian for Beginners II

Continue to improve your use of Russian through this sequential course. Emphasis will be on improving reading, writing and speaking Russian and increasing basic vocabulary in order to understand and communicate.   Please check the JCCC bookstore for the textbook for this class.

$89.00

XPL 1500

Spanish for Travelers

Planning a trip to a Spanish speaking country? Learn useful vocabulary, phrases and cultural tips that will help you socialize and communicate with native speakers and make your trip enjoyable. No prior knowledge of Spanish necessary.

$99.00

XPL 1501

Spanish Tutoring

Spanish Interpreting.

$100.00

XPL 1502

Brazilian Carnival

Experience the power and joy of Brazilian Carnival: A study of the largest cultural festival on the planet, its origins, its music, regional variations, and its distinct roots in the social liberation movements of Afro-Brazilians. The last session includes a Feijoad dinner.

$79.00

XPL 1505

Spanish, Conversational I

Solo En Espanol. Learn to communicate in simple and complex sentences using present, future and past tenses. Role playing and other exercises will be used to help you improve. Prerequisite: Spanish II.   Please check the JCCC bookstore for the textbook for this class.

$99.00

XPL 1510

Spanish, Conversational II

Solo En Espanol. Vocabulary and grammatical structures will be emphasized as you communicate in more complex sentences. Learn to handle everyday-life situations (shopping, traveling, ordering food) and discuss current events. Achieve good pronunciation and grammatical skills. Learn about Spanish cultures. Please check the JCCC bookstore for the textbook for this class.

$99.00

XPL 1511

Spanish, Beginning I

Learn the alphabet, numbers, telling time, colors, days of the week, months of the year, seasons, colors, and opposites and to ask and answer basic questions in the present tense. You can expect to learn approximately 150 words. The instructor will inform you if a book is required for this class.

$99.00

XPL 1512

Spanish, Beginning II

This course, a continuation of Beginning Spanish I, will focus on the study and use of basic Spanish grammar, vocabulary development, word pronunciation and common phrases. The instructor will inform you if a book is required for this class.

$99.00

XPL 1515

Spanish, Intermediate

Begin to create orally with the language and rely less on memorized material. Increase your vocabulary, learn more verbs, increase reading and writing skills and improve understanding of a native speaker.

$99.00

XPL 1516

Spanish, Intermediate II

This course is a continuation of Spanish Intermediate I with the goal of expanding grammar skills. Students will practice speaking in past, present, and future correctly and confidently. Please check the JCCC bookstore for the textbook for this class.

$99.00

XPL 1525

Spanish, Conversational III

Solo En Espanol. Join this advanced group of students practicing and improving Spanish speaking and writing skills. Gain a better understanding of complex grammar structures and increase your vocabulary to 1500 words. Feel confident speaking and understanding the language. Please check the JCCC bookstore for the textbook for this class.

$99.00

XPL 1526

Spanish Translation

Document Translation

$50.00

XPL 1550

Swedish for Travelers

This class will teach all you need to know to make traveling in Sweden an enjoyable experience. Learn basic phrases to help you shop, order a meal and ask directions. Explore sightseeing possibilities to assist you in getting the most out of your Scandinavian experience.

$99.00

XPL 1551

Swedish I

Join us to learn the basics of speaking this musical Scandinavian language. You will learn the Swedish alphabet, basic grammatical constructions, and reading simple phrases, all in a fun, easy-going manner from a native born Swede. Please check the JCCC bookstore for the textbook for this class.

$99.00

XPL 1552

Swedish II

Continuation of the study of the Swedish Language with emphasis on simple conversations, reading, and applying grammar. Your current interest regarding travel, communicating with relatives, and practical help in researching a family tree will be covered. Please check the JCCC bookstore for the textbook for this class.

$99.00

XPL 1700

Arabic for Travelers

Learn basic spoken Arabic phrases for getting by as tourists or business travelers. Topics will include basics for getting by, money matters, at the hotel, eating out, shopping, meeting people and other general information. You will also learn about Egyptian culture. The textbooks, "Now You're Talking Arabic In No Time" and "Getting By In Arabic", can be purchased at the JCCC bookstore.

$99.00

XPL 1705

Conversational Arabic for Travelers

This course, a continuation of Arabic for Travelers, will focus on increasing the student's ability to express themselves orally in Arabic by teaching conversational skills useful for traveling to the Middle East. Prerequisite: Arabic for Travelers. The textbooks, Vestpocket Arabic and Colloquial Arabic of Egypt, can be purchased at the JCCC bookstore.

$104.00

XPL 1710

Beginning Modern Standard Arabic I

In this fast-paced, low-pressure course you will learn the Arabic alphabet, many conversational expressions, as well as the Arabic case and verbal measure systems. Learn to read, write, and speak in simple Arabic sentences. Please check the JCCC bookstore for the textbook for this class.

$89.00

XPL 1715

Beginning Modern Standard Arabic II

In this follow-up course to Beginning Arabic I, learn conversational expressions, while furthering your understanding and usage of the Arabic case and verbal measure systems. Please check the JCCC bookstore for the textbook for this class.

$89.00

XPL 4001

Spanish for the Workplace

Here's your chance to learn conversational Spanish for use on the job and in the workplace. Spanish will be taught using the same methods that native speakers use to learn language through memorization and structured practice. You will learn the correct pronunciation of Spanish words using the phonetic encoding system. No prior knowledge of Spanish necessary. The textbook can be purchased at the JCCC bookstore.

$149.00

XPL 4002

Spanish for the Workplace II

Here's your chance to learn conversational Spanish for use on the job and in the workplace. Spanish will be taught using the same methods that native speakers use to learn language through memorization and structured practice. You will learn the correct pronunciation of Spanish words using the phonetic encoding system. No prior knowledge of Spanish necessary. The textbook, "Spanish In Ten Minutes A Day" is available in the JCCC bookstore.

$149.00
XPL 4003

Spanish, Command Spanish for the Workplace

This is a comprehensive Spanish language program that provides immediate access to functional language skills for non-Spanish speaking students. The language component utilizes phonetic encoding to present the most important Spanish commands, questions, and phrases pertinent to the workplace.

$159.00
XPL 4004

Spanish for the Community

This class will prepare you to speak and understand small amounts of general and basic Spanish needed for interactions in daily life. Spanish for the Community provides basic cultural information to inform and educate about unique aspects of Latino culture.

$159.00
XPL 5000

Speed Spanish I, Web-Based

This course is for anyone who wants to learn Spanish pronto. You'll learn six easy recipes for gluing Spanish words together to form sentences. In no time, you'll be able to go into any Spanish-speaking situation and converse in Spanish.

$98.00
XPL 5001

Speed Spanish II, Web-Based

Gain comfort in Spanish-speaking situations by learning even more clever new recipes you can put to immediate use. When you've completed both this course and its predecessor, you'll be well on your way to fluency.

$98.00
XPL 5003

Speed Spanish III, Web-Based

Master your ability to speak, understand, and read Spanish by taking the final installment of this three-part Speed Spanish learning series. You'll learn the final six recipes that will serve as templates to help you create any Spanish sentences.

$98.00
XPL 5005

French, Beginning Conversational

Learn common French words, phrases and cultural tips for leisure and business. This course makes pronunciation simple, with phonetic spellings for every word you learn. You'll be able to hear and practice the language with a click of your mouse!

$98.00

XPL 5006

Instant Italian

This dynamic course makes learning Italian fun and surprisingly easy. You'll learn how to ask directions, book a room, order a meal, and much more - in Italian! Phonetic spellings of each word and phrase make mastering pronunication a breeze. The course audio even lets you hear and practice Italian with a simple click of your mouse. Cultural notes are included throughout the course to help you better understand the Italian people and thier way of life.

$98.00

XPL 5007

Instant Italian

You'll learn how to ask directions, book a room, order a meal, and much more! Phonetic spellings of words and phrase make mastering pronunciation a breeze. The course audio even lets you hear and practice Italian. Cultural notes are included.

$98.00

XPL 5014

Braille Beginning Transcription, Web-Based

You'll learn the history of Braille, plus different ways of producing the Braille English alphabet, numbers, punctuation and more. You'll also learn about employment opportunities for Braille Transcribers.

$98.00

XPL 5015

Braille Intermediate Transcription, Web-Based

Learn Literary Braille and prepare for the Library of Congress Braille Transcriber's Certification exam. Explore the 63 contractions used to increase your efficiency with Braille by decreasing the amount of space required to produce words or parts of words.

$98.00

Health Care Professions (XNC)

XNC 1000

Care of the Client Experiencing Depression

This course, available in JCCC's open lab, provides comprehensive information about depression, including mental status examination and empathic communication. RNs, LPNs, LMHTs and social workers will earn 3 contact hours for completing this course. ACHAs will earn 3 (RC) hours.

$36.00

XNC 1001

Care of the Client Experiencing Mania

This course, offered in JCCC's open lab, presents a comprehensive overview including client assessment, nursing diagnoses and nursing interventions. RNs, LPNs, LMHTs and social workers will earn 2 contact hours for completing this course. ACHAs will earn 2 (RC) hours.

$24.00

XNC 1010

Managing the Side Effects of Chemotherapy (Part I)

A description is not available for this course.

$22.00
XNC 1011

Managing the Side Effects of Chemotherapy (Part II)
A description is not available for this course.

$22.00
XNC 1020

Hemodynamics - Part I
The Heart and How It Works

$11.00
XNC 1021

The Pulmonary Artery Catheter
The Pulmonary Artery Catheter

$11.00
XNC 1022

The Ups and Downs of Hemodynamics
The Ups and Downs of Hemodynamics

$11.00
XNC 1030

Those Fabulous Nitrates
A description is not available for this course.

$22.00
XNC 1040

Tuberculosis: Identification, Prevention and Control
This course, available in JCCC labs, provides comprehensive information about tuberculosis, including implications for identification, prevention and control. It also differentiates between TB infection and TB disease. RNs, LPNs and LMHTs will earn 2 contact hours for completing this course. ACHAs will earn 2 (RC) hours.

$24.00
XNC 1050

Immunization: You Call The Shots (Part I)
Presented as a computer-based module in JCCC's open lab, this program is the first of a two-part series. It presents a comprehensive overview of currently accepted immunization practices. RNs, LPNs and LMHTs will earn 4 contact hours for completing this course.

$48.00
XNC 1051

Immunization: You Call The Shots (Part II)
Presented as a computer-based module in JCCC's open lab, this program is the second of a two- part series. It provides a continuation of currently accepted immunization practices. RNs, LPNs and LMHTs will earn 2 contact hours for

completing this course.

$24.00

XNC 1052

Developing Multicultural Sensitivity

This course, available in JCCC's open lab describes cultural beliefs and family relationships of selected cultural groups, including Native Americans and African Americans. RNs, LPNs and LMHTs will earn 2 contact hours for completing this course. ACHAs will earn 2 (RC) hours.

$40.00

XNC 1054

Care of the Client with Borderline Personality Disorder

This course, available in JCCC's open lab, describes dysfunctional behaviors frequently seen in clients with borderline personality disorder and presents interventions, behaviors, and discharge planning. RNs, LPNs, LMHTs and social workers will earn 1 contact hour for completing this course. ACHAs will earn 1 (RC) hour.

$12.00

XNC 1055

Clinical Delegation and Nursing Roles

This course, available in JCCC's open lab, focuses on safely and effectively giving and taking delegation, and determining the supervision needed for delegated tasks. RNs, LPNs and LMHTs will earn 3 contact hours for completing this course. ACHAs will earn 3 (A) hours.

$36.00

XNC 1056

Infection Control

This course, available in JCCC's open lab, discusses the chain of infection, mechanisms of transmission and signs and symptoms of various types of infection, as well as the differences between Universal and Standard precautions. RNs and LPNs will earn 3 contact hours for completing this course. ACHAs will earn 3 (A) hours.

$36.00

XNC 1057

Pain Management

This course, available in JCCC labs, provides a comprehensive survey of the research, neurophysiology, assessment and management of pain as it relates to children, older adults and patients at the end of life. RNs, LPNs and LMHTs will earn 7 contact hours for completing this course. ACHAs will earn 7 (RC) hours.

$84.00

XNC 1058

Ethical Care: Exploring Common Issues

Presented as a computer based module available in JCCC's open lab, this course discusses important issues related to providing ethical care, including advance directives, confidentiality, ethical decision making and a patient's rights. RNs, LPNs and LMHTs will earn 3 contact hours for completing this course.

$36.00

XNC 1059

Breastfeeding: A Model for Patient Education

This course, available in JCCC's open lab, describes the benefits of breastfeeding and information related to establishing and maintaining the breast milk supply. RNs and LPNs will earn 3.5 contact hours for completing this course.

$42.00

XNC 1060

Avoiding Medication Errors: Geriatric

This program, available in JCCC's open lab, discusses common causes of polypharmacy in the elderly and identifies nursing precautions for the elderly. RNs, LPNs and LMHTs will earn 1.5 contact hours for completing this course. ACHAs will earn 1.5 (RC) hours.

$18.00

XNC 1061

Information Management: Internet Basics

This course, available in JCCC labs, explains how the Internet works and how it can benefit healthcare professionals, including information about e-mail, ListServes, netiquette and searching the World Wide Web. RNs, LPNs and LMHTs will earn 1.5 contact hours for completing this course. ACHAs will earn 1.5 (E) hours.

$18.00

XNC 1799

Building Consensus

This course centers on the dynamics of groups coming to agreement and the importance of having everyone's commitment. Participants learn seven techniques for making clear, high quality decisions that ensure the buy-in and commitment of staff. RNs, LPNs, LMHTs, social workers and counselors will earn 3 contact hours for attending this course. ACHAs will earn 3 (A) hours.

$36.00

XNC 1800

Phlebotomy Technician Course

This 90 hour on site course prepares professionals to collect blood specimens from clients for the purpose of laboratory analysis. Students will become familiar with all aspects related to blood collection and develop comprehensive skills to perform venipunctures completely and safely. Classroom and lab work includes terminology, anatomy and physiology; blood collection procedures; specimen hands-on practice; and training in skills and techniques to perform puncture methods. Proof of Hepatitis vaccination is required prior to the start of class. Note: There is no outside externship rotation included with this program. Payment plan is available for this course.

$1,599.00

XNC 1805

EKG Technician Certification Program

This comprehensive 50 hour on site course prepares the student to function as EKG Technician Electrocardiograph (EKG) Technician exam and other National Certification Exams. This course will include practice and background information on anatomy and physiology of the heart, medical disease processes, medical terminology, medical ethics, legal aspects of patient contact, laboratory assisting, electrocardiography and echocardiography. Additionally, students will practice with equipment and perform hands on labs including introduction to the function and proper use of the EKG machine, the normal anatomy of the chest wall for proper lead placement, 12-lead placement and other clinical practices. Payment plan is available for the course.

$999.00

XNC 2003

Using the Myers-Briggs to Enhance Self-Awareness and

A description is not available for this course.

$54.00

XNC 2008

Conflict: Yours, Mine, Ours and Theirs (Updated)

Learn why people fight and what they fight about. Examine the conditions that create conflict, its value as well as the losses it creates. Look at your own approaches to conflict and how you deal with the approaches others take when there is disagreement. Learn specific steps for resolving conflict. This course has been updated. RNs, LPNs, LMHTs, social workers, counselors, phychologists, dentists, and dental hygienists will earn 6 contact hours for attending this workshop. ACHAs will earn 6 (A) hours. Approval is pending for other health professionals.

$54.00

XNC 2009

Understanding Essentials of Chronic Wound Management

A description is not available for this course.

$24.00

XNC 2010

The EKG: Advancing Your Knowledge Beyond M.I.

A description is not available for this course.

$48.00

XNC 2014

Managing Conflict and the Stress of Change

A description is not available for this course.

$48.00

XNC 2015

Marriage: Theory and Therapy (An In-depth Seminar for Clinicians)

What contributes to a well-functioning marriage? How professionals answer this question influences their clinical work with a marital problem. Most theories about marriage focus on the individuals or the couple. Bowen family systems theory broadens the lens by seeing marriage embedded in the interlocking triangles of the family emotional unit. This seminar presents how marital functioning is influenced by anxiety, differentiation of self, emotional cutoff, and nuclear and multigenerational processes. The seminar explores the clinician's challenge to translate theory into therapy. Common marital issues addressed include distance, conflict, polarization, affairs, focusing on the other, and reciprocal functioning. Social workers, psychologists, counselors and mental health clinical nurse specialists will earn 7 contact hours for completing this course.

$85.00

XNC 2017

Therapeutic Massage in the Health Care Setting

A description is not available for this course.

$36.00

XNC 2018

Hospital to Home Care: Facilitating Successful Transition

A description is not available for this course.

$24.00

XNC 2019

Who Pays for Home Care?

A description is not available for this course.

$24.00

XNC 2020

Health Care Reform: What Does It Mean for Your Career?

A description is not available for this course.

$48.00

XNC 2021

Collaboration in Mental Illness Services: Relapse to Recovery

A description is not available for this course.

$56.00

XNC 2022

Dealing With Upset People

Upset people make everyone's job more difficult. This workshop can help make your job easier by showing you skills and techniques for handling these people. You will examine ways to develop your own personal style, how to identify your role in the organization, effective methods for handling complaints and conditions that breed anger and conflict. RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop. Kansas ACHAs will earn 6 (A) hours. Approval is pending for other health professionals.

$54.00

XNC 2023

Managing Our Differences: From Anger to Action

A description is not available for this course.

$54.00

XNC 2024

Communicating with Sensitivity in Health Care

In the midst of the hectic pace of a health professional's day, patients or clients frequently feel rushed and even misunderstood. How can we be more empathic, "share the moment" with patients who hurt, are alone and losing hope? What roadblocks hinder our efforts to truly listen and understand. Ten sensitive communication techniques and strategies calm and reassure clients in the midst of crisis and uncertainty. In this workshop, you will explore methods of reducing misunderstanding, improving concentration and demonstrating credibility while sharing the emotional moment of your patient or client. RNs, LPNs, LMHTs, social workers, counselors and clergy will earn 6 contact hours for attending this workshop. Approval is pending for other health disciplines.

$54.00

XNC 2025

Asthma Through the Lifespan:The Role of the Caregiver

A description is not available for this course.

$48.00
XNC 2026

Managing Skin Problems in Young Women
A description is not available for this course.

$24.00
XNC 2027

Gene Therapy in Cancer Treatment: An Exciting Tomorrow The Mary Ann Thompson Memorial Cancer Seminar
A description is not available for this course.

$35.00
XNC 2028

Pharmacotherapeutic Treatment Strategies for Common Psychiatric Disorders
A description is not available for this course.

$24.00
XNC 2029

Update on TB: A Kansas Perspective
A description is not available for this course.

$27.00
XNC 2030

Ethics in the Trenches: Issues at the Bedside
A description is not available for this course.

$56.00
XNC 2031

Update in Maternity Care
Update in Maternity Care

$24.00
XNC 2032

Summertime Skin
A description is not available for this course.

$24.00
XNC 2033

Role of Differentiation of Self and Chronic Anxiety in Symptom Development
A description is not available for this course.

$70.00
XNC 2034

Women and Anger
A description is not available for this course.

$48.00

XNC 2035

Using Pattern Management to Improve Diabetes Care: Transitioning from Hospital to Home

A description is not available for this course.

$54.00

XNC 2036

Marketing Yourself in Healthcare

A description is not available for this course.

$24.00

XNC 2037

Psychosocial Aspects of Aging

Explore the psychosocial needs of older adults---their basic personality types and how they develop as well as how they respond if their needs are not met. RNs and LMHTs will earn 3 contact hours for attending this workshop. Kansas ACHAs will earn 3 (RC) hours.

$27.00

XNC 2038

Pharmacology Update: Cardiovascular Drugs

This practical presentation emphasizes the latest cardiovascular agents and include the use, important side effects, and nursing implications of the most commonly used cardiovascular drugs. RNs and LPNs will earn 6 contact hours for attending this workshop. ACHAs will earn 6 (RC) hours.

$72.00

XNC 2039

"Unlayering" the Issues of Abuse

A description is not available for this course.

$54.00

XNC 2040

Self Managed Work Teams: Practical Strategies for Health Professionals

A description is not available for this course.

$54.00

XNC 2041

Building Internal Strength Through Mindful Stress Reduction Part I

A description is not available for this course.

$54.00

XNC 2042

Building Internal Strength Through Mindful Stress Reduction Part II

A description is not available for this course.

$54.00

XNC 2043

Fluids and Electrolytes in Health and Illness
A description is not available for this course.

$54.00
XNC 2044

Lighting Your Candle and Fanning Its Flame
A description is not available for this course.

$54.00
XNC 2045

Skin Cancer Epidemic: Prevention, Treatment, Restoration and Renewal
A description is not available for this course.

$27.00
XNC 2046

Stroke: Diagnosis and Assessment in the 90s
A description is not available for this course.

$36.00
XNC 2047

Antimicrobial Resistance: Implications and Infection Control Strategies
A description is not available for this course.

$27.00
XNC 2048

Polishing Your Clinical Assessment Skills (Part I)
A description is not available for this course.

$72.00
XNC 2049

Death and the Family
A description is not available for this course.

$27.00
XNC 2050

Polishing Your Clinical Assessment Skills (Part II)
A description is not available for this course.

$72.00
XNC 2051

Infusion Therapy in Home Care
A description is not available for this course.

$27.00
XNC 2052

Healing Life's Hurts
A description is not available for this course.

$54.00

XNC 2053

ENT Problems: Trends and New Treatment Options

A description is not available for this course.

$27.00

XNC 2054

Taking Care of Your Customer, Taking Care of Yourself

A description is not available for this course.

$54.00

XNC 2055

Updating Your Knowledge of HIV/AIDS

A description is not available for this course.

$27.00

XNC 2056

Practical Interpretation of 12-Lead EKG

This course includes a study of components of 12-lead EKG interpretation. A knowledge of EKG waveforms (P-QRS-T) is required. RNs and LPNs will earn 6 contact hours for attending this workshop.

$72.00

XNC 2057

Clinical Ethics in Your Practice

A description is not available for this course.

$99.00

XNC 2058

Enhancing Your Personal and Professional Skills

A description is not available for this course.

$79.00

XNC 2060

Managing Criticism and Complaints in the Workplace

A description is not available for this course.

$54.00

XNC 2061

Cutaneous Manifestations of Systemic Disease

A description is not available for this course.

$27.00

XNC 2062

Health Assessment of the Elderly Individual

A description is not available for this course.

$27.00

XNC 2063

Best of Two Worlds: Technology and Health Care
A description is not available for this course.

$54.00
XNC 2064

ICD-9-CM Guidelines for Coding Body Systems
A description is not available for this course.

$72.00
XNC 2065

Healing Powers of Music:Practical Applications for Health Professionals
A description is not available for this course.

$54.00
XNC 2066

Enhancing Your Negotiation Skills
A description is not available for this course.

$54.00
XNC 2067

Process of Intimacy
A description is not available for this course.

$27.00
XNC 2068

Emergency Cardiac Care: Present Status and New Directions
A description is not available for this course.

$39.00
XNC 2069

Continuous Quality Improvement: Making It Work In Health Care
A description is not available for this course.

$27.00
XNC 2070

Therapeutic Touch: The Krieger Method
A description is not available for this course.

$54.00
XNC 2071

Adult Children and Aging Parents
A description is not available for this course.

$27.00
XNC 2072

Myers Briggs Assessment

A description is not available for this course.

$54.00

XNC 2073

Chronically Ill Child: Strengthening Relationships and Coping Skills

A description is not available for this course.

$27.00

XNC 2075

Difficult Diagnoses: Borderline Personality Disorder and Dissociative Identity Disorder

A description is not available for this course.

$36.00

XNC 2076

Dermatologic Problems of Menopause

A description is not available for this course.

$27.00

XNC 2077

Bowen Family System Theory

A description is not available for this course.

$75.00

XNC 2078

Health Prof Appreciation Day

A description is not available for this course.

$35.00

XNC 2080

Children and Obsity: Strategies for Change

A description is not available for this course.

$27.00

XNC 2081

Issues in Lactation Management: Breast Feeding Really Matters

A description is not available for this course.

$54.00

XNC 2082

Dynamic Communication: Communication for Individual and Organizational Success

A description is not available for this course.

$54.00

XNC 2083

Neurofibromatosis: Understanding Its Impact on Individuals and Families

A description is not available for this course.

$50.00
XNC 2084

Tactful Toughness: How to Confront Effectively

You will learn how to handle "tough" situations with firmness, with self respect and with respect for others. You will explore win/win situations when you need to take an unpopular or dissenting position in professional situations and in most areas of your personal life too. RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop. Kansas ACHAs will earn 6 (A) hours. Approval is pending for other health professionals.

$54.00
XNC 2085

Misery of Allergy: Update on Allergies and Anaphylaxis

A description is not available for this course.

$54.00
XNC 2086

Serum Laboratory: From Classroom to Practice

A description is not available for this course.

$54.00
XNC 2087

Dermatologic Drugs in the Primary Care Setting: An Update

A description is not available for this course.

$27.00
XNC 2088

Ethics 101: Clinical Applications

A description is not available for this course.

$27.00
XNC 2089

Nurturing the Mother to Be: Perinatal Massage

A description is not available for this course.

$36.00
XNC 2090

Hypertension: The Silent Threat

A description is not available for this course.

$27.00
XNC 2091

Congestive Heart Failure: Meeting the Challenge

A description is not available for this course.

$27.00
XNC 2092

Intimacy:The Process

A description is not available for this course.

$27.00

XNC 2093

Family Issues in the New Millennium

In recent years, health care professionals have become increasingly aware of the importance of families to individual and societal well being. This seminar is designed to assist mental health and other health care professionals in understanding significant issues affecting today's families. Four separate, yet interrelated, topics will be xplored--couple survival, dilemmas of the blended family, facing America's anti-child sentiment as a family unit and maintaining relationships when applying discipline. Meaningful interventions for each of these problematic family components will be provided. RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop. Approval is pending for other health care professionals.

$54.00

XNC 2094

Connecting for Kids: What's Killing Our Kids?

A description is not available for this course.

$50.00

XNC 2095

SEMINAR AT SEA AND WESTERN CARIBBEAN CRUISE

Using the Myers-Briggs to Understand Yourself and Others Using Your Creativity to Solve Problems and Increase Opportunity Discovering What Motivates You Today

$200.00

XNC 2096

Family Transitions and Symptom Development

A description is not available for this course.

$27.00

XNC 2097

Fear of Abandonment: The Core of Codependence

A description is not available for this course.

$54.00

XNC 2098

Caring and Loving in Helping Relationships

A description is not available for this course.

$27.00

XNC 2099

Attention Deficit Hyperactivity Disorder in Children and

Adolescents: Diagnosis, Assessment and Treatment

$75.00

XNC 2100

Holistic Medical Practices: Blending Traditional and Alternative Medicine
A description is not available for this course.

$27.00
XNC 2101

Understanding Your Myers-Briggs Type: Enhancing
Self-Awareness and Relationships This informative workshop provides an opportunity for you to use the Myers-Briggs Indicator, the most widely used personality instrument in the world, to clarify your individual personality style and understand how it expresses itself in your behavior and relationships. The Myers-Briggs is nonjudgmental, affirming of individual strengths and differences, practical, results-oriented and growth producing. In this workshop, you will take the indicator, learn the basic concepts of this personality theory and enjoy the fun and insights gained from seeing your own and other styles in "action." RNs, LPNs, and LMHTs will earn 6 contact hours for attending this workshop. Approval is pending for other health care professionals.

$54.00
XNC 2102

Hemodynamic Monitoring
A description is not available for this course.

$63.00
XNC 2103

Loving and Caring in an Impersonal World
A description is not available for this course.

$54.00
XNC 2104

Geriatric Nutrition
A description is not available for this course.

$27.00
XNC 2105

Crucial Role of the One-in-the-Middle: Hazards and Opportunities
A description is not available for this course.

$54.00
XNC 2106

Continuous Quality Improvement in Today's Health Care Workplace
A description is not available for this course.

$54.00
XNC 2107

Childhood Depression: Recognition and Treatment
A description is not available for this course.

$24.00
XNC 2108

Women's Health Issues

A description is not available for this course.

$36.00

XNC 2109

Assertiveness: New Perspectives

A description is not available for this course.

$36.00

XNC 2110

Reducing Relocation Stress in the Older Adult

A description is not available for this course.

$27.00

XNC 2111

Real Life Ethics

A description is not available for this course.

$32.00

XNC 2112

Sexuality and Relationship Issues in Chronic and/or Serious Illness

A description is not available for this course.

$54.00

XNC 2113

Behavioral Management of Alzheimer's Disease

A description is not available for this course.

$27.00

XNC 2114

Teen Suicide: Risk and Crisis Among Today's Youth

A description is not available for this course.

$54.00

XNC 2115

Superachievers, Type E's and Coping Strategies

A description is not available for this course.

$36.00

XNC 2116

Bouncing Back: Increasing Personal and Professional

Resiliency Every organization, group and individual encounters reversals, unwanted changes and potential threats. Why do some survive, even thrive, while others do not? This program focuses on the capacity to bounce back, adapt, maintain, develop and grow. You will learn how to distinguish between productive and unproductive stress, the role of anxiety, characteristics of resiliency, and how to strengthen your personal and professional resiliency. RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop. Approval is pending for other health professionals.

$54.00

XNC 2117

Brain Dominance: Communication and Creativity

An exciting learning experience that increases awareness about relationships and how they are affected by your brain profile. You will take the Hermann Brain Dominance Profile prior to the workshop. Workshop activities will be based on the individual brain profiles of the participants. RNs, LPNs, LMHTs, social workers, counselors and dental hygienists will earn 6 contact hours. ACHAs will earn 6 (E) hours. Approval is pending for OTs and PTs.

$72.00

XNC 2118

Coming Up for Air: Stress Management for Health Professionals

A description is not available for this course.

$54.00

XNC 2119

Nine Faces of Pain: Using the Enneagram to Understand Resistance

A description is not available for this course.

$54.00

XNC 2120

Adolescent Sexuality

A description is not available for this course.

$36.00

XNC 2121

Chiropractic: Understanding Its Role in Health Care

A description is not available for this course.

$27.00

XNC 2122

Spirituality and the Road to Meaning

A description is not available for this course.

$63.00

XNC 2123

Through the Looking Glass: Managed Care from the Inside Out

A description is not available for this course.

$63.00

XNC 2124

Eating Disorders: Exploring Family Issues

A description is not available for this course.

$54.00

XNC 2125

Ending Abuse: Living Free

A description is not available for this course.

$45.00

XNC 2201

Elder Abuse: Recognition and Intervention

As the number of elderly in our society increases, so does the number of elderly subjected to abuse by their families and caregivers. In this important workshop you will examine various types of abuse and the characteristics of abuse victims and perpetrators as well as the causes of abuse. You will explore strategies for prevention and protection and discuss the health care processional?s legal responsibilities to elders when abuse is suspected. RNs, LPNs, LMHTs, social workers and counselors will earn 3 contact hours for attending this workshop. ACHAs will earn 3 (RC) hours. Approval is pending for OTs and PTs.

$36.00

XNC 2202

Sinusitis: What's New in Treatment and Care

A description is not available for this course.

$27.00

XNC 2203

EKG: Advancing Your Knowledge Beyond MI

A description is not available for this course.

$54.00

XNC 2204

Abnormal & Dysfunctional Uterine Bleeding

A description is not available for this course.

$27.00

XNC 2206

Transition Trauma and the Older Adult

A description is not available for this course.

$27.00

XNC 2207

Violence in the Family

A description is not available for this course.

$27.00

XNC 2208

AIDS: Present & Future

A description is not available for this course.

$27.00

XNC 2209

Shifting to a Managed Care Paradigm: Change and Choice

A description is not available for this course.

$63.00

XNC 2210

Grief and the Wounded Family

A description is not available for this course.

$54.00

XNC 2211

Pain Assessment and Intervention

A description is not available for this course.

$27.00

XNC 2212

Cultural Diversity: Values, Issues and Strategies

A description is not available for this course.

$54.00

XNC 2213

Patient Focused Leadership: It's Now or Never

A description is not available for this course.

$54.00

XNC 2214

Advances in Wound Care

A description is not available for this course.

$27.00

XNC 2215

Depression, Anxiety and Panic Disorder: Effective Management in Primary Care

A description is not available for this course.

$27.00

XNC 2216

Nursing Assessment of Patients with Cardiac Disorders

A description is not available for this course.

$27.00

XNC 2217

Music, Laughter and Tears: The Scale of Life

A description is not available for this course.

$54.00

XNC 2218

Shame and Guilt: What's Healthy and What's Not

A description is not available for this course.

$54.00

XNC 2219

Exploring Alternative Approaches to Health Care

A description is not available for this course.

$27.00

XNC 2220

Congestive Heart Failure: Advances in Treatment and Care

A description is not available for this course.

$27.00

XNC 2221

Updating Your Knowledge of Diabetes

A description is not available for this course.

$54.00

XNC 2222

Abnormal Lab Values: Painting the Fluid Balance Picture

A description is not available for this course.

$27.00

XNC 2223

Special Considerations in the Health Care of the Older Adult

A description is not available for this course.

$27.00

XNC 2224

Mid-Life Transitions: Management and Health Promotion

A description is not available for this course.

$36.00

XNC 2225

Mindfulness Based Stress Management

A description is not available for this course.

$54.00

XNC 2226

Infidelity: Theory and Therapy

Nothing stirs up an emotional storm in a marriage and a family like an affair. This program will present Bowen family systems theory as a framework for understanding infidelity and focus on the clinical work with the individual or couple. RNs, social workers, psychologists and counselors will earn 7 hours for attending this workshop.

$79.00

XNC 2227

Hats 'R Us Using Critical and Creative Thinking Skills to Improve Problem Solving

A description is not available for this course.

$54.00

XNC 2228

Common Areas of Nursing Negligence: Avoiding Legal Problems in Clinical Practice

A description is not available for this course.

$27.00

XNC 2229

Nursing in the New Millennium: Legal Issues in Telecommunications

A description is not available for this course.

$27.00

XNC 2230

Medicare Reimbursement: Essentials of Today's Payment System

A description is not available for this course.

$27.00

XNC 2231

Non-surgical Options for Skin Rejuvenation: Where the Hype Ends and the Science Begins

A description is not available for this course.

$27.00

XNC 2232

Fibromyalgia: Effective Evaluation and Care

A description is not available for this course.

$27.00

XNC 2233

Pediatriac Assessment: Birth Through

Adolescence We often hear "children are not just small adults." This is the challenge of pediatric assessment - tailoring your approach to the appropriate developmental level of the child. In addition, you must consider the whole family, interacting with both client and parents. This program will address the individual from birth through adolescence, including history taking, physical examination and developmental assessment. Communication with parents and with children of various ages will be included. RNs and LPNs will earn 3 contact hours for attending this workshop.

$27.00

XNC 2234

Lines That Divide Us

A description is not available for this course.

$27.00

XNC 2235

You Are Only As Happy As Your Unhappiest Child

A description is not available for this course.

$54.00

XNC 2236

Expand and Apply Your Knowledge of the Myers Briggs Personality Type

Indicator

A description is not available for this course.

$54.00

XNC 2237

Hot Topics in Bioethics

A description is not available for this course.

$36.00

XNC 2238

Say What You Mean: Dealing with Anger Effectively

A description is not available for this course.

$54.00

XNC 2239

Using Case Management Principles Throughout the Nursing Continuum

A description is not available for this course.

$54.00

XNC 2240

Body, Mind and Soul: HIV/AIDS Approaching the Year 2000

A description is not available for this course.

$54.00

XNC 2241

Enhancing Your Patient Teaching Skills

A description is not available for this course.

$27.00

XNC 2242

Connecting for Kids: Creating Safe Schools and Communities

A description is not available for this course.

$50.00

XNC 2243

Business Skills Every Nurse Should Know

In the ever-changing health care marketplace, nurses have more opportunities than ever to lead the pack in health care matters. You must arm yourself with knowledge about communications, negotiations, marketing, networking, managed care terminology, outcomes reporting, finance, computer systems, and resume and publication writing. Influencing health care requires understanding why and how systems are formed, what financially drives those systems and what you as an individual can do to assure your own career path success. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop.

$27.00

XNC 2244

"Write" Stuff: Writing for Publication

A description is not available for this course.

$27.00

XNC 2245

Kids Need More than Bandaids and Medicine: The Psychosocial Needs of Hospitalized Children

A description is not available for this course.

$27.00

XNC 2246

Pharmacology Update: GI Disorders

A description is not available for this course.

$27.00

XNC 2247

Dying Well

A description is not available for this course.

$54.00

XNC 2248

Metagrumbling: Understanding the Communication and Changing the Behavior

A description is not available for this course.

$27.00

XNC 2249

Untying the Knots in Family Ties

A description is not available for this course.

$54.00

XNC 2250

Successful Aging: Making the Most of the Journey

"Baby boomers," the 76 million babies born between 1946 and 1964, have become the dominant social, market and political force in our society. Who are they? What are they like? This workshop will provide you with a demographic profile of the "boomers," their relationship to other populations, their impact as babies, children, teens, young and middle-age adults and their future impact on health care providers. You will learn how to work effectively with this population in preparation for the aging boom of tomorrow. RNs, LPNs, LMHTs, social workers and counselors will earn 3 contact hours. ACHAs will earn 3 (RC) hours. Approval is pending for OTs and PTS.

$36.00

XNC 2251

Asthma: Update 2001

An estimated 17 million Americans, five million under age 18, have asthma. One adult out of three suffers from gastroesophageal reflux disease (GERD), a common trigger for asthma. Asthma, GERD and related conditions are becoming more prevalent across all age, sex and racial groups and the magnitude of these conditons alone compels nurses and other health professionals to be knowledgeable about recent innovations in successful management. This program will ehlp update your knowledge and familiarize you with strategies to effectively assist the asthma patient to maintain better control of his/her disease. The morning session of this workshop will utilize a didactic format to present an overview of these conditions focusing on presentation, triggers, management

strategies and pharmacotherapy. The afternoon session will utilize problem based learning to develop an action plan for both an adult and pediatric patient, giving you an opportunity to put theory into action. RNS and LPNs will earn 6 contact hours for attending this workshop.

$54.00

XNC 2252

Strategies for Changing Bullying Behaviors

A description is not available for this course.

$27.00

XNC 2253

Introduction to Chinese Medicine and Acupuncture

Traditional Chinese medicine, much of which is based in Taoism, teaches that when your body, mind and spirit are in harmony with one another, you will achieve internal balance. When any of these factors is stressed, internal Qi imbalances arise and disease and dysfunciton result. In this workshop, you will explorethe basic tenets of Chinese medicine, including "Yin and Yang" and "Qi," as well as discuss how Meridian Therapy (acupuncture) and other therapies assist in maintaining health and treating illness. RNs, LPNs, LMHTs, dentists and dental hygienists will earn 6 contact hours for attending this workshop. Approval is pending for other health disciplines.

$54.00

XNC 2254

Legal Aspects of Documentation

A description is not available for this course.

$36.00

XNC 2255

Postpartum Depression and Anxiety: Assessment and Treatment

A description is not available for this course.

$27.00

XNC 2256

Healing the Past, Living the Present

Do you ever feel that no matter how hard you try you keep dealing with feelings and relationships in ways that make you feel worse instead of better? Unhealed wounds from childhood can have a profound impact on your life and keep you from finding the fulfillment you deserve. Explore the reasons you have difficulty breaking out of old patterns as well as how your relationships can be more rewarding. RNs, LPNs, LMHTs and social workers will earn 6 contact hours for attending this workshop. Kansas ACHAs will earn 6 (A) hours.

$54.00

XNC 2257

Delegation and Supervision: Yours, Mine or Ours?

Health care reorganization, downsizing and increasing penetration of managed care have yielded major adjustments in skill mix. Consolidation of care functions as well as cross training of both licensed and unlicensed personnel underscores the need for you to clearly understand the underlying principles and issues involved in delegation and supervision. This session will provide you with information on legal, regulatory, professional standards and competency, and organizational leadership issues involved in safe and effective delegation and supervision. It will also include recommendations for action. RNs, LPNs and

LMHTs will earn 6 contact hours for attending this workshop.

$54.00
XNC 2258

Simply Put Psychopharmacology: The Mood Disorders

In the last few years, there has been a barrage of information and use of medications to assist in the treatment of psychological disorders. This workshop will help you understand the disorders associated with depression and gain clarity about the psychopharma- cological treatments used to treat these disorders. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop. Approval is pending for other health professionals.

$27.00
XNC 2259

HIV/AIDS Update: Looking Toward the Future and Rebuilding the Immune System

A description is not available for this course.

$27.00
XNC 2260

Understanding and Dealing with Difficult Children

Irritability, agitation and/or distractability, running away, frequent arguing or anger---normal developmental struggles or behavioral problems that trigger concern? Children and adolescents can display a wide array of behaviors, including some that may not always "make sense" or seem appropriate to the situation at hand. In this workshop, you will identify qualities, characteristics and behaviors associated with normal and abnormal development, distinguish common diagnostic categories related to behavior problems and explore strategies for managing problem behavior in children and adolescents. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop. Approval is pending for other health professionals.

$27.00
XNC 2261

Postpartum Care of Mother, Baby and Family: Problem Prevention and Management

A description is not available for this course.

$54.00
XNC 2262

Violence and the Family

A description is not available for this course.

$70.00
XNC 2263

Powerful Choices:Maximizing Personal and Professional
Power

$54.00
XNC 2264

Hope,Affirmation, and Encouragement: Psychotherapeutic Strategies with the Older Adult

A description is not available for this course.

$27.00

XNC 2265

Men, Women and Change
A description is not available for this course.

$54.00

XNC 2266

Introduction to the Enneagram: Moving Toward Balance
A description is not available for this course.

$72.00

XNC 2267

Women and Heart Disease
A description is not available for this course.

$27.00

XNC 2268

Cardiovascular Assessment
A description is not available for this course.

$27.00

XNC 2269

Dying Well: Major Issues
A description is not available for this course.

$27.00

XNC 2270

Stepfamilies
A description is not available for this course.

$54.00

XNC 2271

Update on Chronic Fatigue Syndrome
A description is not available for this course.

$27.00

XNC 2272

Case Study Approach to Diagnostic Test Assessment
A description is not available for this course.

$54.00

XNC 2273

Music Brings the Heart Back Home
A description is not available for this course.

$54.00

XNC 2274

Using Action Therapy in Your Personal Life and
Professional Practice

$54.00
XNC 2275

Women and Anger
A description is not available for this course.

$27.00
XNC 2276

Issues and Trends in Healthcare (Formerly Titled Issues and Trends in Nursing)
A description is not available for this course.

$54.00
XNC 2277

Outcomes Management: Proving Our Value
A description is not available for this course.

$27.00
XNC 2278

Discovering the Differences in Delivering Non-Surgical Peridontal Debridement Therapy
(Dentist Fee $149, Dental Hygienist Fee $89)

$149.00
XNC 2279

Helping Families Survive Divorce
A description is not available for this course.

$27.00
XNC 2280

Introduction to Office Dermatology
A description is not available for this course.

$27.00
XNC 2281

Nutrition and the Older Adult: Issues Essential to Health and Healing
A description is not available for this course.

$54.00
XNC 2282

Caught in the Middle: The Sandwich Generation Dilemma
A description is not available for this course.

$27.00
XNC 2283

Helping Children Grieve: A Developmental Approach to Childhood Grief

A description is not available for this course.

$27.00

XNC 2284

Yoga and Meditation: An Introduction and Experience

Given our frantic schedules and high levels of fatigue, is it any wonder that people are seeking ways to feed their mind, body and soul with original energy? The practice of yoga and meditation have been shown to be very effective life skills for health professionals and their patients. This seminar will focus on practices that calm the "inner well-being", and help one know their purpose in life, while avoiding the propensity to be robotic. Dress in casual, comfortable, loose-fitting clothes (no dresses or skirts). RNs, LPNs, LMHTs, social workers, counselors, dentist and dental hygienists will earn 3 contact hours for attending this workshop. ACHAs will earn 3 (E) hours. Approval is pending for OTs and PTs.

$36.00

XNC 2285

Sick Role: Understanding the Psychological Impact of Illness

A description is not available for this course.

$54.00

XNC 2286

What Every Nurse Should About Cancer: Cells,

Chemotherapy and Caring - Eighth Mary Ann Thompson Memorial Cancer Seminar Review what causes cancer to be a life threatening disease, discuss the role of screening and early diagnosis and learn about treatments such as chemotherapy, monoclonal antibodies, biologic response modifiers, hormonal medications and newer therapies. Explore symptom management for common problems to improve quality of life while undergoing treatment. RNs and LPNs will earn 6 contact hours for attending this workshop

$40.00

XNC 2287

Confronting Periodontal Disease: A Day in the Life of a Dental Professional

(Dentist Fee $149, Dental Hygienist Fee $89)

$149.00

XNC 2288

Connecting for Kids: Exploring the Diversity Needs of Today's Children

(Includes a Box Lunch)

$50.00

XNC 2289

Delegation and Supervision: Is My License on the Line?

A description is not available for this course.

$27.00

XNC 2290

AIDS 101: Pathogenesis and Immunodeficiency of the Human Immunodeficiency Virus

A description is not available for this course.

$27.00

XNC 2291

Stress Management for the Superachiever

Extraordinarily high standards combined with the need to balance multiple roles are the hallmarks of the superachieving personality. Driven to succeed, superachievers push themselves to perform with perfection and often ignore signs and symptoms of distress. This scenario places them at risk for mental and physical exhaustion. As the healthcare environment grows increasingly demanding, superachievers are vulnerable to developing serious complications from the stress in their lives. If you are experiencing stress- related symptoms, suspect you might be a superachiever or have been told you hold very high standards, join us to learn stress management skills for the superachiever. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop. Kansas ACHAs will earn 3 (A) hours for attending. Approval is pending for other health care professionals.

$27.00

XNC 2292

Understanding the Effects of Sibling Relationships

Are you the oldest, youngest, middle, only child? Or maybe a twin? Understanding the effects of your sibling relationships and position is useful in knowing yourself better and navigating relationships at home and work. In this class, you will explore common characteristics of various sibling positions and examine how sibling relationships affect your personality, adaptability to stress and relationship style. You will also take a look at how sibling relationships are affected by family maturityand anxiety. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop. Approval is pending for other health professionals.

$27.00

XNC 2293

Antibiotics: What's New?

Need an update on the newer antibiotics being used? This workshop will examine new antibiotics for bacterial infections as well as review newer drugs for viral and fungal infections. A systems approach will be used and discussion will focus on mechanisms of action, principles of therapy and nursing implications. Nurses practicing in both inpatient and outpatient settings will find the information beneficial. The course will not cover treatment of HIV/AIDS. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop. Approval is pending for other health professionals.

$27.00

XNC 2294

Breastfeeding: Clinical Management for the Early Days

This course will offer basic and advanced level information about lactation physiology, interventions that work in promoting and facilitating successful breastfeeding, and problem diagnosis and management. Strategies for use with fullterm and preterm babies and their mothers will be presented. RNs and LPNs will earn 9 contact hours for attending this workshop. Approval is pending for other health professionals.

$89.00

XNC 2295

Awakening the Spirit Within: Daring to Be Yourself

Think about creating the kind of life that reflects who you really are--your talents, your values, your serenity, your joy? There are so many ways in which you can express your true self every day of your life. And, there are so many ways to keep that from happening! In this experiential workshop, you will explore who you really are--your dreams, fears, passions, blocks, spirituality, creativity, laughter,

gratitude--your SPIRIT. You will discover ways in which you are already expressing your authentic self as well as tools for deepening your understanding of what makes you YOU. RNs, LPNs, LMHTs, social workers, counselors, dentist and dental hygienists will earn 6 contact hours for attending this workshop. Kansas ACHAs will earn 6 (A) hours. Approval is pending for other health professionals.

$54.00

XNC 2296

Right Choice: Values and Ethics for Changing Times

Social critics say that Americans are losing "moral fiber". The nightly news is filled with stories of people's inhumanity to others. Are values and ethics following the path of extinction? Are the values and ethics of health professionals immune to such a fate? Re-engineering, financial constraints and the continuous call to "do more with less" challenge each of us to examine the ethical foundation of our practice. This course will explore ethical issues related to professional conduct rather than biomedical ethics. RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop. Kansas ACHAs will earn 6 (RC) hours. Approval pending for other health professionals.

$54.00

XNC 2297

Power of Light: From Harming Light to Healing Light

Traditionally, sunlight has been associated with health and well being. Now, however, we are being warned of damaging light rays from the sun and other environmental sources. We hear that sunlight increases risk of skin cancer and that certain foods, medicines and topical applications can react with light to cause unpleasant or damaging results. Conversely, laser light, infrared light and ultraviolet light are sometimes employed to improve and heal our bodies. In this workshop, you will explore the spectrum of light and its qualities and learn more about its possibilities and dangers. RNs and LPNs will earn 3 contact hours for attending this workshop.

$27.00

XNC 2298

Exploring Issues of Diversity in Patient Care

As a health care provider, you are mandated to increase your understanding and sensitivity to the varied people you meet and care for as part of your job. In this workshop, you will explore the dimensions of diversity, learn how your own background influences your personal paradigms and how these paradigms influence your professional practice. You will explore the concept of "privilege" and its effects on those that receive it and those that do not. You will examine organizational culture and its impact on professional practice and gain practical information that will allow you to more effectively meet the diversity needs of your patients. RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop. Approval is pending for other health professionals.

$54.00

XNC 2300

Promoting Oral Health for the Elderly: A Course for Dental Professionals

Our elderly population is rapidly growing and dental professionals must respond to the evolving oral care needs of this group. This program will assist you with identifying access to care challenges for today's elderly population and learn how to become actively involved with identifying solutions. You will examine the current structure of the oral health delivery system and discuss ways to develop promotional and educational oral care programs through partnering with community organizations. Dentists and dental hygienists will earn 3 contact hours for attending this program. (Dentist Fee $59) (Dental Hygienist Fee $29)

$59.00

XNC 2301

Assessment and Care of the Patient With a Failing Heart

Heart failure is the most common reason for hospital admission in Medicare patients. Equip yourself to perform a thorough nursing assessment of your next heart failure patient. Gain a current understanding of heart failure and the modern array of therapy for management of this complex problem. RNs and LPNs will earn 4 contact hours for attending this workshop. ACHAs will earn 4 (RC) hours.

$48.00

XNC 2302

Obstetrical Emergencies

Fortunately, obstetrical emergencies are rare, but when they occur, the results may be devastating, possibly compromising or ending two lives. In this workshop, you will explore selected obstetrical emergencies which may occur in the antepartum, intrapartum and/or postpartum period, including hemorrhagic complications, hypertensive disorders, shoulder dystocia and others. You will discuss pathophysiology as well as focus on early detection and nursing intervention to maximize outcomes. RNs and LPNs will earn 6 contact hours for attending this workshop.

$54.00

XNC 2303

Understanding Substance Abuse

Alcoholism and drug abuse present major problems and crisis situations for individuals and families. Understanding "drugs of choice" and learning how to most effectively deal with the effects of substance abuse can be complicated. This presentation will include an overview of alcohol, cocaine, and marijuana abuse and treatment models. The special populations of women, children and adolescents who abuse these substances will also be explored. RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop. Approval is pending for other health professionals.

$54.00

XNC 2304

Developing Healthy Boundaries

Boundaries are essential for personal and professional growth and development. In this workshop, you will examine emotional, physical and spiritual beliefs to better understand the basic dynamics of boundaries. You will also explore how issues developed from infancy can impact all areas of adult life. RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop. Approval is pending for other health professionals.

$54.00

XNC 2305

Introduction to Complementary and Alternative Therapies

in Health Care Health care professionals are increasingly being challenged to answer questions about alternative therapies, help patients with referrals to alternative practitioners and learn more about the science behind such therapies. This course will provide an overview of a variety of alternative therapies currently being used by patients. The concept of evidence-based medicine will be discussed, especially as it applies to creating a level playing field for conventional and alternative therapies. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop. Approval is pending for other health professionals.

$27.00

XNC 2306

Stroke: Assessment and Management Strategies for the New Millennium

Stroke is the third leading killer and the number one cause of adult disability in this country. In spite of recent innovations in understanding and managing stroke, clinicians continue to struggle to define, measure and assess the physical, psychosocial and societal impact of stroke and the effectiveness of therapeutic interventions. This seminar will provide an update on primary and secondary prevention, diagnosis and medical management of hemorrhagic and ischemic stroke. Neurologic, functional and psychosocial assessment tools will be defined and discussed. Special emphasis will be paid to the assessment and treatment of visual and perceptual deficits. RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop. Approval is pending for other health professionals.

$54.00

XNC 2307

Introduction to ICD-9-CM Coding

A basic understanding of coding has become an important part of effective health care delivery. If you need an introduction to coding and want to focus on basic how to's, plan to attend this practical course. The course will begin with an overview of the coding system and its conventions and will include in-class exercises from real-life situations to help you correctly apply the concepts learned. While the basic concepts are applicable to a variety of health care settings, the content is hospital focused. A working knowledge of medical terminology is recommended. You will need to bring an ICD-9-CM coding book to each class. You may use any recent edition you have available or purchase the latest edition in the JCCC bookstore. Certificates of attendance will be awarded upon completion of the course.

$79.00

XNC 2308

Sharpening Your Skills in Dealing with Ethical Issues

Ethical issues confronting health care providers in our society have become more complex and challenging. Consumers are generally well-informed and demand more and better health care services, yet contradictory value systems are prevalent throughout both health care and society. In this seminar, you will explore critical content to assist you to strengthen decision-making and problem-solving skills in dealing with ethical issues in both your professional career and your personal life. Dental professionals, RNs, LPNs, and LMHTs will earn 6 contact hours for attending this workshop. Approval is pending for other health professionals.

$54.00

XNC 2309

Women and Heart Disease: Decreasing Risk and Promoting Health

This three-hour workshop will focus on heart disease and its occurance in women. You will review the general risk factors for the development of atherosclerotic disease and give special attention to those risk factors unique to the female population. You will explore ideas to modify those risk factors as well as discover ways to promote a healthy lifestyle. Special emphasis will be given to cholesterol management in women. Exercise and activities for older women will be discussed also. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop. Approval is pending for other health professionals.

$27.00

XNC 2310

Assuring a Safe Workplace: Annual OSHA Update Course

This course provides participants with an overview and update of the mandatory OSHA Bloodborne Pathogen Standard, Hazard Communication Standard and the General Industry Standard. Although the standards are reviewed, participants attending this course should have knowledge and previous training in the OSHA standards. The course is presented as a review and current update and will satisy the required annual training for the Bloodborne Pathogen Standard. Future

standards being considered by OSHA will be discussed as well. RNs, LPNs, dentists and dental hygienists will earn 3 contact hours for attending this program. Kansas ACHAs will earn 3 (A) hours. Approval is pending for other health care professionals.

$27.00

XNC 2311

An Update on AIDS

Through the rapid evolution of treatment options and our scientific understanding of the HIV disease, today's clinician faces the challenge of staying abreast of the state-of-the-art treatment modalities and newest research discoveries. A patient's clinical well-being depends heavily on the clinician's knowledge base and awareness of the most modern tools available. This course will provide an in-depth look at the natural history, epidemiology and pathogensis of HIV infection. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop. Approval is pending for other health professionals.

$27.00

XNC 2312

Behavioral Disorders in Children: Dynamics, Issues and

Interventions Explore etiological, diagnostic and clinical approaches for behavioral disorders commonly observed during childhood and adolescence, including conduct disorder, oppositional defiant disorder and ADHD. RNs, LPNs, LMHTs, social workers and counselors will earn 3 contact hours for attending this workshop.

$27.00

XNC 2313

Making Sense of What We Do: An Introduction to

Bowen Family Systems Theory Understanding human behavior has always been challenging. Bowen family systems theory provides a natural systems perspective with which to make sense out of what we do. It offers a road map that engables us to understand more about ourselves and about the people we treat---particularly, how relationships influence behavior and the development of symptoms. It also provides a way of thinking about how family relationships and the influence they exert throughout our lives. In this seminar, you will learn the basic concepts of Bowen family systems theory. You will examine numerous relationship systems, including marital relationships, parent-child relationships and work relationships. Emphasis will be placed on applying theoretical understandings to everyday personal, clinical and work situations. RNs, LPNs, LMHTs, social workers and counselors will earn 6 contact hours for this workshop.

$59.00

XNC 2314

Demystifying Medical Terminology

This introductory course, which serves as the prerequisite for the Medical Coding Certification Course, is of special interest to billing and insurance personnel, as well as consumers. The course covers use of basic medical terms in oral and written communication plus use of word-analysis and word-building skills to expand a basic vocabulary. No CE credit is offered.

$108.00

XNC 2315

Innovations in Diabetes Management

Innovative advances are evident in every dimension of diabetic care-- new oral medications, new insulin, nutrition guidelines and choices, new glucose monitors, computer related technology and new administration devices and aides. Preventing the onset of diabetes, especially among our nation's youth, is a high

priority of care and education. This exciting workshop will provide you with the latest information about recent advances, including the concept of self care/self management as the basis for diabetes treatment and education. RNs and LPNs will earn 7 contact hours for attending this workshop. Approval is pending for other professional groups.

$63.00

XNC 2316

Healthy Boundaries: Increasing Personal and Professional

Effectiveness While we realize that boundaries are essential for personal/professional growth, it is not always clear how we develop them or how they impact our lives on a daily basis. Learn the basic dynamics of boundaries and explore how boundary issues are developed from infancy and how they can affect adult life. RNs, LPNs, LMHTs, social workers and counselors will earn 6 contact hours for attending this workshop. Kansas ACHAs will earn 6(A) hours. Approval is pending for other healthcare professionals.

$54.00

XNC 2317

Tips, Tactics and Techniques for Communicating in the

Dental World Our dental patients do not want dentistry! That's right! They want the benefits of dentistry--improved appearance, greater comfort, better function and a generally improved feeling and quality of life. So, how can we steer our patients to want what they "need"? Join us for this high energy, fun-filled and informative evening designed to take the monotony and boredom out of your patient education and treatment presentations. Learn ways to vitalize your communication skills and trigger that motivational spark in each of your patients. Be ready to enjoy the process and relish the result in this relaxed evening of enlightment. Dentists and dental hygienists will earn 3 contact hours for attending this workshop. Fee for dentist is $59. Fee for dental hygienists is $29.

$69.00

XNC 2318

Alzheimer's and Other Dementias: Strategies for Assisting

Patients and Caregivers Alzheimer's Disease is the fourth leading cause of death in the United States. Like many other chronic conditions, it has no known cause or cure. Caregivers, including health care providers, who assist individuals with Alzheimer's or other dementias, often face unique and seemingly impossible obstacles as they struggle to provide care. How do you prevent a confused person from driving a car or bathe a resistant resident? How do you communicate with a person who can not process information in a rational way? This workshop will explore problems confronting caregivers and offer practical approaches to assist them in dealing with demented individuals. RNs, LPNs, social workers, counselors and clergy will earn 3 contact hours for attending this workshop. Approval is pending for other health disciplines.

$27.00

XNC 2319

Aging and Individual Differences: We are More

Alike at 10 than at 70 Why are we more alike at 10 than at 70? Why are some people in a nursing home at 78 and others able to orbit the earth?--or lead a country? This course will present an overview of physical and psychological aspects of the aging process and how individual differences often become more pronounced as we age. Knowledge about aging not only helps us to serve our clients and patients better, but it is also important for our own personal benefit. RNs, LPNs, LMHTs, social workers, counselors, dentists, and dental hygienists will earn 3 contact hours for attending this workshop. Approval is pending for other health disciplines.

$27.00

XNC 2320

Healing Power of the Pen: Journaling as a Therapeutic

Tool Today's world is hectic. As people face the challenges of personal and professinal transitions, the technique of journaling can be a helpful tool for change. Journaling can help ease the stress that often accompanies transformation and growth and it can help break through the emotional blocks that stand in the way of success. In this innovative workshop, you will learn techniques for personal use as well as explore specific case examples of exercises that can be used when working with patients/clients--those coping with serious illness, disability and mental health issues, including alcoholics, adult children of alcoholics and others in the addictions recovery process. RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop. Approval is pending for other health professionals.

$54.00

XNC 2321

Marriage or Divorce? (An In-depth Seminar for Clinicians)

Sitting on the fence between marriage and divorce is one of life's weighty dilemmas for people in psychotherapy. Clients who are motivated to take a thoughtful approach with this difficulty can benefit from learning more about their emotional patterns in relationships and from taking another step in defining what principles matter most. How the clinician conceptualizes this issue significantly affects how this question is addressed in therapy. This seminar presents Bowen family systems theory as a framework for understanding how a marriage gets to this point and how to move forward. The seminar also focuses on the clinical work with the individual or couple. Case examples are presented to illustrate the therapy process. RNs, LPNs, LMHTs, psychologists, social workers, counselors and clergy will earn 6 contact hours for attending this workshop.

$79.00

XNC 2322

Depression and Suicide in Children and Adolescents

Learn to recognize depressive symptomatology in children and adolescents and understand its relationship to the development of a depressive disorder. Learn about suicide risk and other self destructive behaviors associated with depression as well as treatment and therapeutic interventions. RNs, LPNs, LMHTs, social workers and counselors will earn 3 contact hours for attending this workshop.

$27.00

XNC 2323

Awakening the Spirit Within: Daring to Be Yourself

Think about creating the kind of life that reflects who you really are-your talents, your values, your serenity, your joy? There are so many ways in which you can express your true self every day of your life. And, there are so many things to keep that from happening! In this experiential workshop, you will explore who you really are---your dreams, fears, passions, blocks, spirituality, creativity, laughter, gratitude---your SPIRIT. You will discover ways in which you are already expressing your authentic self as well as tools for deepening your understanding of what makes you YOU. If you're ready to take the next step in awakening your spirit within, join us for this day of self-discovery. RNs, LPNs, LMHTs, social workers, counselors, dentists and dental hygienists will earn 6 contact hours for attending this workshop.

$54.00

XNC 2324

Exploring the Child Within: Taking a Look at Codependency

Do you regularly put the needs and wants of others before your own? Do you deal with your feelings in ways that make you feel worse instead of better? In this workshop, you will explore the ways in which unhealed childhood wounds can

interfere with your ability to create a loving and joyful life. You will learn practical tools for developing a caring relationship with your inner child---the part of you that feels---so that you can begin to include yourself in your "circle of care." RNs, LPNs, LMHTs, social workers, counselors, dentists and dental hygienists will earn 3 contact hours for attending this workshop. Includes a box dinner.

$27.00

XNC 2325

Negativity: Increasing Skills for Diagnosis Intervention

and Prognosis We all know people whose general demeanor communicates--perhaps screams--negativity. Besides being unpleasant to deal with, negativity can significantly impact other individuals, groups and organizations. In this workshop, you will identify root causes of negativity and discuss ways to prevent, reduce or turn around negative attitudes or behaviors. RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop. Kansas ACHAs will earn 6 (A) hours. Approval is pending for other health professionals.

$54.00

XNC 2326

Three Score Years and Ten: Families and Eldercare

This seminar for helping professionals will focus on understanding the aging process within the context of family life. You will explore issues related to the life cycle, healthy aging, advance directives within the family context, family dilemmas associated with aging and the role of the professional care giver in working with the elderly and their families. This program will be helpful and interesting if you work with the elderly, have elderly family members or are thinking ahead about your own or a loved one's aging issues. RNs, LPNs, LMHTs, social workers, counselors, psychologists, dentists and dental hygienists will earn 6 contact hours for attending this workshop. Kansas ACHAs will earn 6 (RC) hours. Approval is pending for other health professionals.

$54.00

XNC 2327

Art of Positive Conflict: Creative Approaches to

Conflict Management Do you hesitate to voice disagreement because you fear an unpleasant scene or a damaged relationship? Too often, disagreements are ignored because conflict is viewed as a destructive process. Learning to use conflict as a constructive tool for problem solving gives you the confidence to approach disagreements expecting positive outcomes. Achieving outcomes that enhance relationships and produce positive solutions is the essence of creative conflict. Join us as we explore this essential interpersonal skill. RNs, LPNs, LMHTs, social workers, counselors, dentists and dental hygienists will earn 6 contact hours for attending this workshop. Approval is pending for other health disciplines.

$54.00

XNC 2328

Competency: Individual and Organizational Accountability

Increasing attention is being directed toward assuring competency of practicing health care professionals. This workshop will provide you with an overview of the legal, regulatory, accreditation and professional standards that draw attention to issues of competency. You will explore strategies for assessing competency as well as implications for practice, including accepting or declining assignments, delegation and floating. You will look at this important issue from both the individual and organizational perspective and discuss the responsibility and accountability of each for assuring appropriate practice competencies. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop.

$27.00

XNC 2329

Connecting for Kids: Discovering Diversity's Colorful

Palette Health care professionals have an opportunity to view their patients' diversity as a colorful palette, with each patient adding a special hue or intensity to the experience, interaction or relationship. But while a colorful palette adds interest, it can also add confusion as we try to appreciate and understand individual and cultural differences. This program will help identify our prejudices and how they impact the way we perceive others as well as explore techniques for communicating with people from cultures other than our own. Presenters will demonstrate ways to hold a discussion without alienating others and discuss case studies from several different cultural backgrounds. Alice Kitchen, Children's Mercy Hospital, will supplement the program with a hands-on approach to available resources, i.e. medical record translation and using the Internet as a research tool. RNs, LPNs, LMHTs, social workers, counselors, dentists and dental hygienists will earn 3.5 contact hours for attending this workshop.

$35.00

XNC 2330

Parkinson's Disease: New Miracles

Learn about the new "miracle" surgery for Parkinson's Disease as well as some of the problems patients have encountered after the procedure. Newer medications and the latest findings regarding swallowing, balance, exercise and ADL's will be included also. RNs and LPNs will earn 6 contact hours for attending this workshop. Kansas ACHAs will earn 6 (RC) hours. Approval is pending for other health professionals.

$54.00

XNC 2331

Managed Care: Mastering the Basics

The dynamics of the health care delivery system have changed dramatically over the past several years. The single most important factor impacting the change in health care delivery is consumer demand for quality care at an affordable price. As a result, we have witnessed the emergence of managed care. This workshop will provide you with a basic understanding of managed care, the concept of medical management, and the expanding roles for nurses in this growing area of health care. This timely workshop will give you insights and new information for decision-making in our changing health care environment. RNs and LPNs will earn 4 contact hours for attending this workshop.

$36.00

XNC 2332

High Tech Dentistry with a Compassionate Spirit:

A Recipe for Success Technology is pushing dentistry rapidly ahead in preparation for the new millennium. Which components are right for you and for your dental office? What benefits will they provide? What headaches? How will the staff adjust to the changes that result? And most important, what will your patients think? This workshop will provide a candid look at the high-tech dental office through the eyes of an experienced dentist and her practice manager. You will meet a dentist who went from being afraid to turn a computer on to one who uses most of the high-tech components available. You will interact with a practice manager who knew computers and how to care of people, but did not know an amalgam from an occlusal. Yet, together they have learned how to combine technology and a compassionate spirit to build a very successful dental practice. They look forward to sharing their journey with your dental team. Dentists and dental hygienists will earn 6 contact hours for attending this workshop. The fee for Dentists is $159. The fee for dental hygienists and dental office staff is $89.

$159.00

XNC 2333

Introduction to CPT-4 Coding

A basic understanding of coding has become an important part of effective health care delivery. If you need an introduction to coding and want to focus on basic how-to's, plan to attend this practical course. The course will begin with an overview of the coding system and its conventions. You will code in-class exercises from real-life situations to help you correctly apply the concepts presented. The CPT-4 coding book can be purchased in the JCCC bookstore. Because this course is applicable to a wide range of medical office professionals, no C.E. credit will be given. Certifications documenting attendance will be awarded and may be submitted by the individual participant to the appropriate licensing board.

$39.00

XNC 2334

Taking Care of You: Creative Self-Care

Is it possible to maintain a career and a life? Organizational demands and busy lifestyles have left many health care providers wondering about this question. Fortunately, the answer is yes! Learn how to prioritize needs and establish a plan for getting those needs met. Explore ways to develop daily discipline, a requirement for maintaining spiritual, emotional and physical health. Maintain a sense of peace even when the world around you seems hectic and chaotic. Join us to discover how to creatively take care of you! RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop. Approval is pending for other health care professionals.

$54.00

XNC 2335

The Challenges of Longevity

We often hear "when the baby boomers reach 65..." Economic implications and social security are already a concern and the large numbers in this age group will influence other factors also. When a large proportion of older people dominates a culture, the social and political climates change as well. Explore these factors and learn how older adults can use their later years in purposeful and rewarding ways. Learn how the healthy and more energetic older adult can contribute in the community, in the family and develop a deeper inner life. Resources for this pursuit will be presented. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop. Approval is pending for other health care professionals.

$27.00

XNC 2336

Practice What You Preach: Modeling Healthy Weight

Management Why is it so hard to maintain a healthy weight? Even many health professionals find it very difficult to remain physically fit. This program will help health care professioanls analyze the effectiveness of their personal and professional approaches to healthy weight management. You will learn research-based strategies for eating without overeating, for getting regular exercise without procrastinating and for gaining insight into how relationships may set you up for overeating and not getting regular exercise. You will receive detailed descriptions of the recommended weight management clinical guidelines by the National Institutes of Health (NIH) as well as the presenter's three-pronged approach--- Holistic Self-Care Model for Long-Term Weight Management. RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop. Approval is pending for other health care professionals.

$54.00

XNC 2337

Putting Your Patient's Best Foot Forward

Painful or disabling conditions of the feet prevent many individuals, especially older or homebound patients, from living comfortable and active lives. In this progrm, you will learn to assess skin condition, circulation, sensation and

movement in the foot as well as discuss the management of common foot fungi. You will also have an opportunity to observe a demonstration of nail and skin care. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop. Approval is pending for other health care professionals.

$27.00

XNC 2338

Nursing Documentation: Professional and Legal Issues

Nursing documentation has undergone multiple changes over the years and documentation methods are continuously evolving-narratives, soaps, AIEMS, focuses, exceptions, raps and paths! Individual, integrated and multidisciplinary formats! No matter what system is used, nursing documentation must reflect the nursing process and stand up to close scrutiny in legal, governmental and regulatory arenas. Learn to evaluate how documentation truly reflects the care received and examine examples of charting involved in medical malpractice cases. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop.

$27.00

XNC 2339

Breathe Easy: An Update on the Pharmacologic Treatment

of Asthma and COPD This practical presentation will emphasize the appropriate use of pharmacological agents in the treatment of patients suffering from asthma and/or chronic obstructive pulmonary disease (COPD). The pharmacology, pharmacokinetics, use, side effects and evidenced-based alternatives will be discussed thoroughly. Case studies of various patient scenarios will be provided to facilitate understanding and application of the information presented. RNs and LPNs will earn 6 contact hours for attending this workshop. Approval is pending for other health care professionals.

$54.00

XNC 2340

Anger: The Road to Misery or Self-Discovery?

What happens when you get really angry? How does your body feel, how does your mood change and how do you act? Does your mood and behavior depend on whether you are a male or a female? In this experiential workshop, you will take a look at the different sides of anger---things that influence your particular style of feeling and expressing it, how the anger of others affects you and how repressed anger shows up. RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop. Approval is pending for other health care professionals.

$54.00

XNC 2341

Diabetes: Psychosocial Aspects of Diagnosis and

Self-Management What does it mean to be diabetic? How does an individual's attitudes and coping styles impact the four areas of diabetes care---diet, medication and glucose monitoring, stress management and exercise? In this workshop, you will explore how various factors, including age, gender, ethnicity and learning or parenting style, influence an individual's response to a diagnosis of diabetes. You will learn to utilize these factors to enhance your patient education and assist your client to achieve good medical outcomes. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop. Approval is pending for other health care professionals.

$27.00

XNC 2342

Therapeutic Touch: A Nursing Intervention

Therapeutic Touch is a healing intervention that involves the direciton of life

energy by the practitioner to benefit the recipient. You will explore the interaction of the human energy fields with the environment and discuss the different phases of therapeutic touch. You will learn the importance of intentionality and centering in the therapeutic touch process. Specific research that supports the practice of therapeutic touch will also be discussed. RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop.

$54.00

XNC 2343

So You Want to Be a Nurse Entrepreneur?

Nurses, because of their education and experience, are in a unique position to work independently rather than in a traditional employment setting. If you are intrigued with this idea, this program will answer your questions and tell you how to get started. RNs and LPNs will earn 3 contact hours for attending this program.

$27.00

XNC 2344

Lab Values: The ABCs of CBCs (and ABGs and TSHs and Lytes and...)

This practical program will provide you with a clear understanding of various lab tests, when and why they are indicated and what their values mean. An overview of cardiac and liver enzymes will be presented and routine labs and their implications will be described. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop.

$36.00

XNC 2345

Women and Heart Disease: The Silent Epidemic

Traditional research into the causes, diagnosis, treatment and prevention strategies of cardiovascular disease has been conducted predominantly on men. As a result, women have not been viewed as being at risk. Yet, national statistics support that more than 500,000 women die from heart disease annually, making it the leading cause of women's death in the United States. This state of vulnerability warrants an emergent need to stimulate awareness, prompt early detection, education and prevention in addressing the magnitude of this "Silent Epidemic" in women. Learn the approaches you need to improve the cardiovascular health of yourself, your family and your patients. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop.

$27.00

XNC 2346

Sentinel Lymph Node: Concept and Technique

The histologic status of lymph nodes is an important prognostic indicator in patients with cancer. The first stop along the route of lymphatic drainage from a primary tumor is a limited set of regional lymph nodes. Dyes and radioactive traces are used to identify the first lymph node(s) to receive drainage from a tumor, termed sentinel lymph node(s). In melanoma, this sentinel lymph node reflects the status of a lymph node basin and is the basis for furthur treatment. In breast cancer, the use of sentinel lymph node biopsy is undergoing debate. In this workshop, you will review the lymphatic system and explore both the concept and technique for using this important prognostic indicator. RNs and LPNs will earn 3 contact hours for attending this workshop.

$27.00

XNC 2347

Hepatitis: Prevention and Management

Hepatitis, presenting in both acute and chronic forms, is more prevalent and often more serious than many people realize. While some forms of the illness may be mild, others can lead to life threatening illness and/or development of serious

sequelae. In this program, you will examine the different types of hepatitis, explore new treatments and prevention strategies and receive the latest information regarding blood borne pathogen protocols. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop. Approval is pending for other health care professionals.

$27.00

XNC 2348

Psychotropics Made Simple

The number and variety of psychotropic agents now available to treat clients/patients with mental disorders has grown significantly in the past few years. Many of these agents have diverse uses and are given to individuals in many different care settings. And you, the health care professional, are asked to respond knowledgebly to these situations! In this interactive program, you will explore the major disease states encountered in mental health care as well as the drug treatment and pharmacology associated with those illnesses. You will learn characteristics of major drug classifications, mechanisms of action, common side effects and implications for use. While pharmacologic treatment of five/six major disease states will be highlighted, the program is flexible and will include an opportunity for questions and more in-depth discussion as needed to provide practical information to assist you in your practice setting. RNs, LPNs, LMHTs, social workers, psychologists and counselors will earn 4 contact hours for attending this workshop. Kansas ACHAs will earn 4 (RC) contact hours. Approval is pending for other health care professionals.

$36.00

XNC 2349

ADD/ADHD: Diagnostic Issues and Management Strategies

Hear thought provoking discussion addressing diagnostic and assessment issues regarding individuals with attention dysfunction (ADD/ADHD). Learn about research, the challenges associated with the condition and successful treatment interventions. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop. Approval is pending for other health professionals.

$27.00

XNC 2350

Drug Therapy in the Elderly

The elderly constitute about 12.5% of the US population. A myriad of health-related problems complicate the lives of these older individuals. Management of these medical problems frequently involves the use of multiple medications resulting in a variety of adverse events. This program will help you gain a better understanding of these events and provide strategies to prevent adverse outcomes of drug therapy. In addition, the most commonly prescribed medications for the elderly will be discussed. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop. Kansas ACHAs will earn 3 (RC) hours.

$27.00

XNC 2351

Mastering Those Dysrhythmia Challenges

This program is designed for nurses and emergency personnel who already have a basic understanding of dysrhythmia analysis and who wish to advance their skills. You will gain confidence in recognizing and appropriately responding to the dysrhythmias covered. Lecture as well as practice on EKG strips will be included. RNs and LPNs will earn 6 contact hours for attending this workshop.

$54.00

XNC 2352

Holistic Approaches to Chronic Fatigue Syndrome

Chronic fatigue syndrome and fibromyalgia have many common features, and some patients may actually have both conditions. Living with these conditions is often very difficult for patients. Health care providers, helping patients manage these chronic ailments, find them challenging as well. This program will discuss criteria for the diagnosis of chronic fatigue syndrome and fibromyalgia and review the latest literature on treatment strategies. The program will also highlight current thinking about the roots of these two increasingly common diagnoses, and assist participants in understanding current research in the field. RNs, LPNs and LMHTs will earn 3 contact hours. Approval is pending for OTs and PTs.

$36.00

XNC 2353

Workplace Relationships: Best Friends or Worst

Nightmare Wherever men and women come together to accomplish a common goal, conflict seems to be an inevitable companion. This is just as true of the health care workplace as any other. In this workshop, you will examine basic life principles---the power of love, the practical application of forgiveness, keeping work issues in perspective and the importance of affirmation ---and how these impact workplace relationships, often turning worst nightmares into best friends. RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop. Approval is pending for other health professionals. Kansas ACHAs will earn 6 (RC) hours.

$54.00

XNC 2354

Anatomy of a Lawsuit: A Case Study Approach

Changes in our health care system have broadened the scope of nursing practice and professional accountability Increased accountability can mean increased liability! It is essential for today's nurse to be aware of areas of risk exposure and potential liability. This seminar will feature three legal nurse consultants who frequently review medical malpractice cases. You will learn how a medical practice case is researached and hear expert witnesses present actual court cases with trial exhibits. RNs, LPNs and lmhts will earn 4 contact hours for attending this course. Approval is pending for other health professionals.

$36.00

XNC 2355

Generation to Generation: How the Family Influences

Children It is generally accepted that the family influences how children function. However, how this occurs is often not understood. Popular ideas range from blaming the mother to blaming the genetic pool of the family. These explanations do not offer people a way of thinking that takes into account how the family emotional environment can influence the behavior of children. This way of thinking dispels the myth of the "dysfunctional family" and focuses instead on the numerous variables that influence how parents function in relationship to their children. The perspective presented in this seminar is based on Bowen family systems theory, which outlines the complexity of how previous generations exert influence on current generations. The "generation" affect will be explored through the concepts of the theory and through clinical examples. RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop. Approval is pending for other health professionals.

$69.00

XNC 2356

Dermatologic Emergencies and Urgencies

Often rashes or other skin problems may appear benign, but actually reflect an omnious diagnosis. Other conditions can appear alarming, but warrant only reassurance. In this workshop, nurses who encounter patients with skin problems as part of their daily care will discover cutaneous clinical clues that will assist them in providing knowledgeable care for patients who present with various

inflammatory, infectious and neoplastic processes. Emphasis will be placed on clinical presentation and will include diagnostic intervention when appropriate. RNs and LPNs will earn 3 contact hours for attending this workshop.

$27.00

XNC 2357

Diabetes and Pregnancy

The outcome of pregnancy complicated by diabetes can be significantly influenced by the effective management of blood glucose levels. In this presentation, you will discuss gestational diabetes as well as pregnancy complicated by pre-existing diabetes. You will explore the pathophysiology of both conditions and learn screening criteria. You will discuss important aspects of effective management, including nutrition, exercise, stress reduction, medications, and intensive monitoring of mother and baby before and during pregnancy, labor, delivery and postpartum. Emphasis will be placed on achieving "healthy moms and healthy babies." RNs and LPNs will earn 6 contact hours for attending this workshop. Approval is pending for other health professionals.

$54.00

XNC 2358

Innovations in Treating Arthritis

Arthritis and other rheumatic conditions affect more than 42 million Americans, approximately one in every six people. Arthritis is the leading cause of disability in the United States and accounts for medical costs of $15 billion annually. The magnitude of arthritis and related conditions alone compels nurses and other health professionals to be knowledgeable about recent innovations in managing these conditions. This presentation will provide an overview of rheumatic disorders, including rheumatoid arthritis, osteoarthritis, lupus and polymyositis, and will include the clinical presentation, treatment and drug therapy for these debilitating illnesses. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop. Approval is pending for other health professionals.

$27.00

XNC 2359

Assessment and Stabilization of the Extremities

This practical presentation will introduce you to the examination of the extremities. Using a systematic approach, you will review the appropriate anatomy and learn to perform a detailed assessment of the upper and lower extremities. You will learn to evaluate injuries and medical problems using a risk management format (a systematic evaluation to eliminate potential, serious, underlying problems). RNs and LPNs will earn 6 contact hours for attending this workshop. Approval is pending for other health professionals.

$54.00

XNC 2360

Psychotherapy Made SimpleR

This workshop identifies and elaborates basic concepts of the psychotherapeutic process. Beginning with how to greet the client and concluding with planning and carrying out termination, this workshop will explore the essential ingredients of the successful therapy practice. Of interest to both new and experienced therapists. Advanced practice mental health nurses, psychologists, social workers and licensed counselors will earn 6 contact hours for attending this workshop.

$69.00

XNC 2361

Attachment and Hunger: Understanding the Client with

An Eating Disorder This presentation will focus on the diagnosis and treatment of eating disorders within the context of connection and attachment. Nurturing care

with balanced limit setting will be explored. RNs, LPNs, LMHTs, social workers, psychologists and counselors will earn 6 contact hours for attending this workshop.

$54.00

XNC 2362

Potassium: Maintaining the Balance

This program, available in JCCC labs, provides an overview of the role and function of potassium in the body, as well as measures to correct potassium imbalance. RNs and LPNs will earn 1 contact hour for completing this course. ACHAs will earn 1(RC) contact hour.

$12.00

XNC 2363

Nursing and the Law

This course, available in JCCC labs, defines legal terms pertinent to nursing practice, explains the role of the state legislature in regulating nursing practice and discusses the relationship between negligence and malpractice. RNs and LPNs will earn 1 contact hour for completing this course. ACHAs will earn 1 (A) contact hour.

$12.00

XNC 2364

Care of the Client Experiencing Anxiety

Presented as a computer-based module in JCCC's open lab, this course discusses various anxiety-related disorders, including social phobia, post trauma stress disorder, obsessive compulsive disorder and hypochondriasis. RNs, LPNs, LMHTs and social workers will earn 1 contact hour for completing this course. ACHAs will earn 1 (RC) hour.

$12.00

XNC 2365

Care of the Client with Peptic Ulcer Disease

This course provides a comprehensive overview of peptic ulcer disease, including causes, nursing interventions, medications and client teaching needs. RNs, LPNs and LMHTs will earn 1.5 contact hours for completing this course. Kansas ACHAs will earn 1.5 (RC) hours.

$18.00

XNC 2366

Clinical Management of Individuals with

Alzheimer's Disease As our population ages, the emotional and behavioral problems associated with Alzheimer's Disease and other forms of dementia are becoming increasingly significant for both families and health care providers. This comprehensive workshop will examine the Alzheimer's Disease process from a neurological viewpoint, emphasizing the changes that result in behavioral and psychiatric problems for these individuals, their families and caregivers. Environmental, pharmacologic and interpersonal interventions will be discussed with an emphasis on understanding the demented person's world and changing needs. Medications commonly used to treat both Alzheimer's Disease and the behavioral changes that occur will be discussed also. RNs, LPNs and LMHTs will earn 6 contact hours for attending this program. Kansas ACHAs will earn 6 (RC) hours.

$54.00

XNC 2367

Religious Diversity in Health Care: A Foundation for

Holistic Care Historically, health care has focused on caring for and curing the body and mind, excluding the spiritual dimension of our triune nature. The wall between medical science and spirituality is now coming down! We recognize that effective treatment requires consideration of the whole person---body, mind and spirit. In this course, participants will explore the complementary relationship between spirituality in a religiously pluralistic society and the care provided to patients. Participants will identify approaches for meeting the spiritual needs of individuals from various religious traditions. RNs, LPNs, LMHTs, social workers, psychologists, counselors, clergy, dentists and dental hygienists will earn 6 contact hours. ACHAs will earn 6 (RC) hours. Approval is pending for other health professionals.

$54.00
XNC 2368

Understanding Lab Values

This practical program will provide you with a clear understanding of various lab tests, when and why they are indicated and what their values mean. You will discuss routine lab tests and their implications as well as overview cardiac and liver enzymes. RNs and LPNs will earn 4 contact hours for attending this workshop.

$48.00
XNC 2369

Naturopathic Medicine: Philosophy, Modalities

Naturopathic medicine, also known as natural or holistic medicine, has experienced a tremendous resurgence in the last two decades as a health conscious public seeks alternatives in health care. In this informative course, you will explore the philosophy and therapeutic modalities of naturopathic medicine, including nutritional medicine, botanical medicine and homeopathy. You will learn the clinical indications, mechanism of action, side effects and contraindications of a wide variety of natural medicines commonly used today---CoQ10, DHEA, Hypericum (St. John's Wort), Ginko, Ginseng and others. You will also gain an understanding of the education, training and role of the naturopathic physisian, allowing you to answer your patients' questions with greater knowledge and confidence. RNs, LPNs, LMHTs and dietitians will earn 3 contact hours.Approval is is pending for OTs and PTs.

$36.00
XNC 2370

Pharmacology of Depression: Familiar Pathways

and New Frontiers This course will allow you to take an in-depth look at depression with special emphasis on the receptors and the neurotransmitters involved. You will study serotonin, dopamine, norephinephrine and other neurotransmitters believed to be involved with depression, as well as the different anatomical pathways in the brain responsible for depression, obsessive compulsive disorder, panic disorder and eating disorders. You will review traditional drugs such as the selective serotonin re-uptake inhibitors (SSRIs) and tricyclics (TCAs) and learn about newer agents now available. You will also examine the pharmacology, side effects and interaction potentials with other drugs. This course will provide an excellent review of depression and introduce cutting-edge concepts and research about new serotonin receptors, new treatments and combination drug therapy. RNs, LPNs and LMHTs will earn 3 contact hours for attending this course. Approval is pending for other health professionals.

$27.00
XNC 2371

Obsessive Compulsive and Anxiety-related

Disorders in Children Although obsessive compulsive (OCD) and anxiety- related

disorders are believed to affect only 3-5% of children under age 16, the symptoms and experiences of these children are often misunderstood and misdiagnosed. Families are confused and often feel helpless as their child battles internal anxiety and the overpowering urge to perform or avoid behaviors/rituals that give only temporary relief to overwhelming anxiety and fear. Since many symptoms associated with OCD or anxiety disorders can also be found in children with attention deficits, learning challenges, Tourette's Disorder and depression, thoughtful consideration will be given to making the correct diagnosis as well as identifying therapeutic treatment/management approaches, including the importance of developing a team approach to assist the child experiencing these challenges. RNs, LPNs and LMHTs will earn 3 contact hours for attending this course. Approval is pending for other health professionals.

$27.00

XNC 2372

Immunization: You Call the Shots (Parts 1 & 2)

Presented on computer disk, this program is a two-part series. It provides a comprehensive overview of currently accepted immunization practices. RNs, LPNs and LMHTs will earn 6 contact hours for completing this course.

$66.00

XNC 2373

Musical Solutions for Everyday Problems

Music is good for us! We intuitively know this and accept it without question. But do we know why it is not only good for us, but needed for optimal development and well being? In this workshop, you will learn what The Mozart Effect is and why it is important. You will discuss high and low frequency sounds and learn how they relate to health. You will discuss the art of listening, hear the latest research on the relationship between the ear and the brain and explore how this can be used in children with ADD and other problems. You will see a slide presentation on The Sound Environment and how this impacts our lives and discover how cutting edge hospitals are using sound and music in innovative ways, including music for grieving, music in hospice and how the harp is used to assist dying patients. RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop. Kansas ACHAs will earn 6 (RC) hours. Approval is pending for other health professionals.

$54.00

XNC 2374

Pain Management: Integrating Complementary Therapies

into Traditional Regimens According to The American Pain Society, pain is often undertreated, causing suffering and financial loss to individuals and to society. As a practicing health care professional, you can site numerous cases to verify this assumption. In addition, Joint Commission on Accreditation of Organizations (JCAHO) acknowledges pain as a coexisting condition with many diseases and injuries and has included new pain management standards for compliance in 2001. In this experiential workshop, you will examine the mind/body connection as well as learn principles of psychoneuroimmunology. You will explore a variety of complimentary therapies, allowing you to individualize your treatment plans and increase you effectiveness as a practitioner. RNs and LPNs will earn 7 contact hours for attending this workshop. Approval is pending for other health professionals.

$63.00

XNC 2375

Taking Off the Mask: Feeding the Hunger Within

Depression, anxiety, marital problems or stress! Traditionally, our clients have presented with symptoms of one of these problems. In recent years, we have been challenged by an increasing number of individuals presenting with feelings of emptiness, being numb or being unable to develop or sustain relationships.

Rather than focus on symptoms, this workshop will examine ways clients can lead a fuller life. It will explore issues of attachment, identity, boundary and spirituality as well as barriers to meaningful relationships. RNs, LPNs, LMHTs will earn 6 contact hours for attending this workshop. Kansas ACHAs will earn 6 (A) hours. Approval is pending for other health professionals.

$54.00

XNC 2376

Intrapartum Bleeding Disorders

Few emergencies are as frightening as intrapartum hemorrhage. The causes of hemorrhage during the birth process are numerous and determining the etiology of the problem requires a sound understanding of maternal- fetal physiology. In this program, you will review maternal-fetal and uteroplacental physiology, examine problems that may result in intrapartum hemorrhage---placental abnormalities, coagulation defects and uterine problems, and explore interventions to improve outcomes when intrapartum hemorrhage occurs. RNs and LPNs will earn 3 contact hours for attending this workshop.

$27.00

XNC 2377

Making Pathophysiology Work in Your Practice:

Endocrine and CNS If you don't work with patients experiencing endocrine and central nervous system disorders often, you may feel challenged to recall the pathological basis of conditions affecting these body systems. In this workshop, you will review the anatomy and physiology related to endocrine and related CNS disorders and discuss clinical features and laboratory changes expected in patients. You will learn the pathogenesis, clinical characteristices, supporting lab data and assessment procedures for a wide variety of endocrine and neurological disorders as well as how to utilize this information to strengthen your everyday practice. RNs and LPNs will earn 6 contact hours for attending this workshop.

$54.00

XNC 2378

The Compassionate Heart: Dealing with Life-limiting

Illness, Death and Grief From the moment an individual learns they have a life-limiting illness, their life and the lives of everyone close to them will never be the same again. Life has changed---with change comes loss, with loss comes grief and with grief comes the opportunity to feel, learn and grow into someone more than we were before. In this workshop, you will examine some of the physical, mental, emotional and spiritual aspects of life-limiting illness, death and loss. You will also examine the pain of the grieving process and discover the healing, hopeful power it can bring. Whether you're dealing with the challenges of a life-limiting illness professionally or on a personal level, developing a compassionate, understanding and loving heart can help make this time a little less difficult. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop. Kansas ACHAs will earn 3 (RC) hours. Approval is pending for other health professionals.

$27.00

XNC 2379

Seizures and Epilepsy: An Overview of Current Management

A diagnosis of seizures/epilepsy can be frightening and health care professionals are in a unique position to provide factual information about the management of this condition. This workshop will provide an overview of this important topic, beginning with the classification of seizures. You will explore the epidemiology and evaluation of seizures/epilepsy, review videos of various seizure types and discover how to differentiate non-epileptic spells (e.g. syncope and pseudoseizures) from epilepsy. You will also discuss therapeutic strategies to eliminate seizures, including vagal nerve stimulators and brain surgery. The impact of epilepsy on the life of the individual and family will also be discussed.

RNs and LPNs will earn 3 contact hours for attending this workshop. Kansas ACHAs will earn 3 (RC) contact hours.

$27.00
XNC 2380

Prevention and Management of Back Injury

Oh, my aching back! This disabling complaint will affect an estimated one out of four people this year and many of these people will be health care professionals! In this workshop, an advance practice nurse and a physical therapis will join forces to explore this common problem. You will discuss spinal anatomy, the etiology of common injuries and various treatment options, including medication, physical therapy and specialist treatments. You will also focus on preventive and rehabilitative aspects of back pain, including ergonomics and fitness. RNs and LPNs will earn 6 contact hours for attending this workshop. Approval is pending for physical therapists and other health professionals.

$54.00
XNC 2381

Hit Parade of Prescribed Drugs: The Top 100

Which drugs make up the top 100 list? Why are these drugs important and why are they prescribed more than others? Are they safer than similar drugs? Is cost the driving force? Do the multi-million dollar drug compaines we hear so much about play a significant part in drug selection? Take a critical look at the top 100 most frequently prescribed drugs, review the characteristics that make them "favorites" and learn why they are prescribed so frequently. Learn why a drug is taken off the market or "banned" by the FDA and discuss the use of herbals and natural products. RNs and LPNs will earn 3 contact hours for attending this workshop. Appproval is pending for other health professionals.

$27.00
XNC 2382

Reclaiming Your Life Story

We each carry with us a story of how we arrived at our current place in life. These stories are made up of generational influences, family of origin experiences, life events and perspectives. This presentation will give you the opportunity to see who the antagonists and protagonists are in your life, what has been the theme of your story to date, and how you can begin to shape and alter the script. A story of pain can be retold as one of empowerment. Come learn how to retell your story from strength and resilience. Information from family systems theory will be intermixed throughout the presentation. RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop. Approval is pending for other health professionals.

$54.00
XNC 2383

Meditation and Mind/Body Health: You and Your

Patient Meditation is becoming an important part of self-care regimens. However, the effects of meditation, its benefits and its risks are not always well understood. You will explore two major forms of meditation--- mindfulness and concentration, learn how meditation is being used in health care settings and which conditions it can help. You will experience four different meditation sessions and get tips on how meditation can be applied to daily life. RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop. Approval is pending for other health care professionals.

$27.00
XNC 2384

Management of Primary Headache

It is estimated that from 60 to 70 million Americans have experienced some form of headache, making it one of our most common health problems. In this informative workshop, you will explore various causes and types of headache, discuss the prevention and medical management of primary headache and discover various behavioral therapies shown to decrease the frequency and severity of headache pain. RNs, LPNs and LMHTs will earn 3 contact hours for attending this course. Kansas ACHAs will earn 3 (RC) hours. Approval is pending for other health professionals.

$27.00

XNC 2385

Innovative Approaches to Diabetes Management

Type 2 diabetes is reaching epidemic proportions in the United States. Approximately 16 million people have diabetes, but only half are currently diagnosed. Although no cure yet exists for diabetes, our understanding of disease progression and complication escalation in growing each year. In this seminar, you will explore new and innovative approaches to the treatment of pre-diabetic conditions leading to type 2 diabetes, including alternative therapies, dietary variations, and folk remedies. You will also discuss the impact of psychological issues and culture on diabetes care. This seminar will be most beneficial for health care providers who wish to advance their knowledge beyond a basic understanding of diabetes. RNs and LPNs will earn 6 contact hours for attending this workshop. Approval is pending for other health professionals.

$54.00

XNC 2386

The Business of Healthcare: Where Does the Money Go?

Reimbursement, budgets and quality patient care may appear to be in direct conflict with each other. Do you know how reimbursement drives your employer's budget? Do you know how to provide quality patient care and yet support your employer's budget. This workshop will explore healthcare reimbursement history, address budget preparation and provide an opportunity for group discussion of case studies that illustrate important concepts related to the business of healthcare. RNs, LPNs and LMHTs will earn 4 contact hours for attending this workshop. Kansas ACHAs will earn 4 (A) hours. Approval is pending for other health professionals.

$36.00

XNC 2387

Engineering Wellness: Nutrition, Exercise and Stress

Management Developing a wellness lifestyle isn't always easy, but it isn't the impossible task we sometimes imagine it to be. Must you impose rigid dietary restrictions, exercise to exhaustion or change your personality type? Absolutely not! In this seminar, you will explore good nutrition and long-term weight management, including the futility/ potential harm of popular diets and the use of herbal drugs, supplements, appetite suppressants and caffeine. You will review the benefits of exercise, learn practical ways to incorporate more physical activity into your daily routine and gain tips to reduce stress, fatigue and professional burnout. RNs, LPNs and LMHTs will earn 6 contact hour for attending this workshop. Approval is pending for other health professionals.

$54.00

XNC 2388

Two and Three-headed Dragons: Meeting the

Challenge of Dual Diagnosis Individuals with dual diagnosis, addiction illness coupled with psychiatric illness, are among the most difficult patients to treat successfully. Left untreated, they are likely to demonstrate horrific behavior in forms of violence, self-harm and suicide. In this workshop, you will explore the relationship between addiction and psychiatric illness and learn how a dual diagnosis treatment approach can make an effective difference. You will also

discover how treating only one problem while remaining blind to the other, only undermines good treatment. RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop. Kansas ACHAs will earn 6 (RC) hours. Approval is pending for other health professionals.

$54.00
XNC 2389

Differential Diagnosis, the DSM-IV and Biopsychosocial

Assessment. Providing accurate differential diagnoses, using the DSM-IV, is a challenging task for mental health practitioners of all disciplines. While the multi-axial design encourages us to view the individual from multiple perspectives, in reality we tend to concentrate only on Axis I and Axis II criteria. In this program, you will learn to assess the individual's developmental stage, life circumstances, culture, gender and physical status, prior to applying DSM-IV diagnoses. Special emphasis will be given to commonly over-diagnosed and under diagnosed conditions. RNs, LPNs, LMHTs, social workers, phychologists and counselors will earn 6 contact hours for attending this workshop.

$54.00
XNC 2390

Tell Me How It Hurts: Health Care Communication

Based on Personality Preferences Why do some patients comply with your requests, while the same words inflame others? It's probably not WHAT you said, but how they HEARD it. Even under normal circumstances, people don't all react the same. When they're sick, their responses are more complex and even more critical to their well being. Based on the Myers- Briggs Type Inventory (MBTI), this program will help you recognize clues to patients' type preferences and interpret them for more effective communication, RNs, LPNs and LMHTs will earn 7 contact hours for attending this workshop. Kansas ACHAs will earn 7 (RC) hours. Approval is pending for other health professionals.

$63.00
XNC 2391

Depression in the Elderly: Relationship to Dementia and Disability

Major depression remains the single most under diagnosed and under treated mental illness in the population over 65 years old. Depression can be confused with dementia, but can be the first troubling symptom heralding the onset of Alzheimer's Disease. Depression is the second most common reason for admission into nursing homes, and is implicated in high mortality rates following loss of a spouse or acute medical conditions. In this program, you will explore the reasons for this phenomenon and discuss how to recognize and differentiate it from delirium and dementia. Current medications, the role of psychotherapy and psychosocial and environmental interventions will be thoroughly reviewed that can successfully treat this illness. RNs, LPNs and LMHTs, social workers, dental hygienists, registered dieticians,will earn 3 contac hours for attending this course ACHAs will earn 3 (RC) hours.

$36.00
XNC 2392

Complementary Approaches to Women's Health Problems

Women are becoming more knowledgeable regarding choices that may be available for managing menopausal symptoms. And they are asking questions of their health care providers! In this seminar, you will review the physiology of menopause and perimenopause and discuss the pros and cons of conventional and alternative approaches to managing symptoms and preventing long-term sequelae of estrogen deficiency. You will also explore nutritional and herbal supplements, Oriental medicine options, lifestyle modifications, and bioidentical, or so-called "natural" hormones. RNs, LPNs and LMHTs will earn 3 contact hours.

$36.00

XNC 2393

Meeting the Challenge of Ethical Practice in

Mental Health Mental health professionals often face ethical challenges as they address the problems and concerns of their clients. In this important workshop, you will discuss these challenges and examine several ethical orientations that can be used as decision-making tools. Vignettes will be used to provide you an opportunity to think through how to manage ethical dilemmas. You will also review ethical principles and Codes of Ethics from various disciplines. This workshop meets the three-hour ethics requirement for mental health professionals established by the Kansas Behavioral Sciences Regulatory Board. Kansas ACHAs will earn 3 (A) hours.

$27.00

XNC 2394

Exploring the Risk Factors for Cardiovascular

Disease Whether for personal or professional reasons, nurses and other health care professionals need a sound understanding of the risk factors for cardiovascular disease. In this workshop, you will review the well- recognized risk factors--family history and genetic predipostion, smoking, diabetes, hypertension and hyperlipidemia as well as lesser risk factors. You will examine each risk factor individually and explore up-to-date treatments and potential nursing interventions. You will review the current NCEP 2 treatment guidelines, learn about the upcoming NCEP 3 anticipated guidelines and discover how these changes will impact practice. This class will be helpful not only for patient care but also for yourself and your family. RNs and LPNs will earn 3 contact hours for attending this workshop. Approval is pending for other health professionals.

$27.00

XNC 2395

Becoming a Quitter: A Guide to Smoking Cessation

Smoking contributes, directly or indirectly, to 20% of all deaths in the United States annually. More than 400,000 smokers die each year from the efffects of smoking. Are you concerned about your patient's tobacco use, but feel unable to help? Is a family member or friend experiencing health problems related to smoking? Are you a smoker and wonder what methods are available to help you quit? This workshop will answer your questions and offer effective strategies for smoking cessation. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop. Kansas ACHAs will earn 3 (RC) hours.. Approval is pending for other health professionals.

$27.00

XNC 2396

Treatment of Inflammatory Disease-Old and New Chemotherapeutic Regimens

Chemotherapeutic Regimens This course will briefly review rheumatologic disease and focus on old and new drug therapy regimens. The treatment goals for inflammatory disorders have remained constant for the past several years and include relief of pain, prevention of joint destruction and deformity and maintenance or restoration of preferred lifestyle. New therapies such as inhibitors of cytokine interleukin-1 and tumor necrosis factor along with monoclonal antibodies are changing current research efforts and treatment modalities. RNs,LPNs and LMHTs will earn 3 contact hours. ACHAs will earn 3 (RC) hours.Approval is pending for OTs and PTs.

$36.00

XNC 2397

Information Management: Internet Basics

This course is presented on CD for home use and as a computer-based module in JCCC's open lab. It explains how it can benefit healthcare professionals, including information about e-mail, listServs, netiquette and searching the World Wide Web. RNs, LPNs and LMHTs will earn 1.5 contact hours for completing this course. Kansas ACHAs will earn 1.5 (E)hours.

$21.00

XNC 2398

Care of Clients With Sexually Transmitted Diseases

Presented as a computer-based module in JCCC's open lab, this course provides a comprehensive overview of common sexually transmitted diseases, including signs and symptoms, patient teaching and pathophysiology required for nursing assessments and interventions. RNs, LPNs and LMHTs will earn 1.5 contact hours for completing this course.

$18.00

XNC 2399

Antithrombotic Therapy in the Emergency Setting

Learn the basic pharmacology, therapeutic indications, contraindications, adverse effects and monotoring parameters for the use of antiplatelet drugs, anticoagulants and thrombotic drugs in urgent and emergent settings. RNs and LPNs will earn 3 contact hours for attending this workshop.

$27.00

XNC 2400

Medicine Ways of Our Ancestors: Native American

Spirituality Energy Medicine, considered the cutting edge of scientific thought, is actually very old. Shamans, wise women, medicine men and sages have practiced it for over five thousand years. Our ancestors understood the true meaning of healing---restoration, reintegration, reunion and reconnection of one's Spirit. To the healing sound of drum, voice and rattle, explore the dreamtime, that realm of no time and no space where all spiritual healing is effected. RNs, LPNs, LMHTs, social workers, counselors, LMTs, dentists and dental hygienists will earn 6 contact hours. ACHAs will earn 6 (E) hours. Approval is pending for OTs and PTs.

$72.00

XNC 2401

Homeopathy: An Introduction to Principles,

Practices and Commonly Prescribed Remedies The word homeopathy, derived from the Greek words for similar and illness/suffering, is based on the theory that a substance can cure the same problems it causes. You will explore how homeopathy differs from conventional medicine, what kinds of conditions it treats and some of the commonly prescribed remedies---Arnica, Sulphur, Sepia and more. RNs and LPNs will earn 3 contact hours for attending this workshop. Approval is pending for other health professionals.

$27.00

XNC 2402

Dealing with Aging Relatives: Care Along the Continuum

As our population ages, issues related to the care of our elderly are becoming increasingly important. Who are the caregivers and why are they care giving? What happens in families as the demands of caring for aging relatives increase? How do you help guide families in making tough decisions and talking about difficult issues? How do you balance care giving with a career, healthy self-care and other family relationships? This seminar will address the issues that are of primary concern for both elders and caregivers. Particular focus will be on family dynamics, how issues present themselves in mental health and medical settings

and what community resources are available. Enrollment is limited to 54. RNs, LPNs, LMHTs, social workers, counselors, dentist and dental hygienists will earn 6 contact hours for attending this seminar. ACHAs will earn 6 (RC) hours.

$54.00

XNC 2403

OSHA Standards as They Apply to the Healthcare

Workplace There have been updates to the Bloodborne Pathogen Standard, Recordkeeping Standard and General Industry Standard that will affect your OSHA compliance program. You need to know the latest information for your healthcare workplace to be in compliance with OSHA regulations. This course will satisfy the required annual training for OSHA's Bloodborne Pathogen Standard and cover health care requirements of the Hazard Communication Standard and the General Industry Standard. RNs, LPNs, dentists and dental hygienists will earn 6 contact hours for attending this workshop. Approval is pending for other health professionals.

$54.00

XNC 2404

Take Charge: Leave Chronic Fatigue Syndrome and

Fibromyalgia Behind Chronic fatigue syndrome and fibromyalgia currently afflict approximately 8-10 million people in the U.S. Many more go undiagnosed and ineffectively treated. This program will discuss physical and cognitive barriers to overcoming these illnesses and present strategies for healing these conditions. Strategies will focus on the whole person. RNs, LPNs and LMHTs will earn 5 contact hours for attending this workshop.

$45.00

XNC 2405

Those Mysterious Movement Disorders

"Movement disorders" encompass a broad array of disease processes, including "restless leg syndrome," ataxia, dystonia, essential tremor, Parkinsonism, spasticity and others. This workshop will explore the evaluation, management and care of these conditions. RNs and LPNs will earn 3 contact hours for attending this workshop. Kansas ACHAs will earn 3 (RC) hours.

$27.00

XNC 2406

Solving Workplace Challanges: 2008 and Beyond

The growing complexities of our changing society are adding challenges to the workplace and traditional thinking patterns seem insufficient for solving them. Meanwhile, staffing challenges and questions posed by a diverse workforce remain unanswered. Are realistic solutions to these issues possible? You bet! Don't miss this exciting seminar. RNs, LPNs , LMHTs and social workers will earn 6 contact hours for attending this workshop. ACHAs will earn 6 (A) hours. Approval is pending for OTs and PTs.

$72.00

XNC 2407

If I'm Their Leader, Which Way Did They Go? The Art of Caring Leadership

Health Care is a business and business research reveals that as high as 75% of all staff are committed to their employer and truly desire to provide quality performance. Their ability to retain that commitment to excellence is governed most by the quality of the leadership they receive. Yet in this present atmosphere of flattened organizational charts, increased direct service of "working managers" and general distrust of people in authority, quality leadership is sorely lacking. This seminar provides the nuts-and-bolts "how to's" of leadership and of influencing staff to eagerly follow. It will be of special interest for health care

managers. RNs, LPNs, LMHTs, social workers, LMTs, dentists and dental hygienists will earn 6 contact hours. ACHAs will earn 6 (A) hours. Approval is pending for OTs and PTs..

$72.00

XNC 2408

Uppers, Downers and All-Arounders

Take a whirlwind tour of the drugs that are abused in our society, from amphetamines, to opiates, to hallucinogens. Explore the brain to uncover the biochemistry of addiction and look at how to utilize this information in the recovery process. Take a look at the latest drugs used in the treatment of addictions as well as important aspects surrounding prescription and street drugs of abuse. RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop. Kansas ACHAs will earn 6 (RC) hours for attending.

$54.00

XNC 2409

Evolutions and Revolutions in Women's Health

This workshop will present a clinical examination of the impact of the women's movement of the past 40 years. Young girls are increasingly susceptible to a dysfunctional peer and media culture. Adult women remain reluctant to make healthy physical and emotional choices. RNs, LPNs, LMHTs, social workers, counselors, psychologists, dentists and dental hygienists will earn 6 contact hours for attending this seminar. Approval is pending for other health care professionals.

$54.00

XNC 2410

Mindful Practice: Using Meditation for Personal

and Professional Growth Mindfulness is about developing your awareness skills. As you do this, you will experience increased insight, decreased stress and a more fulfilling life. In this workshop, you will learn about and practice mindfulness meditation. Through active experiences, you will increase your understanding of meditation and how to apply meditative techniques in daily life. The workshop will involve medtiation, experiential exercises and group discussion. RNs, LPNs and LMHTs will earn 4 contact hours for attending this workshop. Approval is pending for other health professionals.

$36.00

XNC 2411

Managing Behavior Problems in the Elderly

Commonly our elders are stereotyped as cranky, irritable, forgetful, and difficult to deal with. The truth is they often do behave in ways that we don't understand. The bigger truth is that something is wrong and our seniors suffer needlessly. As clinicians caring for the elderly, we must know the signs and symptoms of depression and the ways that Alzheimer's Disease, strokes, pain or unmet psychosocial needs cause them to behave unexpectedly. This course explores the neurobiology of depression and dementia, the changing psychosocial needs of the elderly and why these changes cause unwanted behavior. Assessment of the physical and psychological status of the client and strategies to minimize disruptive behaviors will be explored. The use of psychotropic medications will also be reviewed. RNs, LPNs and LMHTs, counselors, social workers, registered dieticians will earn 3 contact hours. ACHAs will earn 3 (RC) hours. Approval is pending for PTs and OTs.

$36.00

XNC 2412

Bringing Home to Those Who Can't Go Home

Home is the primary environment in which you develop and reinforce your sense

of identity. It is there that you gain a sense of history and roots. Your home is a unique expression of who you are; it serves as a vessel for your memories and your relationships with family and friends. In this moving workshop, you will explore ways to help nurture that sense of home and personal identity so often lost in sick and institutionalized patients. Deanna Edwards will share her musical talents to show you how to accomplish this goal. RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop. Kansas ACHAs will earn 6 (RC) hours. Approval is pending for other health professionals.

$54.00

XNC 2413

When Drugs Don't Kill Bugs: Antibiotic Resistant

Bacteria Explore past, present and future trends of antibiotic resistant bacteria, including the impact of this phenomenon on patient care, patient outcomes and the health care economy. RNs and LPNs will earn 3 contact hours for attending this workshop. Kansas ACHAs will earn 3 (RC) hours.

$36.00

XNC 2414

Understanding Asperger and Other

Pervasive Developmental Disorders Pervasive Developmental Disorders (PPD) represent a spectrum of disorders that generally involve impairment in social relatedness, communication skills and eccentric interests, rituals or stereotypes. Asperger Disorder, one disorder within the PDD spectrum, is frequently compared to autism due to a number of shared behavioral similarities. Unlike autism, however, individuals with Asperger Disorder do not tend to display language delay, but rather exhibit severe impairment in social interactions as well as a restricted repertoire of behaviors, interests and activities. In this seminar, the characteristics of Asperger Disorder will be explored plus you will learn why differential diagnosis of this condition is a complex process. There will be a focus on issues regarding social relatedness and appropriate social interventions. RNs, LPNs, LMHTs, social workers, psychologists, counselors, dentists, and dental hygienists will earn 3 contact hours for attending this workshop. Approval is pending for other health care professionals.

$27.00

XNC 2415

GI Drugs: How Do You Spell Relief for GI Problems?

How do you spell relief for digestive problems that can range from minor inconveniences to major illnesses? This practical seminar will review gastrointestinal disorders, discuss the most common GI medications and explore important drug interactions with these agents. RNs and LPNs will earn 3 contact hours for attending this workshop. Kansas ACHAs will earn 3 (RC) hours.

$27.00

XNC 2416

Finding the Courage to Care: Looking In and Reaching Out

These are tough, yet hopeful times for health care professionals. Critical voices, impossible constraints and unreasonable demands can cause us to lose heart. This seminar will help health care professionals take heart and dare to care. RNs, LPNs and LMHTS will earn 6 contact hours for attending this workshop. Kansas ACHAs will earn 6 (A) hours.

$54.00

XNC 2417

The Silent Epidemic: Alcoholism in the Elderly

Among today's 25 million Americans age 65 and older, there are an estimated 2.5 to 3.7 million that are addicted to alcohol. What is perceived as frailty, senility, or

simply the unsteadiness of old age may be alcoholism. This program will explore the depth of the problem in our elderly citizens, and how to recognize and succesfully treat it in the geriatric client. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop. Kansas ACHAs will earn 3 (RC) hours.

$27.00

XNC 2418

Spanish 101 for Health Care Professionals

Having a grasp of elementary Spanish phrases can serve to meet patients' basic needs and provide a welcoming atmosphere. Learn Spanish pronunciation, basic grammar and helpful phrases. Resources will be shared and discussion of relevant cultural aspects will be included. RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop. Kansas ACHAs will earn 6 (E) hours.

$54.00

XNC 2419

Innovations in Cardiac Surgery

Dramatic changes have occurred in the management of cardiac surgical patients in the last decade. Surgical techniques have undergone exciting changes too--off-pump conorary artery bypass, transmyocardial revascularization and artificial heart implantation to name just a few. This seminar will explore current issues and emerging techniques as well as discuss the impact of evolving technology. RNs and LPNs will earn 3 contact hours for attending this workshop.

$27.00

XNC 2420

Bulletproof Confidence

Celebrities Michael Jordan and Oprah Winfrey generate bulletproof confidence from "feeling" brain centers that are not influenced by "thinking" centers or the thought- based techniques used in self-confidence programs. This new feeling-based program helps you uncover these instinctive, primordial "I-can-do-anything" feelings that, unfortunately, most of us have suppressed. RNs, LPNs, and LMHTs will earn 6 contact hours for attending this workshop. Kansas ACHAs will earn 6 (A) hours.

$54.00

XNC 2421

Managing Anxiety in Today's World

In the uncertainty of today's world, stress cannot be avoided--but it can be managed. This workshop will examine how we can distinguish normal fears and anxieties from serious anxiety disorders. It will focus on ways to make anxiety work for you and your clients in today's uncertain times. RNs, LPNs and LMHTs will earn 4 contact hours for attending this workshop. Kansas ACHAs will earn 4 (A) contact hours.

$36.00

XNC 2422

Your Nursing Practice: A Potpourri of Legal Issues

Today's nurses have many concerns about the legal aspects of their practice. This seminar will address three important aspects--defensible charting, malpractice and liability issues, and your rights as an employee. RNs and LPNs will earn 6 contact hours for attending this workshop. Kansas ACHAs will earn 6 (A) hours.

$54.00

XNC 2423

Integrative Therapies for Labor Comfort

Explore the use of nurse-friendly, non-invasive interventions, including the therapeutic uses of music, massage, aromatherapy and birth balls to enhance support of the laboring and birthing woman. RNs and LPNs will earn 3 contact hours for attending this workshop.

$27.00

XNC 2424

Old Isn't Old Any More: Normal Aging in the 21st Century

At the turn of the 20th century life expectancy for females was 47 years; males slightly less. Today it is almost 80 years. The process of aging is not the same as it was 100 years ago. We must redefine what is normal and what is not. This seminar will explore normal changes that occur with aging as well as ways to slow this process. RNs, LPNs and LMHTs will earn 3 contact hours for attending this seminar. Kansas ACHAs will earn 3(RC) hours.

$27.00

XNC 2425

Stress Management from the Inside Out

Do you think you can't manage your stress because all the things that stress you out---your job, your boss, your spouse, the "system"---are things you can't change? Do you feel "stuck"? Learn how to use your mind and your activities to help create health and peace in your life. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop. Kansas ACHAs will earn 3 (A) hours.

$27.00

XNC 2426

Understanding Conditions of the

Liver Review the role and functions of the liver. Explore the pathophysiology and evaluation of various liver conditions and understand liver function studies often seen in patient records. RNs and LPNs will earn 5 contact hours for attending this workshop.

$45.00

XNC 2427

The Heart of Healing: Providing Compassionate Care

Technological advances, budget challenges and calls for improved productivity contribute to the growing complexity of the healthcare environment. In spite of this complexity, the person seeking healthcare services is a human being in need of healing. For this reason, offering compassionate care within our high tech, fast-paced work environments has never been more important. RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop. Kansas ACHAs will earn 6 (RC) hours. Approval is pending for OTs and PTs.

$72.00

XNC 2428

Management of Peripheral Lymphedema

One out of eight women will develop breast cancer over the course of their lifetime. Twenty percent of these women will develop lymphedema. This workshop will explore strategies to prevent, identify and manage this debilitating condition. RNs and LPNs will earn 3 contact hours for attending this workshop. Kansas ACHAs will earn 3 (RC) hours. Approval is pending for other health professionals.

$27.00

XNC 2429

Premenstrual Syndrome and Menopause: A Natural Medicine

Approach Millions of American women experience unpleasant symptoms because of premenstrual syndrome or menopause. Explore the role of hormones in these conditions and discover how natural and synthetic hormone replacement therapy can impact them. Learn to use dietary and lifestyle changes as well as nutritional supplements and botanical therapies to improve general health and sense of well being. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop.

$36.00

XNC 2430

Medical Coding Certification Course

This class will study medical coding using the latest curriculum approved by the American Academy of Professional Coders (AAPC). Individuals who complete the course are then ready to sit for the national AAPC exam. Student workbooks are included in the fee. In addition, CPT, ICD-9-CM and HCPCS are required books and are available for purchase in the JCCC bookstore. A three installment payment plan is available for this course.

$899.00

XNC 2431

Chemotherapy Today: Principles, Practices and

Complications Learn the basic principles behind chemotherapy, including multiple dosing regimens and targeting specifics areas of the cell cycle with multiple drug regimens. Examine side effects and dose limiting toxicities of specific, commonly used chemotherapeutics. Review oncologic emergencies. RNs and LPNs will earn 3 contact hours for attending this workshop. Kansas ACHAs will earn 3 (RC) hours.

$27.00

XNC 2432

The Decision to Forgive

The decision to forgive after a wrong is sometimes easy, at other times very difficult. In this workshop, you will explore the complex concept and process of forgiveness: the pros, the cons, the risks and the benefits. Gaining more clarity regarding this issue will enhance your personal life as well as your professional life. RNs, LPNs, LMHTs and social workers will earn 3 contact hours for attending this workshop.

$27.00

XNC 2433

Understanding Latino Diversity in Health Care

America's Latino citizens come from dozens of nations and all races. Learn about the similarities and dramatic differences among Hispanic groups and the historical events that shape Latino culture today. Discover how Latino citizens from various backgrounds experience health and illness and explore factors that define quality care for your Latino patients. RNs, LPNs, LMHTs, social workers and counselors will earn 4 contact hours for attending this workshop. Kansas ACHAs will earn 4 (RC)hours.

$36.00

XNC 2434

A Window Into You: Why You Do What You Do

Ever wonder, "How did I get to be the way I am?" This workshop will allow you to look at some of the contributing factors that create your unique self---your family system, your birth order, your personality and temperament as well as your group or leadership style. RNs, LPNs, LMHTs, social workers, LMTs, and counselors will

earn 6 contact hours. ACHAs will earn 6 (E) hours.

$72.00
XNC 2435

Medical Terminology

A description is not available for this course.

$69.00
XNC 2436

Healthcare Management in a Changing Environment

The healthcare manager has never been more challenged than in today's ever changing environment. New and aspiring managers are invited to explore current concepts of successful management, including finance and budgeting, communication and delegation, scheduling, ethics, TQM and leadership skills. RNs and LPNs will earn 12 contact hours for attending this workshop. Kansas ACHAs will earn 12 (A) hours. Approval is pending for other health care professionals.

$99.00
XNC 2437

Depression: Marital and Family Process

Depression is a multifaceted symptom that is part of the human's evolutionary inheritance. Although depression is usually thought of as a problem in the individual, Bowen family systems theory sees depression as a symptom of the family system. Using Bowen theory, this seminar presents a map for understanding how marriage and family relationships affect the development and maintenance of depression and how working on oneself in the context of important relationships can influence the course of this symptom. RNs, LPNs, LMHTs, social workers, counselors, psychologists and mental health nurse clinicians will earn 7 contact hours for attending this seminar.

$84.00
XNC 2438

Movement Strategies to Manage Chronic Health Conditions

This experiential workshop explores how different types of holistic movement can be beneficial for specific chronic health conditions, including arthritis, stroke, multiple sclerosis, fibromyalgia, chronic fatigue, osteoporosis and stress. RNs and LPNs will earn 6 contact hours for attending this workshop. Approval is pending for other health professionals.

$54.00
XNC 2439

Understanding and Motivating A Real Zoo Around the

Workplace Identify your primary personality style and learn how ingrained behavioral patterns tend to cluster into four basic personality styles. Expand your awareness of individual differences and learn to bring out the best in others, while taking advantage of strengths in the workplace and home. RNs, LPNs, LMHTs, social workers, counselors, dentists and dental hygienists will earn 6 contact hours for attending this workshop. ACHAs will earn 6 (A) hours. Approval is pending for other health care professionals.

$54.00
XNC 2440

Something Old, Something New: Total Joint Replacement

As our population ages, total joint replacement is increasing as an option for joint

pain. Disciplines in many areas of health care will likely encounter patients who plan to or have already had a joint replacement. This comprehensive presentation will prepare you to care for the total joint replacement patient across the continuum. RNs and LPNs will earn 3 contact hours for attending this workshop. Kansas ACHAs will earn 3(RC) hours. Approval is pending for OTs and PTS.

$27.00

XNC 2441

New Drugs on the Block

Take a comprehensive look at recently approved drug products in the U.S. Discover how they work, their place in therapy and adverse and drug interactions. RNs and LPNs will earn 3 contact hours for attending this workshop. Kansas ACHAs will earn 3 (RC) hours.

$27.00

XNC 2442

Growing Old Ain't for Sissies

Getting older is not for the faint of heart. The aging process brings slow, but sure, declines in physical and mental abilities. In this workshop, you will explore normal aging, its liabilities and rewards, as well as the psychological characteristics and physical habits we can adopt to face our senior years with optimism and hope. RNs, LPNs, LMHTs, social workers and counselors will earn 6 contact hours for attending this workshop. Kansas ACHAs will earn 6 (RC) hours.

$72.00

XNC 2443

Attachment and Hunger: Understanding the Client with

An Eating Disorder This presentation will focus on the diagnosis and treatment of eating disorders within the context of connection and attachment. Nurturing care with balanced limit setting will be explored. RNs, LPNs, social workers, psychologists and counselors will earn 6 contact hours for attending this workshop.

$54.00

XNC 2444

Family Caregivers: Meet Their Needs and Improve Patient

Outcomes One out of three families in America is providing care for one of their members---a child using high-tech equipment or an elder with dementia. Family caregivers must depend on health care professionals for direction. Learn how to assess and meet the needs of family caregivers from an interdisciplinary group of experts. Hear the latest research and identify resources in the Kansas City area to obtain further assistance. RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop. Kansas ACHAs will earn 6 (RC) hours. Approval is pending for other health professionals.

$54.00

XNC 2445

Beginning Spanish for Health Professionals

Learn the rudiments of conversational Spanish in the health care setting, especially in the context of the therapeutic patient relationship. Vocabulary words, phrases, pronunciation and idioms will be covered as well as basic medical terminology. Cultural considerations of the Hispanic patient will also be considered. RNs, LPNs, LMHTs, social workers and counselors will earn 6 contact hours for attending this course. ACHAs will earn 6 (RC) hours. Approval is pending for other health professionals.

$54.00

XNC 2446

Intermediate Spanish for Health Care Providers

This course will build on the Beginning Spanish for Health Professionals course and will expand upon the Spanish speaking experience in the healthcare setting. More vocabulary and grammar along with more practical activities will be provided to allow the students to develop their Spanish-speaking skills and speak the language with greater confidence. Cultural aspects will also be discussed. Completion of a beginning Spanish course is a prerequisite for this class. Bring required textbook to class. RNs, LPNs, LMHTs, social workers, counselors, psychologists, dentists and dental hygienists will earn 8 contact hours for completing this course. ACHAs will earn 8 (RC) hours. Approval is pending for other health professionals.

$72.00

XNC 2447

Decembered Grief: Grief and Loss During the Holidays

The extended "holiday" season can be difficult, draining, and dysfunctional for persons in grief - regardless of the particular loss. Many of the world religions have holidays in December. How can grievers adequately find support while everyone else is celebrating? For some, the holidays "reboot" memories and become a difficult emotional season. Learn what a family member, friend, or health care provider can do to support a griever - especially when this is not the first holiday season. RNs, LPNs, LMHTs, social workers, psychologists and counselors will earn 3 contact hours. ACHAs will receive 3 (A) hours. Approval is pending for other health care professionals.

$27.00

XNC 2448

It's Not Like They Were Family or Something! When

Friends Grieve in the Workplace "Not on company time!" is an attitude many corporations take toward grieving employees. For many, workplace colleagues become a family of investment. Thus, when a colleague dies, friendgrief is experienced in the workplace. Learn how colleagues and management can work together to create a griever-supportive work environment. RNs, LPNs, LMHTs, social workers, psychologists, dentists and dental hygienists counselors will earn 4 contact hours ACHAs will receive 4 (A) hours. Approval ispending for other health care professionals.

$36.00

XNC 2449

Sensitive Communication in Healthcare: In Case We Have

To Eat Our Words, Make Sure They Are Tender and Sweet!! This seminar reminds health care professionals of sensitive principles of communication with colleagues, supervisors and customers, particularly when tension or time pressure is running high. It also serves as a wonderful review when communicating with those we are privileged to live with and love. This presentation has been recently updated to include a current review of the latest research and information on health care communication. RNs, LPNs, LMHTs, social workers, counselors, psychologists, dentists and dental hygienists will earn 6 contact hours. ACHAs will earn 6 (A) hours. Approval is pending for other health professionals.

$54.00

XNC 2450

OSHA Update for the Healthcare Work Place - 2008

The OSHA Standards were passed to assure a safe working environment for all healthcare employees. Staying compliant and current with OSHA standards is definitely a challenge in today?s working environment. Bloodborne Pathogen Standard annual training is the cornerstone of safety in the healthcare workplace. This course will satisfy the required annual training for OSHA's Bloodborne

Pathogen Standard and provide an update on OSHA Standards critical to the healthcare work place. Participants attending this course would benefit by already having a working knowledge of the OSHA Standards. OSHA compliance is essential and required for every healthcare work place. This course is presented as a review and update. RNs, LPNs, LMHTs, dentists and dental hygienists will earn 4 contact hours. ACHAs will earn 4 (A) hours. Approval is pending for OTs and PTs.

$48.00
XNC 2451

Medical Coding for the Experienced Coder: Certification

Preparation This course is designed for the experienced coder and will move at a fast pace. The latest curriculum approved by the American Academy of Professional Coders (AAPC) will be utilized and will prepare participants to sit for the national AAPC exam. Course completion does not guarantee passing the exam. There is an additional fee for the exam. Prerequisite: Medical Terminology Course and two years verifiable coding experience.

$899.00
XNC 2452

Pain Management in the Substance Dependent Patient

Learn how to properly assess and manage pain in a patient who is currently abusing or has a history of substance dependence. Implementing boundaries in pain treatment plans does this. Boundaries include opiod agreements, random urine drug screens, psychotherapy and frequent appointments. Appropriate pain treatment plans should have both pharmacologic and nonpharmacologic components. RNs, LPNs, LMHTs, social workers, psychologists,counselors, dentists and dental hygienists will earn 4 contact hours. ACHAs will earn 4 (RC) hours. Approval is pending for other health professionals.

$36.00
XNC 2453

Mood Disorders and Anxiety: Diagnosis and Treatment

The program will include didatic and experiential activities that will assist the participant in understanding and being able to make the differential diagnoses in each of these DSM-IV categories. Participants will learn the epidemiology, etiology, diagnostic criteria, and recommended treatments for each diagnosis. Additional topics will include interactions with other diagnoses and ethics with regard to clients with these diagnoses. Experiential activities will include the application of therapeutic interventions to themselves in order to facilitate awareness and understanding, and the review of real case scenarios for practice in diagnosis and treatment management. This program meets social worker requirement for DSM-IV education. RNs, LPNs, LMHTs, social workers, psychologists and counselors will earn 6 contact hours. ACHAs will earn 6 (RC) hours.

$54.00
XNC 2454

Give Me Your Tired, Your Poor: Ethics and Cultural

Competency "Give me your tired, your poor, your huddled masses yearning to breathe free," is inscribed at the base of the Statue of Liberty. No where is that invitation more realized than for those who deliver health care! Today's patient population presents cultural challenges that at times seem overwhelming. This course begins with the use of a dramatic monologue, "Bonita and Her Children," performed by nurse dramatist, Julie Russell. Helen Emmott, community ethicist, will follow with ethical theory and facilitation of participant self-reflection. With the presenters' unique methodology, you will journey from reaction to practical response, better preparing participants to meet the challanges of cultural issues. Active listening, narrative ethics and the ethic of care will be utilized. RNs, LPNs, LMHTs, social workers, psychologists,counselors, dentists and dental hygienists

will earn 3 contact hours. ACHAs will earn 3 (A) hours. Approval is pending for other health professionals.

$27.00

XNC 2455

Mary Ann Thompson 11th Memorial Cancer Symposium

Cancer is the culmination of years of mutation, promotion and progression within a cell. It is never too soon to intervene, but it can often be too late if left unchecked. The idea reigns that a person was healthy until diagnosed with cancer. Who tries to change this concept? A few clinicians who believers in prevention ? that?s who! Let?s hope that the number of believers grows and infects the world with more than hope, with the knowledge of each person?s power to prevent cancer. This workshop will review current clinical concepts in complementary medicine, nutrition, and meditation. Dr. Jane Murray will discuss that as more people are diagnosed with cancer every year the interest in all options to assist them, including complementary therapies, is growing exponentially. Dr. Murray will discuss a variety of complementary therapies that can be useful for people with cancer ? both during and after conventional treatment. The evidence to support their use, when it exists, will be presented. A model of integrating the best of all healing options will be offered. Tom Jacobs will share stories and songs from the heart that give support to the spiritual journey and help you view life's challenges with an inner strength and a positive demeanor that strengthen the immune system. This workshop will feel more like a retreat as you laugh, cry and soak-in the time to reflect and refresh and learn to heal yourself. Nan Borchardt will focus upon nutrition variables shown to contribute to increased risk in addition to identifying specific protective dietary intake factors which reduce overall risk and promote wellness. RNs, LPNs, LMHTs, and massage therapists will earn 6 contact hours. ACHA 6 (RC). Approval is pending for OTs and PTs.

$72.00

XNC 2456

Holistic Strategies for Managing Chronic Pain

According to the American Pain Society, pain is often undertreated, causing suffering and financial loss to individuals and to society. Considering the multidimensionality of pain, traditional treatment modalities are not always successful. Pain often requires more than medical management. The addition of complementary therapies to traditional treatment is based on the principles of psychoneuroimmunology, or the mind/body connection. In this experiential workshop, participants will discuss current research on complementary techniques, experience techniques first hand, and begin to develop a plan to integrate techniques into daily life and patient care. RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop. ACHAs will receive 6 (RC) hours. Approval is pending for other health professionals.

$54.00

XNC 2457

Baby Boomers are Busting Out All Over

This seminar will provide an overview of the so called "baby boom" generation. The session will provide a demographic profile and then identify the effects of this generation on numerous American social institutions such as the family, the economy, and the health care industry. Methods of working with "baby boomers" who have aging parents will also be included. RNs, LPNs, and LMHTs will earn 3 contact hours. ACHAs will earn 3 (A) hours.

$27.00

XNC 2458

The Silent Epidemic: Alcohol and Prescription Drug

This workshop explores the seriousness of this problem and ways in which to become involved and help break the cycle of these addictions. RNs, LPNs,

LMHTs, social workers, counselors, phychologists, dentists and dental hygienists will earn 3 contact hours. ACHAs will earn 3 (RC) hours. Approval is pending for other health professionals.

$36.00

XNC 2459

Creative Patient Education: How To Teach So That

Patients Will Learn Positive educational outcomes are the goal of patient teaching encounters. Declining lengths of stay have made attaining those goals more challenging. Have you wondered if it is possible to provide patients essential information in today's rapid delivery healthcare environment? Despite the challenges such an environment poses to professionals, shortened lengths of stay have intensified the need for effective patient education. Leaving the hospital sooner and often with complicated care requirements, patients and families are expected to manage increasingly complex care. Creative approaches to patient education are essential so that we may prepare individuals for life beyond the hospital. This program will provide realistic, practical, and creative approaches to give patients the education they need to be successful. RNs, LPNs, LMHTs and social workers will earn 6 contact hours. Approval is pending for other health care providers.

$54.00

XNC 2460

What's Bugging You? Update on Tick Borne Illness and

Infectious Diseases This program will provide information about the symptoms, evaluation and management of various insect borne and infectious diseases affecting Americans currently. These diseases include: west nile virus, SARS, anthrax, lyme disease, erlichiosis, rocky mountain spotted fever, malaria, hanta virus, plague, tularemia, typhus, babesiosis, tick paralysis, relapsing fever, eastern equine encephalomylitis and St. Louis encephalitis. RNs, LPNs and LMHTs will earn 3 contact hours. ACHAs will earn 3 (RC) hours.

$36.00

XNC 2461

Nursing Assessment of Patients with Cardiac Disorders

Nursing assessment is the foundation for providing care. Proficiency in conducting a concise and systematic history and physical assessment is a key element. This program will provide the nurse with the skills to perform an adult cardiac assessment and to differentiate between normal and abnormal findings. RNs and LPNs will earn 4 contact hours. ACHAs will receive 4 (RC) hours.

$36.00

XNC 2462

Sixty, Seventy and Suddenly Single

Aging in America is changing the phychosocial make-up of our society in many ways and none so important as widowhood and later life divorce. Historically, these life events were handled in traditional ways by remarrying or often going to live with family. Today, seniors are exploring a number of options not open to them before, and women in particular are leading the way to broader horizons after becoming single again. This workshop explores the ways in which seniors survive and often thrive following the loss of a spouse. RNs, LPNs, LMHTs, social workers and psychologists will earn 3 contact hours. ACHAs will earn 3 (RC) hours.

$27.00

XNC 2463

Conscious Anger: Learning to Respond Instead of React

Anger is one of those feelings that is often misunderstood and, in many situations,

is just downright scary! We can learn to run from it, deny it, block it, use it as a weapon, or we can learn to see it for what it is - just another emotion that is trying to teach us something about oursleves or someone else. In this workshop, we will explore some of the different facets of anger - the things that influence your particular style of feeling and expressing it, the ways in which the anger of others affects you and the ways in which unexpressed anger shows up. We will also discuss the importance of learning to "pick your battles" wisely in your personal as well as your professional life. RNs, LPNs, LMHTs, social workers, counselors, psychologists dentists and dental hygienists will earn 3 contact hours for attending this workshop. ACHAs will earn 3 (RC) hours. Approval is pending for other health care professionals.

$27.00

XNC 2464

The Compassionate Heart: Responding to the Needs of

Your Seriously and Chronically Ill Patients From the very moment that someone is told that they have a serious or chronic illness, not only their life but the lives of everyone near and dear to them will never be the same again. Life has changed and with the change comes loss, with loss comes grief, and with grief comes the opportunity to feel, to learn, and to grow into someone more than we were before. We will look at some of the physical, mental, emotional and spiritual aspects of someone who is going through this process. Whether you are dealing with the challenges of illness professionally or on a more personal level, developing a compassionate, understanding and loving heart can help to make a very difficult time a little less difficult. RNs, LPNs, LMHTs, social workers, counselors, psychologists, dentists, dental hygienists will earn 3 contact hours for attending this workshop. Approval is pending for other health professionasl.

$27.00

XNC 2465

Pharmacologic Interventions for Mental Illness

This course will discuss drug therapies across different mental health disease states with an emphasis on pharmacological mechanisms of actions and side effects. The course will also highlight some of the newer drugs approved by the FDA within the last 3-5 years and the biology of some of the receptors and neurotransmitters involoved. This course is designed to be interactive and involve participants in their learning. Your course experience will be enhanced if participants come prepared to talk and ask questions about some of the patients in your own clinical settings. RNs, LPNs, LMHTs, social workers, psychologists and counselors will earn 6 contact hours for attending this workshop.   ACHAs will earn 6 (RC) hours.

$54.00

XNC 2466

Long Term Care: Issues, Changes and Approaches for

Our Future Plagued with years of poor reimbursement, bad public image and a staffing crisis, the Long Term Care provider community is now rising above the struggles with new innovations and strategies. Demands will increase due to our aging population, especially within the next 20 years. This seminar will identify some of the issues and discuss their causes. Focus will then be shifted to successful strategies for dealing with those issues and current realities. RNs, LPNs, LMHTs and social workers will earn 3 contact hours. ACHAs will earn 3 (A) hours. Approval is pending for other health professionals .

$27.00

XNC 2467

Nursing Care of the Patient in Renal Failure

This interactive presentation focuses on the common causes, physiological alterations, clinical manifestations and nursing care of the patient suffering from renal failure. A differentation is made between acute and chronic renal failure.

Current treatments, such as dialysis and organ transplantation will be discussed. An interactive case approach is used to assist participants with learning about renal failure. This is basic introductory presentation. Enrollment is limited to 40. RNs and LPNs will earn 4 contact hours for attending this seminar. ACHAs will receive 4 (RC) hours.

$36.00

XNC 2468

Levels of Healing

This program explores the levels of healing, physical, psychological and spiritual, and the practitioner's interventions at each of these levels. Beyond meeting the physical, medical needs, learn ways to promote a positive attitude during the healing experience and help your patients find meaning in their pain and suffering. Come and explore how to integrate this holistic approach in your practice. RNs, LPNs, LMHTs, social workers, counselors, psychologists, dentists and dental hygienists will earn 3 contact hours for attending this seminar. ACHAs will receive 3 (RC) hours. Approval is pending for other health care professionals.

$27.00

XNC 2469

Diagnosing and Treating the Continuum of Grief

When loss occurs for individuals the resulting ripple effects of change permeates a family system as individuals move to adjust and adapt to the loss. The grief and mourning journey is unique to each person however there are some commonalities often shared by fellow travelers on the road. This workshop will explore what is referred to as the grief journey. Attention will be given to the following areas: clinical aspects of diagnosing and treating grief; practical interventions to use with those experiencing loss; issues related to trauma; grief over the life span; discussion on the concept of complicated mourning; and cultural considerations in working with people around loss and grief issues. This course meets the requirements for social worker's DSM-IV annual training. RNs, LPNs, LMHTs, social workers, counselors and psychologists will earn 7 contact hours for attending the seminar. ACHAs will receive 7 (RC) hours.

$84.00

XNC 2470

Psychosocial Aspects of Patient Care: Now What Do

Many patients bring multiple emotional issues to the medical setting. In addition to the demands of addressing medical needs, the health professional is often used as a sounding board or confidant on emotional matters. It can be difficult to know what to say or suggest. Intense emotional reactions are common during crisis or anxious times, which can be especially challenging. This workshop is designed for the non- mental health professional. Discussion will center on interactions and interventions one might use to address the non-medical areas of life. RNs, LPNs, and LMHTs will earn 3 contact hours for attending this workshop. Approval is pending for OTs and PTs.

$36.00

XNC 2471

Insulin Resistance: The Path to Metabolic Syndrome and

Diabetes Type 2? Obesity has risen to epidemic proportions in the US today. An estimated 64% of the current population is either overweight or obese. Metabolic Syndrome, the term used to describe a cluster of related medical conditions (including obesity, hyperlipidemia, hypertension and high blood sugar), is also on the rise. An estimated 47 million Americans exhibit symptoms of Metabolic Syndrome. Many of these individuals eventually develop Diabetes Type 2. Can these conditions be identified and treated early to slow or stop the onset of Diabetes? This lecture will discuss Insulin Resistance (IR) as the root cause of these disorders and propose strategies for early detection and possible prevention of Metabolic Syndrome and Diabetes Type 2. RNs and LPNs will earn 3 contact

hours for attending this seminar. Approval is pending for other health care professionals.

$27.00

XNC 2472

Assuring a Safe Working Environment: Applying the OSHA

Standards to the Healthcare Workplace 2004 It is important for Healthcare employers and employees to not only know what is required by the OSHA standards, but also understand the spirit and intent of the standards to provide a safe working environment. OSHA has uupdated the Bloodborne Pathogen Standard, Recordkeeping Standard and General Industry Standard in the last three years that will affect your OSHA compliance program. You need to know what the latest information is for your healthcare workplace to be in compliance with OSHA regulations. This course will satisfy the required annual training for OSHA's training. RNs, LPNs, LMHTs, social workers, dentists and dental hygienists will earn 6 contact hours for attending this seminar. ACHAs will receive 6(A) hours. Approval is pending for other health care professionals.

$54.00

XNC 2473

Living in a Culture of Loss

No one is immune from loss. Not in today's business and social climate. Loss of status, employment, marriage, parent(s), spouse, child, sibling, mind, health, financial security and/or integrity are part of the task of navigating life in a loss-centric culture. The motivationalists tell us it's about "turning lemons into lemonade!" You still end up with sticky lemon pulp and peels. How can one recognize, integrate, and come, over time, to value the loss-the accumulated losses? How can the palette of loss become a resource for personal growth and maturation? It's not what you will do "about" the loss. It's, "What will you do through the loss?" RNs, LPNs, LMHTs, social workers, counselors, psychologists, dentists and dental hygienists will earn 4 contact hours for attending this seminar. ACHAs will earn 4 (RC) hours. Approval is pending for other health care professionals

$36.00

XNC 2474

Advice Outside of the ER/Office

Nurses are always being asked for advice by friends, neighbors and family. Do you ever wonder if there are limitations on what kind of information or assistance a nurse can give outside of the office? Do you worry about your liability when helping a friend with a medical problem? This lecture will answer those questions and more. RNs and LPNs will earn 3 contact hours for attending this seminar.

$27.00

XNC 2475

End-of-Life Nursing Education Consortium Training (ELNEC)

Nurses spend more time with patients and families facing the end of life than any other health professional. Nurses are intimately involved in all aspects of end-of-life care and they address the myriad of needs facing individuals at this time of life. Expert nursing care has the potential to greatly reduce the burden and distress of those facing life's end and the ability to offer support for the many physical, psychological, social, and spiritual needs of patients and their families. This educational activity utilizes the End- of- Life Nursing Education Consortium's curriculum and includes all nine ELNEC modules addressing critical aspects of end-of-life care. Attendance for all nine modules is required to utilize the "ELNEC Trained" designation. RNs and LPNs will earn 9 contact hours for attending this seminar.

$108.00

XNC 2476

Practical Applications of Human Genome Project

Discoveries This workshop for health care providers will give a historical perspective on the Human Genome Project and provide information about its application to clinical medicine, now and in the future. RNs and LPNs will earn 4 contact hours for attending this seminar.

$36.00

XNC 2477

Insulin Resistance: The Path of Metabolic Syndrome and Metabolic Syndrome and Diabetes Type 2

Obesity has risen to epidemic proportions in the US today. An estimated 64% of the current population is either overweight or obese. Metabolic Syndrome, the term used to describe a cluster of related medical conditions (including obesity, hyperlipidemia, hypertension and high blood sugar), is also on the rise. An estimated 47 million Americans exhibit symptoms of Metabolic Syndrome. Many of these individuals eventually develop Diabetes Type 2. Can these conditions be identified and treated early to slow or stop the onset of Diabetes? This lecture will discuss Insulin Resistance (IR) as the root cause of these disorders and propose strategies for early detection and possible prevention of Metabolic Syndrome and Diabetes Type 2. RNs, LPNs and dietitians will earn 3 contact hours for attending this seminar. Approval is pending for OTs and PTs.

$36.00

XNC 2478

Music, Mediation and Mending the Mind.

This special morning introduces how meditation can mend and heal the mind and offer strength to your soul in dealing with the various challenges of daily life. Tom Jacobs will offer instruction in the ancient practice of meditation which enhances relationships, renews energy and creates flexibility for forgiveness. Daily practice of meditation can heal past wounds, hurtful memories and pent-up fears. In the second half of the morning, Tom will weave back and forth between stories and songs that bring both laughter and tears; inspiration and strength to your life journey. RNs, LPNs, LMHTs, social workers, and counselors will earn 4 contact hours. ACHAs will earn 4 (E) hours.

$48.00

XNC 2479

The Management and Treatment of Parkinson's Disease

What is Parkinson's disease? Is it genetic? Which medications are indicated, and which are contraindicated? How can I give the best care to people with Parkinson's disease? Come to this seminar and learn about Parkinson's disease, its symptoms, causes and treatments. Get an overview of genetics and heredity and their role in Parkinson's disease. Learn about the best and most common PD medications, their effects and side effects, and the role polypharmacy plays in the treatment of Parkinson's. RNs, LPN, LMHTs, LMTs, social workers, dentists and dental hygienists will earn 4 contact hours for attending this seminar. ACHAs will earn 4 (RC) hours. Approval is pending for OTs and PTs.

$36.00

XNC 2480

Haven't Got Time for the Pain

This program will cover the basics of pain management including, nociception of pain, types of pain, pain assessment and barriers to appropriate pain management. Particular emphasis will be placed on medications used in pain management with a didactic session on dosing calculations and conversions. Nonpharmacologic interventions for empowering patients in pain will be discussed. RNs, LPNs, social workers, dentists and dental hygienists will earn 6 hours for attending this seminar. ACHAs will earn 6 (RC) hours. Approval is

pending for other health care professionals.

$54.00

XNC 2481

Seizure Salad: Recognizing Uncomplicated Childhood Seizures

Uncomplicated seizures and epilepsy are common findings in infants and children. Nurses need to have an understanding of epilepsy syndromes that occur in children, such as febrile seizures, benign focal epilepsy of childhood, complex partial epilepsy, juvenile myoclonic epilepsy and video game related epilepsy. Nurses also need to be aware that not all uncomplicated childhood seizures require neuro-imaging or treatment. RNs, LPNs, LMHTs and social workers will earn 3.5 contact hours.

$42.00

XNC 2482

Presentation Skills for Health Care Professionals

Speaking effectively is a top skill for success in the health care industry. If you want to look, feel, and sound more confident in speaking situations, you'll want to enroll in this class. Learn how to easily organize your thoughts, confidently present your information and maintain audience interest. RNs, LPNs, LMHTs, social workers, and counselors will earn 6 contact hours. ACHAs will earn 6 (A) hours. Approval is pending for OTs and PTS.

$72.00

XNC 2483

Just a Behavior: Managing the Behavi

As therapeutic interventions and scientific research continue to improve the quality of life for individuals with autism and their families. The stereotyped description of a child banging a head against the wall while rocking and screaming has become vastly outdated. Individuals with autism spectrum disorders are winning basketball games and spelling bees, starting companies, and writing books. While awareness of autism disorders has grown, practical knowledge about this group of disorders has not followed suit. This course is designed to familiarize students with the characteristics of autism and Asperger Syndrome, with a dual focus on behavioral and social challenges. Particular emphasis will be placed on the proactive and reactive management of challenging behaviors as well as the promotion of social competence. RNs, LPNs, LMHTs, social workers and counselors will earn 4 contact hours. Approval is pending for OTs and PTs.

$48.00

XNC 2484

Effective Teamwork

Health care is a growing industry where people work non-standard hours and often feel they lack sufficient resources. It is essential to their success that they involve, support, and share information with those in their teams or work groups. This course helps managers focus their staff on personal, interpersonal, and organizational advantages of working together effectively and efficiently. RNs, LPNs, LMHTs, social workers, and counselors will earn 3 contact hours. ACHAs will earn 3 (A) hours.

$36.00

XNC 2485

FLASH! Everything You Wanted to Know About Hormones

Have you ever wanted to know more about hormones and hormone replacement therapy? Have other people asked you questions about hormones that you couldn't answer? Find the answers you need about hormones and how they affect women, men and even children in this seminar. RNs and LPNs will receive 3 contact hours for attendin this seminar.

$27.00

XNC 2486

Obesity and Bariatric Care

This course is designed to provide an overview of the obesity epidemic affecting so many Americans today. The treatment options available through bariatric surgery offer many of these people new hope for a better quality of life. The process of identifying appropriate surgical candidates, resolving co-morbidity issues and psychological and sensitivity issues will be addressed in this program along with the significance of multidisciplinary care to foster positive outcomes. Specific components of a comprehensive surgical program will be identified and reviewed. RN, LPNs, LMHTs, social workers and counselors will earn 3 contact hours. ACHAs will earn 3 (RC) hours. Approval is pending for OTs and PTs.

$36.00

XNC 2487

Leadership in Long Term Care

Leadership takes action, communication and insight, not to mention bravery when you work in the long-term care profession. This course will talk about effective leadership styles and techniques to help build teams and consistency. With the changing survey process, we will focus on the latest trends, deficiencies and how to keep up to date on survey issues, while being proactive in meeting these challenges. RNs, LPNs, LMHTs, social workers and counselors will earn 3 contact hours. ACHAs will earn 3 (A) hours. Approval is pending for OTs and PTs.

$36.00

XNC 2488

When You and Me and Baby Don't Make Three: Infertility

The frequency of infertility has remained unchanged over the past century, however, medical advances have overcome many of the obstacle faced by couples wanting to have children. This fact brings hope to thousands of people every year and yet, further education is needed to help these people come to understand and be comfortable with the assisted reproductive technologies now available. Clients need this education to become comfortable with specific psychological and sexual issues that often accompany infertility and affect relationships. Participants will learn how to identify and assess the complex psychological and sexual issues that couples dealing with infertility face and what signs to look for when determining to make a referral for counseling. RNs, LPNs, LMHTs, social workers and counselors will earn 3 contact hours.

$36.00

XNC 2489

Why We Click With Some, and Clank With Others

This course will utilize the DiSC personal profile to help each individual better understand what their strengths and weaknesses are as well as those of others. This information is then utilized to help participants understand how to adapt their style to that of others and explore interpersonal relationships at work. This program also develops key skills based on communication, teamwork and leadership to improve personal and professional relationships. Course fee includes DiSC Personal Profile workbook ($25). RNs, LPNs, LMHT, social workers and counselors will earn 6 contact hours. ACHAs will earn 6 (A) hours.

$97.00

XNC 2490

Elder Law for Kansas Caregivers

Caring for an elder in today's legal environment can be confusing at best. Come learn how aging can be impacted by the legal system. You will study legal principles where decision making can be withheld from impaired adults and grant

to others the power to act for them. (Guardianship). Legal principles will be reviewed which permit preservation of some assets without causing ineligibility for benefits (Medicaid eligiblity). Plus there will be valuable information about the power of others to make decisions for a person who is ill or injured (Durable Power of Attorney and Advanced Directives). RNs, LPNs, LMHTs, social workers, counselors, dentists and dental hygienists will earn 3 contact hours for attending this workshop. ACHAs will earn 3 (A) hours. Approval is pending for other health professionals.

$27.00
XNC 2491

Caring for the Caregiver: The Hidden Patient

Approximately 50 million people in the United State provide care for an elder or disabled family member during any given year. As the population of persons age 65 and older climbs to 20 percent by 2030, more and more families will be faced with care giving responsibilities. Caregivers must provide care under complex circumstances, balancing care giving with other responsibilities related to their own families and work outside the home. This seminar provides information about our aging population, issues related to care giving, how to support the caregiver, and available resources. RNs, LPNs, LMHTs, social workers, counselors and psychologists will earn 3 contact hours. ACHAs will earn 3 (RC) hours. Approval is pending for OTs and PTs.

$72.00
XNC 2492

Building Habits that Empower Positive and Durable Change in Clients

Boost your professional effectiveness by learning to make the most of both your knowledge and personal style. First, we'll examine the five strategies to success and how terminology and communication are key to facilitating change in clients. Then the next level begins with professional philosophy and demeanor: How do you see your role? Is success more art or science? How do you use your personality as an instrument? What elements of routine and self-discipline (as well as self-care) can heighten your effectiveness (think boundaries, record-keeping, professional support and consultation, policies, and systems)? This course will encourage participants to maximize the resources they bring to future professional interventions. RNs, LPNs, LMHTs, social workers and counselors will earn 6 contact hours.

$72.00
XNC 2493

Blending Families: Practical Skills and Insights for Combining Families

Blending families are the fastest growing lifestyle in America. The complexities far exceed the 'Brady Bunch' perception. Half of American children will live in divorced families before they are age 18. The divorce rate for first marriages is 50%, second marriages is 60%, and 75% for third marriages. Children are left with revolving parents and parents with revolving responsibilities. The challenge of clarifying ambiguous boundaries and roles takes 5-7 years. This course will cover how these Blending families can, with guidance and psycho-education, be very successful and positive for everyone. RNs, LPNs, LMHTS, social workers, counselors and psychologists will earn 6 contact hours. Approval is pending for OTs and PTs.

$72.00
XNC 2494

Neglected Articles: Advocacy, Aging and the Social Work Code of Ethics

Although working with the aging population exposes the significant presence of age discrimination that persists in our society, much of social work efforts in the aging field are directed at maintaining inadequate systems. This class will focus on the demands of the social work code of ethics as it relates to advocacy as interpreted through individual, group and community work and how those

demands take form in day to day work with this population. Social workers and counselors will earn 3.5 contact hours.

$42.00

XNC 2495

Lab Studies - Advanced

This seminar is expanded beyond the basics. It is a practical program that will provide a clear understanding of various lab tests, when and why they are indicated and what their values mean. In addition to routine labs, content will cover pregnancy and hormone tests, rheumatology tests, cardiac and liver enzymes, strep and other infectious diseases. RNs and LPNs will earn 5 contact hours for attending this seminar.

$45.00

XNC 2496

Women With Attentional Issues: How to Intervene When Traditional Treatment Fails

Females with attentional deficits often fall through the cracks in terms of both diagnosis and treatment. Unlike their male counterparts, most women report no childhood history of disruptive classroom behavior, no impulsive hyperactivity. Instead, we see a pattern of adulthood contradictions: creativity and underachievement, plus insightful, witty personalities with troubled relationships. Participants will learn to identify and appropriately address attentional issues in women. Both professionals and clients benefit from a multi-discipline approach to client care and education, and this course will invite participants to increase their personal resource lists, gain a better understanding of which interventions are not appropriate for this population, and explore the unique benefits of a women?s attention-deficit support group. RNs, LPNs, LMHTs social workers and counselors will earn 6 contact hours.

$72.00

XNC 2497

A Culture of Change in Long-term Care

As many industries use the term culture change, in long-term care it is vital and long over due. In this course you will learn the changing trends of healthcare delivery affecting our seniors. Understand how culture change / resident centered care is transforming the long-term care profession. Identify the barriers and road-blocks found during the transformation process. Discover how employee empowerment and self-directed teams can effect retention, job satisfaction and resident outcomes. Find out what type of leadership skills best work in culture change. RNs, LPNs, LMHTs, social workers and counselors will earn 3 contact hours. ACHAs will earn (3 RC) hours. Approval is pending for OTs and PTs.

$36.00

XNC 2498

Epilepsy in Infants and Children

Epilepsy, also called the "sacred disease" and the "falling sickness", affects one percent of the U.S. population. Epilepsy is particularly difficult to recognize early in infants and children. Epilepsy may be considered a "symptom" and not a disease, so that every effort should be made initially to find its cause or etiology. Diagnostic investigations may include laboratory tests, neurophysiological (EEG) and neuroimaging studies (CT, MRI, PET, ultrasound). Antiepileptic drugs (AED) and education of family, teachers and health care givers are important components of management. This workshop explores how successful diagnosis and treatment may allow epileptic patients to have normal lives. RNs, LPNs, LMHTs, social workers, and counselors will earn 3 contact hours. Approval is pending for OTs and PTs.

$36.00

XNC 2499

Behavior Patterns That Pollute

Interpersonal communication can contribute to harmony or disharmony in our relationships. Many of us learned patterns of thinking and behaving that create stress and emotional pain. Frequently we are unaware of how to identify and deal with these destructive "no win" patterns that wreak havoc in our lives and relationships. In this course participants will to learn how to examine their patterns of thinking and interacting and determine how to make productive changes that can transform their lives. This course will be useful to clinicians to develop tools that can be used to help their own clients as well. RNs, LPN, LMHTs, counselors and social workers will earn 3 contact hours. ACHAs will earn 3 (A) hours.

$36.00

XNC 2500

Traumatic Grief and Trauma in Children

This course is designed to help professionals who work with bereaved individuals and families to better understand the nature and effects of trauma on the grief process and to identify methods of dealing with those who have experienced traumatic events. Specific content will be presented on how to work with children and adolescents who have experienced trauma - recognizing the signs of trauma, identifying signals that are warning signs that a child may be in difficulty and learning about appropriate interventions. RNs, LPNs, LMHTs, social workers, counselors and psychologists will earn 5 contact hours for attending this seminar.

$45.00

XNC 2501

Building Relationships That Can Prevent Youth Violence

American culture is the most violent in the world and our youth are now participants in crimes once thought unthinkable in ones so young. The causes for this are many, but no longer can we ignore the problem. The research shows that one caring adult can make a difference when they realize the pain our youth are experiencing trying to grow up in complex society. This symposium explores the individual psychiatric conditions, family, cultural and the societal dynamics that fulminate in this serious problem. Strategies for individuals and organizations to apply that will make a difference will be presented. Lunch will be provided. RNs,LPNs, LMHTs, social workers, counselors, and psychologists will earn 16 contact hours.

$240.00

XNC 2502

Diagnosing and Treating Migranes and Other Headaches

Headaches, including migraine, are common in both children and adults. A simple classification of headaches includes tension headaches, migraine, and organic (caused by lesions or increased pressure in the brain) headaches. Each category has distinct symptoms that help to recognize each type of headache. Migraine, particularly in young children, may present as recurrent vomiting, vertigo or weakness (also known as ?migraine equivalents?). A correct diagnosis, appropriate medications and removal of stress and other contributing factor are helpful in controlling the majority of headaches. RNs, LPNs, LMHTs and social workers will earn 3 contact hours. ACHAs will earn 3 (RC) hours. Approval is pending for OTs and PTs.

$36.00

XNC 2503

Life's Anxieties: The Diagnosis and Treatment of Anxiety Disorders

This six hour course will be given in two, three hour segments. Both segments meet the BSRB requirements for diagnosis and treatment of mental illness. The morning section will cover the physiology of anxiety, including the chemical and physical changes that occur when we become anxious or suffer a panic attack.

The diagnostic symptoms of panic attacks and treatment options will be addressed. The afternoon session will cover the remainder of the anxiety disorders in the DSM IV. Both diagnostic criteria and treatment options will be presented. The class will learn relaxation and breathing exercises that can benefit anyone suffering from an anxiety disorder. RNs, LPNs, LMHTs, counselors, psychologists, dental hygienists and social workers will earn 6 contact hours. ACHAs will earn 6 (RC) hours. Approval pending for OTs and PTs.

$72.00

XNC 2504

Polish Up Your Skills: Physical Assessment

This is a review and refresher course of key physical assessment techniques to guide the clinician in the long term health care setting. The clinician will have a better understanding of performing a detailed adult physical examination and provide care based on these assessment findings in the long term care setting. RNs, and LPNs will earn 6 contact hours.

$72.00

XNC 2505

Bridging Generational Gaps: Four Generations in

Healthcare Workplace Representatives from the four generations comprising today's workforce agree about their desire to work in a coordinated, cooperative environment. Yet, discussions between members of those generations often yield unproductive results. In today's world, success is contingent on the ability to identify and enhance the strengths possessed by all team members, regardless of their generation. If you've struggled to understand why some members of your work team behave in annoying and unpredictable ways, don't miss this seminar! RNs, LPNs, LMHTs, social workers, dentists and dental hygienists will earn 6 contact hours for attending this seminar. ACHAs will earn 6 (A) hours. Approval is pending for other health professionals.

$54.00

XNC 2506

Dysmorphic Syndromes: Down Syndrome and Other Abnormalities in Childhood

Recognition and understanding of syndromes (a collection of abnormalities) is an important part of the knowledge required by anyone involved in health and human services. For example, knowledge about Down syndrome facilitates the work of nurses, teachers, physical therapists, speech and language therapists who participate in the care of such persons. In addition to Down syndrome, more than a thousand other syndromes have been described. Databases are available to help identify individuals with syndromes. RNs, LPNs, LMHTs, social workers, dietitians and counselors.will earn 3 contact hours. Approval is pending for OTs and PTs.

$36.00

XNC 2507

Obesity and Bariatric Care

This course is designed to provide an overview of the obesity epidemic affecting so many Americans today. The treatment options available through bariatric surgery offer many of these people new hope for a better quality of life. The process of identifying appropriate surgical candidates, resolving co-morbidity issues and psychological and sensitivity issues will be addressed in this program along with the significance of multidisciplinary care to foster positive outcomes. Specific components of a comprehensive surgical program will be identified and reviewed. RNs, LPNs, LMHTs, social workers and counselors will earn 3 contact hours. ACHAs will earn 3 (RC) hours. Approval is pending for OTs and PTs.

$36.00

XNC 2508

Understanding Current Strategies in Diabetes Management

Understanding diabetes as a multi-organ disease broadens the scope of interventions for early treatment and ongoing management of this disease. This changing management includes the use of a multitude of new oral medications and insulins that have been introduced during the past five years. This seminar will present a series of case studies demonstrating the implementation of a wide variety of diabetes management therapies. The importance of in-hospital hyperglycemic control, early addition of insulin therapy in Type 2 diabetes, and a broad overview of the many oral anti-diabetic agents will be discussed. RNs and LPNs will earn 6 contact hours.

$72.00

XNC 2509

Insulin: Understanding Onset, Peak and Duration

Insulin analogs, insulin pumps and inhaled insulin have dramatically changed the fine tuning options in the management of diabetes management. Insulin is always a potent medication and understanding the differences in the variety of insulins is critical to the safe use of this medication. This seminar will present a clear understanding of insulins and present case studies to demonstrate practical application of this understanding. RNs and LPNs will earn 4 contact hours.

$48.00

XNC 2510

Where Has the Thrill Gone? Burnout Prevention and Recovery

Remember the excitement and enthusiasm you experienced when you began to practice your profession? Do you still anticipate each workday or have you become vulnerable to the devastating impact of burnout? Has your excitement and enthusiasm been replaced with cynicism and apathy? Are negative feelings no longer limited to the workplace, but creeping into other aspects of your life as well? If you've been wondering where the thrill has gone, it's time to take action! Join us to identify strategies for recovery and future prevention. RNs, LPNs and LMHTs, social workers, and counselors will earn 6 contact hours for attending this workshop. ACHAs 6 (E). Approval is pending for OTs and PTs.

$72.00

XNC 2511

Diagnosis and Treatment of Schizophrenia

This continuing education course will look at the impact of a diagnosis of schizophrenia on the family system. This course will stress the diagnostic criteria of schizophrenia from the DSM-IV TR and how these criteria would manifest in a person diagnosed with schizophrenia. From there, emphasis will be placed on understanding schizophrenia and its impact on the family system. This course will conclude with discussion of family intervention, resources and education as an adjunct to the treatment of schizophrenia. RNs, LPNs, LMHTs, social workers, and counselors, will earn 3 contact hours. ACHAs will earn 3 (RC) hours. Approval is pending for OTs and PTs.

$36.00

XNC 2512

EKG-Making Sense of a Squiggly Line

In this course participants will learn or for those who already are familiar, re-learn the fundamentals of EKG interpretation. The seminar will start with the basic principles of EKG's and help participants become comfortable with interpreting the important EKG patterns that they will encounter. RNs and LPSs will earn 4 contact hours

$36.00

XNC 2513

Traumatic Brain Injury and PTSD

People sustain head injuries everyday from bumping into a cabinet door to being in horrific accidents and war. Minor head injuries usually go away without treatment. Serious injuries obviously require emergency treatment. This class will focus on the nurse?s role in the early detection and treatment of Mild Traumatic Brain Injuries that often go unnoticed, yet cause significant impairment. RNs, LPNs, and LMHTs will earn 6 contact hours.

$72.00

XNC 2514

Low Back Pain:Non-invasive Assessment and Treatment

In this workshop the student will explore the common causes of Low Back Pain (LBP) and the conditions associated with it. Symptoms and types of LBP and ways to determine the causes will be reviewed as well as how various professions diagnose LBP. The prevention and treatment of LBP by medical, chiropractic and massage therapy professionals will be included. Dr. Uriarte?s MyoKinesthetic System of treatment for low back pain will be reviewed and hands on practice will be included. RNs, LPNs, LMHTs and massage therapiests will earn 6 contact hours. Approval is pending for OTs and PTs.xxxxx

$72.00

XNC 2515

FEN/PHENomenon:Are Anti-obesity Drugs the Answer?

A description is not available for this course.

$27.00

XNC 2516

Troubled Youth: Where to Turn and How to Help

Drugs, alcohol, crime, gangs, truancy, and mental illness plague some youth today. Though a small percentage of the total population, these young people wreak untold havoc on their families, schools, neighborhoods, law enforcement and community services. Healthcare professionals are frequently left bewildered about how to plan interventions, what resources to contact and where, and what approach is best to connect these youth with the resources they need to make a successful transition to productive society. This workshop will explore the psychosocial and medical dynamics iinvolved in accessing, diagnosing, treating, and aftercare of troubled youth and their families. RNs, LPNs, LMHTs, social workers, counselors, psychologists will earn 6 contact hours.

$72.00

XNC 2517

Understanding Chemical Dependence: From Shame to Acceptance

One in 10 Americans are substance dependent. Everyone knows someone who is an alcoholic or addict. With inaccurate concepts of addiction, fueled by frustration and belwilderment, we form opinions that create detrimental stigmas. These stigmas, in turn, prevent people for seeking help and/or benefiting from it. This course will look at addiction from a medical disease perspective, comparing addiction to other diseases and helping the particpant understand addiction for what it truly is and to be better prepared to intervent in its deadly path. This course meets the DSM - IV criteria for diagnosis and treatment. RNs, LPNs, LMHTs, counselors, social workers, psychologists, and dental hygienists will earn 6 contact hours. ACHAs will earn 6 (RC) hours. Approval is pending for OTs and PTs.

$72.00

XNC 2518

Survey Rediness for Assisted Living

The survey process in assisted living is a key component in the delivery of quality care. This is an interactive course for professionals designed to provide tools to help prepare their staff for the survey process. The course will identify and discuss key survey issues so the attendees can self-evaluate their programs for their weakness and strengths. RNs, LPNs, and LMHTs will earn 6 contact hours. ACHAs will earn 6 (A) hours. (fee includes regulation manual)

$72.00

XNC 2519

Core Concepts of Mental Health Diagnosis and Treatment

This workshop looks at the core concepts in the diagnostic and treatment process. Concepts such as forming an alliance, framing, and reframing the conflict, dealing with resistance are the bread and butter elements of our work with clients. This workshop brings these elements of treatment alive through a mixture of role-playing, discussion, and lecture. RNs, LPNs, LMHTs, social workers and counselors will earn 3 contact hours

$36.00

XNC 2520

Thriving in a Kaleidoscope of Change

A description is not available for this course.

$54.00

XNC 2521

Planning for the Baby Boomers: The Future of Long-Term Care

The U.S. Census Bureau shows the population over the age of 65 growing from 36 million in 2003 to 72 million in 2030. The fastest growing segment percentage wise in our population today are the "elite old" - those 85 to 100 years old. The need for long-term care homes will be staggering. But Baby Boomers will not accept institutionalized care. They will want a quality of life prior generations have not often been able to access once they leave independent living. This workshop will explore the changing culture in long-term care, the ethical issues related to aging services that this country will face, the pressure administrators and staff will face to create "home" in the face of increasing federal and state regulations, and what is currently being done to make long-term care an enjoyable, satisfying environment to work and live. RNs, LPNs, social workers, and dieticians will earn 3 contact hours. ACHAs will earn 3 (A) hours. Approval is pending for OTs and PTs.

$72.00

XNC 2522

Hope for Happy Health Care

Happy Health Care is distressed. Relentless change, difficult coworkers and chaotic teams have left her overwhelmed and burned out. She wonders how to get through demanding days with a shred of joy. Happy complains about her circumstances to anyone who will listen, but so far she hasn't discovered methods to improve her situation. She dreams of retreating to a tropical island, but figures the bugs and tourists would get on her nerves. Happy is a bundle of possibilities, but she's dwelling on limitations and becoming limited herself. She told coworkers she was thinking of abandoning her health care careersaying she ws tired of being tired, tired of being grouchy and tired of pretending to be Happy. Is there hope for Happy? Join us and find out. RNs, LPNs, LMHTs, social workers, counselors, dieticians, dental hygienists will earn 4 contact hours. ACHA will earn 4 (A) hours. Approval is pending for OTs and PTs.

$48.00

XNC 2523

The Healing Power of Nature

Nature has many miraculous ways to heal itself and us. Research has shown that a natural setting rather than an urban one reduces cardiac stress and promotes healing following surgery. Participants will explore ways that nature uses metaphors to relieve stress, cope with crisis, ease burnout and ways to walk in nature specifically for creative problem solving. The seminar includes a slide presentation on creative problem solving through nature and explains how to utilize this technique. For part of the seminar, you actually go out into nature to practice what you have learned. Walking long distances is not required, but is an option. This interactive and partially outdoor seminar will provide new insights on how to use the natural world for growth and healing. RNs, LPNs, LMHTs, social workers and counselors will earn 4 contact hours. Approval is pending for OTs and PTs.

$48.00

XNC 2524

Marital Autopsies: What Failed Marriages Teach Us Aout Good Marriages

Failed marriages teach us how to make a good marriage. Drawing on the work of John Gottman, Frank Pittman, and others and including his own clinical experience in working with couples, Dr. Stamm takes the audience on a journey through marriage that offers hope that we may all improve our own marriages and as therapists help our clients to improve their marriages. RNs, LPNs, LMHTs, social workers and counselors will earn 3 contact hours.

$36.00

XNC 2525

Using Biofeedback to Reduce Stress

A description is not available for this course.

$54.00

XNC 2526

Methicyllin Resistant Staph Aureus: Bad Bug Gone Worse

Disease-causing organisms that have become resistant to drug therapy are an increasing public health problem in hospitals, non-hospital health care settings (long-term care and skilled nursing homes, home care, hemodialysis centers, and physicians' offices) and in the community. Common examples of these organisms include methicillin/oxacillin-resistant Staphylococcus aureus (MRSA), vancomycin-resistant Enterococcus (VRE), extended-spectrum beta-lactamases (ESBLs, resistant to cephalosporins and monobactams), and penicillin-resistant Streptococcus pneumoniae (PRSP). This program will help update your knowledge and familiarize you with antibiotic resistance and MRSA and provide you with strategies to effectively manage MRSA in the health care environment. Discussions will focus on disease transmission, epidemiology, treatment and prevention. In addition, antibiotic resistance in other bacteria and nosocomial infections will be discussed. RNs, LPNs, LMHTs, social workers, massage therapists, dieticians and dental hygienists will earn 6 contact hours. ACHAs will earn (RC) hours. Approval is pending for OTs and PTs.

$72.00

XNC 2527

Depression, Suicide and Self-Mutilation

One in ten Americans suffers from the medical illness we have come to know as depression. The worst outcome of depression is suicide. One in five of those afflicted with this condition will die by their own hand. Depression also takes a heavy toll on work performance, physical health and quality of life. If recognized, the illness can be effectively treated in most (70-80%) cases. This course will review the signs and symptoms of depression, suicidal risk and self-mutilation and effective treatment interventions. RNs, LPNs, LMHTs, social workers, and counselors will earn 3 contact hours. ACHAs will earn 3 (RC). Approval is pending for OTs and PTs.

$36.00

XNC 2528

Influenza: Could the 1918 Pandemic Come Again?

It is estimated that more than 200,000 people are hospitalized every year following complications arising from influenza infection, with around 36,000 mortalities being recorded in the US alone. This program will help update your knowledge and familiarize you with the influenza virus. Discussions will focus on disease transmission, epidemiology, treatment and prevention. In addition, mutation of the virus and how this contributes to the emergence of new viral strains including avian strains will be discussed. The threat of an influenza pandemic and the current preparedness strategies for pandemics will also be explored. RNs, LPNs, LMHTs, social workers, dieticians, and dental hygienists will earn 6 contact hours. ACHAs will earn 6 (RC) hours. Approval is pending for OTs and PTs.

$72.00

XNC 2529

Influenza: Could the 1918 Pandemic Come Again?

It is estimated that more than 200,000 people are hospitalized every year following complications arising from influenza infection, with around 36,000 mortalities being recorded in the United States alone. This program will help update your knowledge and familiarize you with the Influenza virus. Discussions will focus on disease transmission, epidemiology, treatment and prevention. In addition, mutation of the virus and how this contributes to the emergence of new viral strains including avian strains will be discussed. The threat of an Influenza pandemic and the current preparedness strategies for pandemics will also be explored. RNs, LPNs, LMHTs, social workers, dietitians, and dental hygienists will earn 6 contact hours. ACHAs will earn 6 (RC) hours. Approval is pending for OTs and PTs.

$72.00

XNC 2530

Taking Positive Action to Manage Stress and Burnout

A description is not available for this course.

$27.00

XNC 2531

HIV/AIDS Update

It is estimated that 39.5 million people were living with Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) worldwide as of the end of 2006. This program will help update your knowledge and familiarize you with HIV/AIDS and provide you with strategies to effectively manage HIV/AIDS in the health care environment. Discussions will focus on disease transmission, epidemiology, treatment and prevention. In addition, the emergence of human immunodeficiency virus as an international pathogen will be discussed. Participants will discuss strategies to prevent stigma and educate about HIV/AIDS in the health care environment and in the community. RNs, LPNs, LMHTs, social workers, dietitians and dental hygienists will earn 6 contact hours. ACHAs will earn 6 (RC) hours. Approval is pending for PTs and OTs.

$72.00

XNC 2532

Culture Change in LTC: Meeting the Psychosocial Needs of Residents

Meeting the psychosocial needs of those living in long-term care is challenging, but critical for their health and well-being. It has been estimated that up to 60% of instutionalized residents suffer from depression. Depression increases mortality and morbidity regardless of adequate treatment for all co-morbid conditions. Many of these seniors simply "give up." The good news is there is a revolution sweeping

our country to put the "home" in nursing home. This workshop reviews the psychosocial needs of the elderly, and reviews the signs, symptoms and treatment of depression. By addressing the environmental and interpersonal issues that negatively impact residents, much can be done to relieve depression. This workshop explores ways in which the Pioneer Network and other organizations are spearheading the culture change movement in America and transforming the culture of long-term care away from the medical model toward the person-centered model and securing a better future for all who live and work in long-term care. RNs, LPNs, LMHTs, social workers and dieticians will earn 4 contact hours. ACHAs will earn 4 (RC) hours. Approval is pending for OTs and PTs.

$48.00

XNC 2533

Understand Mental Health in Medical Surgical Patients

A description is not available for this course.

$72.00

XNC 2534

Dialysis: Lifesaving Measures

A description is not available for this course.

$36.00

XNC 2535

Women and Anger

A description is not available for this course.

$54.00

XNC 2536

Wound and Ostomy Care

This course will address the assessment, management and potential complications of adult patients experiencing health care concerns that often result in an ostomy or continent diversion. RNs, LPNs, LMHTs, social workers, counselors and dieticians will earn 6 contact hours. ACHAs will earn 6 (RC) hours.

$72.00

XNC 2537

Professional Ethics in Social and Medical Services

This course will provide information on social service and medical ethics and the impact on the professional. You will learn about and examine their personal beliefs as they relate to professional ethics. Values, beliefs, morals, mores and laws will be used to help the participant clarify their personal stance on various ethical issues and meet the legal and ethical expectations of their profession. This course meets the BSRB criteria for ethics. RNs, LPNs, LMHTs, social workers and counselors will earn 3 contact hours. ACHAs will earn 3 (A) hours.

$36.00

XNC 2538

Menopausal Hormone Therapy: What the Women's Study Really Means

Following the research outcomes of the Women's Health Initiative (WHI), much confusion and, sometimes fear, followed as to the best treatment of peri and post menopausal women. This course discusses the controversies, explores the options and the impact HRT can have on a woman's life expectancy, risk for breast cancer, cardiovascular health and other serious health issues. The course

will also explore complimentary alternatives to hormone therapy. RNs. LPNs, LMHTs and social workers will earn 4 contact hours.

$48.00

XNC 2539

What's New in NICU?

A description is not available for this course.

$72.00

XNC 2540

Diabetes: Using Pattern Management to Improve Care

A description is not available for this course.

$54.00

XNC 2541

Stay Tuned! Successful Approaches to Listening

The strongest influence on the quality and outcome of interpersonal communication is not talking, but listening. Yet, most people screen out or misunderstand the intended meaning or purpose of the sender's message in over 70 percent of communications. In today's busy health care environment strong listening abilities are key to "getting it right" and delivering quality care. This course uses the Personal Listening Profile to identify the five different listening approaches and to teach you how to listen and respond appropriately with those you communicate with. RNs, LPNs, LMHTs, social workers, counselors and dieticians will earn 6 contact hours. ACHAs will earn 6 (A) hours. Approval is pending for OTs and PTs. Note: Course fee includes additonal supply cost.

$100.00

XNC 2542

Self-Care Strategies for Health Care Practitioners

Providing healthcare can be both physically and emotionally taxing on the practitioner. By taking the time to incorporate proper self-care techniques into their lives, healthcare practitioners can increase their strength, vitality and fluidity allowing them the opportunity to increase the longevity of their career and be more effective providers. This class will introduce a number of quick, easy self-care strategies to address various stressors that affect healthcare practitioners. RNs, LPNs, LMHTs, social workers, counselors and massage therapists will earn 4 contact hours. ACHAs will earn 4 (E) hours

$48.00

XNC 2543

Play Therapy: Working With Children

Working with children in a therapeutic setting is often challenging when verbal and language skills are not yet fully developed. The field of play therapy is a vital and effective tool when working with this population though it is often not well understood. This workshop will discuss the practicality of play therapy in both a theoretical and clinical presentation. Participants will be able to identify theories of play therapy vis a vis Adlerian, psychoanalytic, family and cognitive behavioral. Play therapy in the context of education and family interventions will be discussed, and identifying techniques that are utilized in this approach. RNs, LPNs, LMHTs, counselors and social workers will earn 6 contact hours.

$72.00

XNC 2545

Osteoporosis: Prevention and Treatment

A description is not available for this course.

$27.00

XNC 2546

Exploring Energetic Healing

Can the human mind heal the body? Learn how mind-body healing methods such as meditation, visual imagery, and prayer affect the body's ability to fight infection and ward off the damaging effects of stress and illness. Discover why more and more healthcare professionals complement traditional western medicine with mind-body healing methods an integral part of patient care. RNs, LPNs, LMHTs, social worker, counselors, and massage therapists will earn 3 contact hours. Approval is pending for OTs and PTs.

$36.00

XNC 2547

Neurological Evaluation of Infants and Children

A complete neurological evaluation of infants and children requires a detailed history, including pre-natal, perinatal and neonatal details and developmental events, and a complete examination of both the central and peripheral nervous systems. This includes evaluation of mental status, cranial nerves, motor and sensory functions, reflexes, and cerebellar function. The history and neurological examination must be modified according to the child?s age and developmental stage. In the case of suspected brain or neuromuscular abnormalities, additional studies such as EEG (brain-wave test), evoked potentials, EMG (electromyography), neuro-imaging (CT, MRI, MRS and MRA), may be necessary. RNs, and LPNs will earn 3 contact hours.

$36.00

XNC 2548

Customer Service: Getting It Right

Healthcare is a profession that is people-oriented and which requires exceptional communication skills, organization, and the ability to solve problems under pressure. The expectations of patients and their families in this zero-time world are high and advances in technology are placing more demands on you. As a health professional you must constantly hone your skills and find ways to improve your efficiency for improved patient satisfaction. The high stress associated with these jobs requires a positive mental attitude and healthy ways of dealing with the pressure while providing the service your patients expect. This workshop will give you insight into today?s patient demands and how to handle them, and how to stay energized and motivated as you strive to improve patient service. RNs, LPNs, LMHTs, social workers, and counselors will earn 3 contact hours. ACHAs will earn 3 (A) hours. Approval is pending for OTs and PTs.

$36.00

XNC 2549

Inpatient Hyperglycemia and Its Impact on Our Patient Population

Hyperglycemia and insulin resistance has been identified in critically ill patient with or without a history of diabetes. In addition, hyperglycemia has been identified as a risk factor for poor clinical outcomes. Improving glycemic control in the hospitalized patient continues to be a challenge but interventions to maintain normal glucose levels is relevant and important to nursing practice. RNs, and LPNs will earn 3 contact hours.

$36.00

XNC 2550

Successful Asthma Management: What Health Professionals Need to Know

A description is not available for this course.

$54.00

XNC 2551

Metabolic Syndrome: A Closer Look

Until recently it was thought that increases in blood pressure, triglycerides and cholesterol, and blood sugar were a "normal" part of growing older. We now know this is far from the truth and has serious consequences. Metabolic Syndrome is a cluster of metabolic abnormalities that increase the risk of cardiovascular disease and type 2 diabetes. These abnormalities are related to the body?s metabolism and include excess body fat, high blood pressure, and abnormal cholesterol levels. Treatment strategies include education regarding appropriate lifestyle changes to reduce the cardiovascular risks. RNs, LPNs, LMHTs, and registered dieticians will earn 3 contact hours. ACHAs will earn 3 (RC).

$36.00

XNC 2552

Hepatitis: An Update on an Old Infection

Hepatitis, an acute or chronic inflammation of the liver, can be caused by viral infections, toxic agents, medications, alcohol abuse or an autoimmune response. Five types of hepatitis, from A to E, have been identified. This program will help update your knowledge and familiarize you with Hepatitis A, B, C and provide you with strategies to effectively treat these diseases in the healthcare environment. Discussions will focus on transmission, treatment and prevention. Hepatitis D and be will also be discussed. RNs, LPNs, LMHTs, social workers, counselors, and massage therapists will earn 3 contact hours. ACHAs will earn 3 (RC) hours. Approval is pending for OTs and PTs.

$36.00

XNC 2553

Lighten Up: A Stress Recess

Medical Alert: lack of laughter causes osteoporosis of the funny bone and constipation of the personality. There is nothing funny about the aches and pains of aging ? but we all feel better after a good laugh. Join us for some fun and laughter - sure to tickle your funny bone. You will discover tips for finding humor in your everyday life and you will get some ?playful practice?. There is no evidence that humor adds years to your life ? but there is evidence that it adds life to your years! Paul McGee, Ph.D. RNs, LPNs, LMHTs, counselors and social workers will earn 3 contact hours. ACHAs will earn 3 (E). Approval is pending for OTs and PTs.

$36.00

XNC 2554

Bioterrorism: What You Really Need to Know to Be Ready

Bioterrorism is the intentional use of biological agents (bacteria, virus or microbial toxins) to produce disease and death in humans, livestock and crops. This program will help update your knowledge and familiarize you with bioterrorism and provide you with strategies to effectively prepare for and recognize a bioterrorism attack in the healthcare environment. Discussions will focus on potential bioterrorism pathogens, methods of dissemination and treatment. RNs, LPNs, LMHTs, social workers, and counselors will earn 3 contact hours. ACHAs will earn 3 (RC).

$36.00

XNC 2555

Those Versatile Steroids

Corticosteroids are among the most frequently prescribed medications. They are unique in their ability to treat a variety of diseases. The dilemma presented by this class of medications, however, is the side effect profile. Corticosteroids have the potential to adversely affect virtually every organ system. This program will review

the physiology, pharmacology, indications, dosing and adverse effect profile of corticosteroids. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop. Kansas ACHAs will earn 3 (RC) hours.

$27.00

XNC 2556

Death and Dying: Changing the Mind-Set of a Forbidden Topic

Death in American society is often a forbidden topic. Typically the focus is on fixing and maintaining. This causes a disconnect when it comes to discussing the end of life. When death is acknowledged, the developmental process can be addressed and, the inevitable can be met with a holistic approach and better acceptance. In this seminar you will review the many different ways long-term care facilities are addressing the end of life, through promoting relationships and offering rituals that provide meaning and celebration. Facts about organ donation will be presented, and a discussion about how organ donation can save lives despite the age of the donor. A review of hospice and palliative care will be discussed. RNs, LPNs, social work, counselors will earn 3 contact hours. ACHAs will earn 3 (RC) hours.

$36.00

XNC 2557

First Annual Stroke Forum: From victim to Victor

Every year approximately 730,000 Americans have a new or recurrent stroke - 1 every 45 seconds. That means that at about the time you finish reading this paragraph, another American will have suffered a stroke. Stroke is the third leading cause of death and the leading cause of serious long-term disability in the United States. Fifteen percent of stroke victims will die shortly after their stroke, and only 10% will have near full recovery. In light of these statistics, much has been done to prevent strokes, intervene and diminish stroke severity. Long after traditional rehabilitation drops off, we know people can improve following stroke when resources are available. This program is co-sponsored by the American Stroke Foundation, a one of a kind stroke recovery center with locations in Kansas and Missouri. Regina Walsh is a nurse and artist and a cancer and stroke survivor. She will present her personal experiences as a stroke survivor and share the art work she created during her recovery to begin this day of hope and learning. Susan Stark, Brenda Hanna-Pladdy and Karen Parker will focus on the recent research in stroke treatment and rehabilitation and discuss the acute and long-term treatments now available for stroke survivors. RNs, LPNs, LMHTs, social work, counselors and dieticians will earn 6 contact hours. ACHA?s will earn 6 (RC) hours. Approval is pending for OTs and PTs.

$72.00

XNC 2558

Nurses Eating their Young: Bullying and Conflict to Mentoring and Collaborations

It isn?t just the young that are eaten; conflict in nursing work environments can take many casualties. Conflict is inevitable in any work environment, simply because there are differences in goals, needs, desires, and responsibilities. Some forms of conflict are actually beneficial. However, given the complexity of patient care, today?s nursing practice environments and issues related to new nurses in practice, the presence of negative conflict creates concern for the viability of professional nurses currently in practice. While the newest nurses may be the most likely victims of horizontal violence or nurse bullying, this is not always the case. This course will explore various concepts of conflict within nursing work environments from a historical and present-day perspective. Literature and research will be utilized to study sources and outcomes of conflict within nursing work environments. Strategies for preventing conflict, managing conflict and promoting healthy conflict will be studied and applied to practice examples. RNs, LPNs, LMHTs will earn 3 contact hours. ACHAs will earn 3 (A) hours.

$36.00

XNC 2559

Arthritis: A Disease of Heartache and Hope

Osteoarthritis and rheumatoid arthritis are two potentially devastating diseases. Over 10% of the US population is afflicted. This course will study these two diseases ? prevention, causes, managing the disease and treatment options. Differences between these two forms of Arthritis will be addressed. Patient education in medical and surgical management will be reviewed, including current technology options related to joint replacement ? preservation procedures, joint preservation strategies and prosthetic bearing surfaces (including the gender specific options). Participants will have the opportunity to practice exercises that are helpful for patients who have arthritis. RNs, LPNs, LMHTs, and massage therapists will earn 3 contact hours. ACHAs will earn 3 (RC) hours. Approval is pending for OTs and PTs.

$36.00

XNC 2560

Mirth, Music and Mental Health (Health Professionals

Appreciation Day) As a health care professional, you serve a vital role in the community and you deserve a day of relaxation and fun. Attend this program in your honor and explore the importance of laughter and music to good health. RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop. Kansas ACHAs will earn 6 (RC) hours. I Approval is pending for other health professionals.

$40.00

XNC 2561

Children and Grief

Children grieve differently than adults. This workshop will discuss how children grieve; secondary losses children experience; developmental issues and grief; suggestions for caregivers to help promote understanding of children?s needs; and community resources available. Many adults bring unresolved grief issues from childhood into their adult life. Information shared may be helpful with an adult population as well. RNs, LPNs, LMHTs, social workers, counselors will earn 6 contact hours.

$72.00

XNC 2562

Sex, Pregnancy and Parenthood in the Teenage Years

While teenage pregnancy has decreased in the last decade, the United States still has the highest teen pregnancy rate in the developed world. Approximately one million teenage girls become pregnant before the age of 20, and 40% are under the age of 17. This course will discuss the problems facing teenagers today related to unprotected intercourse that may result in a sexually transmitted disease, an undesired pregnancy and the final outcome of facing parenthood in adolescence. This course will begin by outlining the current literature on sexually transmitted diseases and discussing the health risks that teens now face from unprotected intercourse. Secondly, literature will be presented to discuss the complex issue of teenage pregnancies, health including risks to mother and infant and social implications on the family. The course will also outline the most at risk population for teenage pregnancy and interventions needed to successfully educate our youth to prevent adolescent pregnancy and disease. RNs, LPNs, LMHTs, social work, counselors, psychologists will earn 6 contact hours.

$72.00

XNC 2563

Older Adults and Chemical Dependence

Alcohol abuse and addiction in the elderly is a serious problem that more often than not goes unnoticed. Seniors do not exhibit the same warning signs as younger people that alert friends and families to the problem. They do not miss

work, rarely have trouble with the law, and often drink alone. The consequences are devastating for their mental and physical well being. Late onset drinkers have a very positive prognosis as do some early onset IF the problem is addressed effectively. Penny Shaffer will address the psychosocial and physiological effects of alcohol and prescription drug abuse on the elderly and signs and symptoms to alert us to the problem. Ron Griffin will explore effective strategies for intervention, treatment and sustained sobriety among this population. RNs, LPNs , LMHTs, social workers and counselors will earn 6 contact hours. ACHAs will earn 6 (RC) hours.

$72.00

XNC 2565

Dear Dr. Menninger: Women's Voices From the 1930s

Explore issues that troubled people in the 1930s and compare these with today's concerns. Take an historical look at the foundations of mental health treatment, as developed by psychiatrist Karl Menninger, and examine how current mental health approaches grew from these pioneering efforts. RNs, LPNs, LMHTs, psychologists, social workers and counselors will earn 7 contact hours for attending this workshop.

$79.00

XNC 2566

Making a Difference in Chemical Dependence: Motivation, Treatment and Recovery

The best intentions from an untrained person may be counterproductive to assisting in the recovery of an addict or alcoholic. Seeking promises, threats, yelling, cajoling, helping them through the `tough times? may not be what really works for the creating long lasting change.   This course will look at motivating the addict or alcoholic by creating healthy boundaries and reasonable expectations and understanding what does and doesn?t work when addressing problem substance use. Other issues will include motivational enhancement, treatment paradigms, dealing with the untreated alcoholic or addict, recovery and how to be healthy yourself, regardless of what the addict or alcoholic does. RNs, LPNs, LMHTs, counselors, psychologists, social workers, registered dieticians will earn 6 contact hours. ACHAs will earn 6 (RC) hours. Approval is pending for OTs and PTs.

$72.00

XNC 2568

Diagnosis and Treatment of Personality Disorders

This course will take an overview of personality disorders as defined in the DSM IV ? TR. This course will utilize lecture, video clips, worksheets and discussion to look at personality disorders, how these disorders manifest, and effective treatment strategies. This course meets the BSRB criteria for diagnosis and treatment. RNs, LPNs, LMHTs, social workers, and counselors, will earn 3 contact hours.

$36.00

XNC 2569

The Kidneys: An Overview of Normal vs Chronic Kidney Disease

Renal disease affects thousands of Americans and has numerous etiologies ranging from hypertension to drug overdose. Understanding the complexity of the renal system is often challenging for clinicians and critical for the survival of their patients. This workshop explores normal renal function and the conditions that cause pathology and disease. Treatment options, including diet, medications and dialysis will be reviewed. RNs, LPNs, LMHTs, will earn 6 contact hours. ACHAs will earn 6 (RC) hours.

$72.00

XNC 2570

Asthma Update: 2004

An estimated 17 million Americans, five million under 18, have asthma. Asthma is becoming more prevalent across all age, sex and racial groups and the magnitude of this condition alone compels nurses and other health professionals to be knowledgeable about recent innovations in successful management. This seminar will update your knowledge of both pediatric and adult asthma as well as familiarize you with strategies to effectively assist the asthma patient to maintain better control of his/her disease. Both basic and advanced information will be presented and case studies will be utilized to help you put theory into action. RNs and LPNs will earn 4 contact hours for attending this program. ACHAs will earn 4 (RC) hours.

$36.00

XNC 2575

What's New in IV Therapy? Skin Prep and More

Update your knowledge of intravenous therapy from skin prep to catheter selection. Learn new skin prep techniques, flushing techniques and the latest from the CDC. Go away with ideas for changing your IV practice to improve patient outcomes. RNs and LPNs will earn 3 contact hours for attending this workshop. Kansas ACHAs will earn 3 (RC) hours.

$27.00

XNC 2580

Exercising Your Options: The How, When and Why of

Physical Fitness What does being physically fit mean to you? Losing weight, improving your cholesterol profile, lowering your risk of osteoporosis, improving your muscle tone and cardiovascular endurance, looking younger? Learn how to establish your health priorities and create an exercise program that fits your lifestyle. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop. Kansas ACHAs will earn 3 (E) hours. Approval is pending for other healthcare professionals.

$27.00

XNC 2585

Elder Abuse: What to Look For and How to Help

Elder abuse is far more common that we generally realize. It comes in many forms, most often at the hands of family members or caregivers. Explore the many components of abuse and identify ways to intervene and stop the abuse. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop. Kansas ACHAs will earn 3 (RC) hours.

$27.00

XNC 2590

Lab Studies - Advanced

This seminar is expanded beyond the basics. It is a practical program that will provide you with a clear understanding of various lab tests, when and why they are indicated and what their values mean. In addition to routine labs, content will cover pregnancy and hormone tests, rheumatology tests, cardiac and liver enzymes, strep and other infectious diseases. RNs and LPNs will receive 5 contact hours for attending this seminar.

$45.00

XNC 2595

Spanish for Health Care Professionals: Expanding the

Basics Build on the basics you learned in Spanish 101 for Health Professionals.

Learn more basic Spanish as well as vocabulary and phrases specific to various medical settings. Gain more information about cultural aspects and resources for future study. RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop. Kansas ACHAs will earn 6 (E) hours.

$54.00

XNC 2600

Holistic Health Care: Uniting Mind, Body, Spirit

Learn to revive holistic care in your daily practice. Compare the allopathic and holistic models of health care and discuss the role of spirituality--one component of the time-honored holistic concept. Identify practical approaches to assess and promote patients' spiritual health and collaborate with colleagues in applying principles of spiritual care. RNs, LPNs, and LMHTs will earn 7 contact hours for attending this workshop. Kansas ACHAs will earn 7 (RC) hours.

$63.00

XNC 2605

Complementary Therapies for Chronic Health Problems:

Hope or Hype? You will discuss complementary therapies being used to help patients manage chronic health conditions such as cardiovascular disease, arthritis, fibromyalgia, irritable bowel disease, chronic fatigue syndrome and others. Recent research will be presented. RNs and LPNs will earn 3 contact hours. Kansas ACHAs will earn 3(RC) hours.

$27.00

XNC 2610

Clinical Management of Individuals With Alzheimer's and Related Dementias

Today there are 5 million Americans with Alzheimer's Disease. By 2050 there will be 17 million unless a cure can be found. This staggering number, combined with other forms of dementia, contribute to the growing healthcare needs of patients and their families for hope and quality of life in the face of these devastating illnesses. Current research into the medical, interpersonal, and environmental treatments and prevention strategies for Alzheimer's Disease and related dementias will be reviewed. RNs, LPNs and LMHTs, social workers, and counselors will earn 6 contact hours. ACHAs will earn 6 (RC) hours. Approval is pending for OTs, PTs and dietitians.

$72.00

XNC 2615

Preventing/Managing Violence in the Workplace

For many years, health care professionals have faced a significant risk of job-related violence. The Bureau of Labor Statistices indicates that they are among the highest at risk for non-fatal assaults. In this overview course, you will learn concepts of anger control as well as how to assess violence risk. You will gain skills to help you defuse angry situations or manage a potential threat should it occur. RNs, LPNs and LMHTs will earn 6 contact hours for attending this workshop. Kansas ACHAs will earn 6 (A) hours.

$54.00

XNC 2620

Lucid Dreaming and Journeying: Pathways to Recovering

Spirit Learn to gain greater control of your dreams, both awake and sleeping. Explore Lucid Dreaming and Journeying, two pathways central to the cultural and healing practices of the ancients. This workshop will include practical guidance and knowledge to effect healing of mind, body and spirit for both the novice and practiced dreamer. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop.

$27.00

XNC 2625

Certified Dietary Manager-Basic Nutrition

A description is not available for this course.

$0.00

XNC 2630

Deadly Sleep

More than 1,500 traffic fatalities per year may be directly attributed to sleep disorders. Strokes, headaches, impaired mental function and poor job performance can be the result of these disorders as well. Sleep disorders involve more than 'sleep apnea" and may include a long list of possible diagnoses. Learn about the many causes of these disorders. RNs, LPNs and LMHTs will wear 3 contact hours for attending this workshop. Kansas ACHAs will earn 3 (RC) hours. Approval is pending for other health professionals.

$27.00

XNC 2635

Healing Trauma: The Stages of Treatment

Treatment of survivors of trauma, childhood or adult, neglect and abuse, has often been a random process for both the therapist and the client. While healing trauma is not a linear process, certain stages of recovery follow a common pathway. This presentation explores dynamic, cognitive and behavioral approaches to healing trauma. RNs, LPNs, LMHTs, social workers and counselors will earn 3 contact hours for attending this workshop.

$27.00

XNC 2640

Why It's OK to Put the "I" Back in Team

Who says there's no "I" in team? As a matter of fact there are Introverts, Extroverts and other categories of preference that make up any well-functioning team. The problem comes in indentifying them and then relating to them in effective ways. Using the Myers-Briggs Type Inventory (MBTI), a framework that facilitates team building, you will explore these preferences and learn to respond to individuals in ways that produce a more effective work environment. RNs, LPNs, LMHTs, social workers and counselors will earn 6 contact hours for attending this workshop. Kansas ACHAs will earn 6 (A) hours.

$54.00

XNC 2645

Common G.I. Conditions: Updating Your Knowledge

Explore common G.I. problems, including GERD, ulcers and superinfections of the G.I. tract, that affect all segments of our population in one way or another. Update your knowledge of current treatments, the health professional's role in educating patients and ways to prevent complications or recurrence of symptoms. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop. Kansas ACHAs will earn 3 (RC) hours.

$27.00

XNC 2650

Biological Terrorism: A High Impact Threat in Our

Community Are you prepared to deal with a large-scale biological attack when it happens in your community? This workshop will give you a better understanding of the threat that biological terrorism poses and what you can do to prepare for dealing with such an attack. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop. Kansa ACHAs will earn 1.5 (A) and 1.5 (RC) hours.

Approval is pending for other health care professionals.

$27.00
XNC 2655

Low Back Pain: Managing A Disabling Health Problem

Low back pain is the leading cause of disability in adults less than 45 years of age, with more that 60% of the U.S. population expected to have at least one episode of limited function from low back pain during their lifetime. Explore the expanding roles of physical medicine and physical therapy in managing this painful and debilitating problem. RNs and LPNs will earn 3 contact hours for attending this workshop. Kansas ACHAs will earn 3 (RC) hours. Approval is pending for physical therapists.

$27.00
XNC 2660

Communication: How to Say Almost Anything to Almost Anyone

Anyone Effective communication is the building block for all relationships. Improved patient care, enhanced teamwork and creative problem solving are impossible without it. Discover methods to reduce defensiveness in others, learn to use the stages of conflict constructively and identify how important it is to use the whole message during difficult communication encounters. RNs, LPNs, LMHTs, social workers and counselors will earn 6 contact hours for attending this workshop. Kansa ACHAs will earn 6 (A) hours. Approval is pending for other health professionals.

$54.00
XNC 2665

Botox: 101 Medical Uses for the World's Most Deadly Toxin

Everyone knows that botulism toxin can be used to erase wrinkles and as a weapon of bioterrorism. Between these extremes, however, are a multitude of other medical uses, including treatment of stroke, cervical dystonia, DMS, migraine headache and movement conditions. Hear a whole range of it's uses and abuses. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop. Approval is pending for other health professionals.

$27.00
XNC 2670

Caregiving: A Sacred Role in Determining Quality of Life

The aging of America will present complex challenges as we learn to care for the oldest population in the history of the world. Today, 22.4 million families are caregivers for elder family members or friends and this trend will increase as the baby-boomers make their way into their senior years. Learn the practical, emotional, and spiritual aspects of being a caregiver in the 21st century and its effects on individuals and families. RNs, LPNs, LMHTs, social workers and counselors will earn 6 contact hours for attending this workshop. Kansas ACHAs will earn 6 (RC) hours. Approval is pending for other health professionals.

$54.00
XNC 2675

Facing Change in Health Care: Security of

Teams Security and confidence are enhanced when coming together. Find direction for facing challenge and change in today's health care market through the formation of effective teams and the strategy of continuous improvement. RNs, LPNs, LMHTs, social workers, counselors, dentists and dental hygienists will ear 6 contact hours for attending this workshop. ACHAs will earn 6 (A) hours. Approval is pending for other health professionals.

$54.00

XNC 2680

Exploring the Use of Nutritional Supplements and

Botanical/Herbal Medicines The use of nutritional supplements and herbal remedies has experienced a resurgence in the last two decades as the public and the medical community alike seek effective ways to treat chronic disease. Learn the clinical indications, actions, side effects and contraindications for a wide variety of these natural medicines. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop. Kansas ACHAs will earn 3 (RC) hours. Approval is pending for other healthcare professionals.

$27.00

XNC 2685

Nursing Care of the High Risk Obstetric Patient

Discuss the pathophysiology, treatment and nursing care of the most common high risk obstetrical conditions: pregnancy induced hypertension, placenta previa, placenta abruptio and pre-term labor. RNs and LPNs will earn 4 contact hours for attending this workshop.

$36.00

XNC 2690

The ABC's of Stroke: Onset to Rehabilitation

This program is designed to enhance the ability of the health care professional to associate symptoms and assessment with the pathophysiology of stroke. New research and rehabilitation strategies will be integrated in tracing the acute stroke treatment process from E.R. through community reintegration. RNs, LPNs, LMHTs, social worker and counselors will earn 6 contact hours. ACHAs will earn 6 (RC) hours. Approval is pending for OTs and PTs.

$72.00

XNC 2695

Fluids and Electrolytes: A Balancing Act

Historically, the subject of fluids and electrolytes creates a great deal of sweat for the average nurse - osmosis, diffusion, filtration, eeegad! Every working day, nurses encounter disease processes, drug reactions, patient responses to procedures and crisis situations that involve fluids and electrolytes. This presentation uses case studies to review fundamental fluid and electrolyte concepts, and identify helpful strategies for evaluating the fluid electrolyte status of patients to improve care. So, grab a favorite fluid and join us for a review that focuses on logic and clinically based scenarios. RNs and LPNs will earn 4 contact hours.

$48.00

XNC 2700

Antisocial Personality Disorder: A Cauldron of Problem

Patients, Criminals and Predators The diagnosis of antisocial personality disorder includes a variety of individuals and diagnostic pictures. This group, mostly men, range from those who manage to function, to convicted criminals, to sadistic sexual predators. Developmental cues and types of thinking common among those with this diagnosis will be presented. Understanding the diagnostic picture and mental processes of the antisocial can assist those who encounter them in medical, legal or other contexts. There will be a review of the diagnosis and epidemological picture of this disorder. You will also learn how these individuals think, communicate, and behave. Techniques for interacting with and managing the antisocial will be explored. This seminar meets mental health DSM-IV requirement. RNs, LPNs, LMHTs, social workers, counselors and psychologists will earn 6 contact hours for attending this seminar. Content will be of interest to law enforcement personnel.

$54.00

XNC 2705

Healing the Spirit: Native American Perspectives of

End-of-Life Care Health care professionals are on the front lines of end-of-life care. You know that patients and families face challenges and needs that are social, psychological and spiritual, as well as medical. This seminar will include an introduction to Native American Spirituality and a cultural orientation in end-of-life care for caregivers working with the sick and dying Native American and his/her family. RNs and LPNs will earn 3 contact hours for attending this program. ACHAs will earn 3 (RC) hours.

$27.00

XNC 2710

Medication Misadventures

This seminar will provide healthcare providers with an understanding of medication errors including causes, patient safety, reduction, prevention, reporting, and the legal issues resulting from these errors. RNs and LPNs will earn 3 contact hours for attending this program. ACHAs will earn 3 (A) hours.

$27.00

XNC 2715

Beyond the Vital Signs - Dealing Effectively With Diversity Issues in the Health Care Industry

Diversity Issues in Health Care One of the biggest challenges in the health care business is managing diversity issues. Differing cultures, work styles and mannerisms often lead to miscommunication and team conflict. This seminar clearly illustrates the importance of learning about your staff and patient population and how they respond in the health care industry. Attend this seminar to examine the many diversity concerns facing the health care industry every day. This will be of special interest for health care managers. RNs, LPNs, LMHTs, social workers, dentists and dental hygienists will earn 5 contact hours. ACHAs will earn 5 (A) hours. Approval is pending for other health professionals.

$60.00

XNC 2720

When a Child You Know is Grieving: Griefcare in the

World of Contemporary Children "Oh children are so resilient!" is a convenient escape clause for lack of recognition of childgrief. In many quarters, however, children are disenfranchised and discounted grievers - whether the loss is the death of a parent or grandparent or sibling, a divorce, loss of safe neighborhood, abuse, or loss of innocence. This seminar will prepare you to develop a compassionate care response - rather than a reaction - to the childhood grief. You will learn how to support grieving children, how to give permission to grieve, and how to recognize warning signs of emotional stress in the grieving child. RNs, LPNs, LMHTs, social workers, counselors, psychologists and clergy will earn 4 contact hours for attending this seminar.

$36.00

XNC 2725

Flash! Everything You Want to Know About Hormones

Have you ever wanted to know more about hormones and hormone replacement therapy? Have other people asked you questions about hormones that you couldn't answer? Find the answers you need about hormones and how they affect women, men and even children in this seminar. RNs, LPNs and LMHTs will earn 3 contact hours.

$36.00

XNC 2730

Making a Difference When Grief Strikes

This seminar will explore the needs and support required by the grievers and their close family. RNs, LPNs and LMHTs will earn 3.0 contact hours for attending this seminar

$35.00

XNC 2735

Making Meaning Out of Loss

This seminar will center on the post-death grieving experience. RNs, LPNs and LMHTs will earn 3.0 contact hours for attending this seminar.

$35.00

XNC 2740

Command Spanish for Health Professionals

This course is designed to teach Spanish that can be used immediately in day-to-day communication with patients. Pronunciation, work-specific language, phonetic encoding and listening activities are part of each lesson. This is a customized real-life Spanish program designed to prepare the non-Spanish speaking health care professional to better interact with and care for Spanish-speaking patients.   Coursework will apply to a wide range of health professionals with an emphasis on enhancing the quality of patient care. Educational materials are published by Command Spanish(r) and include a workbook manual and two CDs ($30) which are included in the fee.   RNs, LPNs, LMHTs, social workers and counselors will earn 12 contact hours for attending this seminar. ACHAs will earn 12 (RC) hours. Approval is pending for OTs and PTs.

$150.00

XNC 2745

Negligence 101:   The Basics of Tort Law

What does it mean to think like a lawyer? What does an attorney look for when deciding to take a case? As the healthcare environment becomes more technical, healthcare practitioners are exposed to more liability than ever. A basic understanding of what negligence is and how to avoid it are essential. This course is designed for the healthcare professional interested in gaining a basic understanding of how an attorney views a negligence case. You will also gain insight into what happens during the course of litigation and what you can do to limit your risk of being involved in a malpractice action. RNs, LPNs and LMHTs will earn 3 contact hours. ACHAs will earn 3(RC) hours. Approval is pending OTs, PTs and dietitians.

$27.00

XNC 2750

Fitting in Fitness

Too Busy? No Time? No Energy? Rid yourself of excuses by squeezing bite-size amounts of fitness into every day. Those with hectic schedules know that finding time to go to the gym can be a challange. How can we take care of others if we aren't taking care of ourselves too? Perhaps we know what to do, but can't find the time to start? Don't allow exercise to be overwhelming; there are many ways to fit fitness into our lives. By making small changes in your daily routine, you'll increase your health and well-being tenfold. A little brief stretching goes a long way when it comes to a pain-free body. Learn how to make the most out of every stretch, exercise, and daily task performed at home as well as in the workplace. Develop fitness programs tailored to suit your personal goals and lifestyle. Learn how to exercise properly by combining strength-training and cardiovascular activity to achieve life-long results. Class participation in exercises and stretching is optional, but encouraged. (Bring calculators to class and wear comfortable clothing) RNs, LPNs,LMHTs, social workers counselors and dental

hygienists will earn 3 contact hours for attending this course. ACHAs will earn 3 (E) hours. Approval is pending for OTs, PTs and dietitians.

$27.00

XNC 2755

It's Time To Get Reacquainted with Basic Immunity

and Immune Reactions Every day health care professionals care for patients who are immune suppressed, deficient, hypersensitive or autoimmune. Yet we often do not remember how the immune system works or the consequences of its failure to work properly. This program is designed to reacquaint health care professionals with the basic principles of immunity. The structure and function of the immune system will be reviewed and case studies will be used to demonstrate the concepts of hypersensitivity, autoimmunity, and therapeutic immune suppression. RNs and LPNs will earn 4 contact hours for attending this seminar. ACHAs will earn 4 (RC) hours.

$36.00

XNC 2760

Apples to Oranges: Comparisons of the Popular Weight

Loss Programs In the industrialized world, modern agribusiness has largely done away with food shortages, allowing society to achieve a millennia-old dream of plentiful, low cost, calorie-dense food, readily available in hundreds of thousands of supermarkets and restaurants around the globe. Currently, there are more than 56 million who are obese 13 percent of American children are now classified as clinically overweight or obese. The diet industry is a $40 billion per year industry. This figure is amazing considering 95% of all dieters will regain their lost weight within 1-5 years. The staggering breadth and scope of America's obesity epidemic is only surpassed by its complexity. This workshop will assist health professionals to understand more completely the various commercial diet programs so as to better advise patients with their successful weight loss attempts. RNs, LPNs, LMHTs, social workers and counselors will earn 3 contact hours for attending this course. ACHAs will earn 3 (E) hours. Approval is pending for OTs and PTs.

$27.00

XNC 2765

Functional Medicine: Health Care for the Future

Functional Medicine involves understanding the etiology, prevention, and treatment of complex chronic disease in order to assess and treat each patient individually. It emphasizes evaluating and intervening with environmental factors (diet, toxins, lifestyle) and fundamental internal and external imbalances in order to help patients achieve an optimal healthy life span. This course will detail the philosophy and approach to health care taken by functional medicine, and expose the learner to basic science research that leads to effective nutritional and lifestyle interventions to help improve health status. RNs, LPNs and

$27.00

XNC 2770

Healthcare Quality: Myths and Realities

The eighth leading cause of death in America may surprise you. It isn't cancer or cardiac disease. Medical errors have earned that dubious distinction. Every year between 44,000 and 98,000 deaths occur due to medical errors. This seminar will explore the National Institute of Medicine report that identifies the reason why deaths from medical errors remain high and will include a discussion of healthcare organizational policies that contribute to medical errors. We will examine proven methodologies for eliminating many of those errors and discuss why healthcare systems have not embraced those methodologies. The workshop will explain why leading quality experts suggest healthcare delivery systems are ten years behind other high-risk industries in developing and implementing quality control mechanisms. RNs, LPNs, LMHTs, social workers, counselors and dental

hygienists will earn 6 contact hours for attending this program. ACHAs will earn 6 (A) hours. Approval is pending for OTs, PTs, and dietitians.

$54.00

XNC 2775

Juggle, Balance and Scramble! Managing Priorities in the Healthcare Industry

Attend this seminar and you will learn how to survive and thrive in your high demand job. RNs, LPNs, LMHTs, social workers, counselors and dietitians will earn 5 contact hours. ACHAs will earn 6 (A) hours. Approval is pending for other health professionals.

$72.00

XNC 2780

Teen Suicide: At Risk and In Crisis in America's

Classrooms This seminar will provide an understanding of the suicidal teen including early warning signs, lethality evaluation, immediate crisis intervention, and long-range deterrents. You will learn the importance of teens understanding basic intervention strategies that disrupt suicidal ideation. The basic myths of suicide that complicate treatment and intervention will be studied. You will take an in-depth look at behavioral warning signs and teaching strategies to prepare teens to provide meaningful intervention. You will learn school policies and practices found legally and therapeutically sound in crisis management. RNs, LPNs, LMHTs, counselors and social workers will earn 6 contact hours for attending this course.

$54.00

XNC 2785

Mirror Mirror On The Wall! Anti-Aging Medicine:

Anti-aging this and anti-aging that. This course will provide a basic overview of what it is, where to begin, and what to do. You've heard the new buzz word in medicine, but what is it? Find out what all the 'hype' is all about in this new and emerging field of medicine and what you can do to be a part of this new health movement. You will learn about theories of aging, the role free radicals and oxidative stress play and how antioxidants can help. This course will help you understand how the choices we make with regards to diet, lifestyle, etc can impact your health and what you can do to optimize your health and vitality. RNs, LPNs, LMHTs, social workers and dietitians will earn 3 contact hours for attending this course. Approvals is pending for OTs and PTs.

$27.00

XNC 2790

In Charge, but Losing Control: Leadership Skills

So you're in charge...now what? How do you go about getting your team to perform together rather than "storming" together? Effective leadership skills are necessary to manage staff in any healthcare setting. This course will explore the unique interpersonal skills necessary to be an effective leader. Learning how to motivate and reward others to do a good job, communicating in ways that resolve conflict and build cooperative working relationships, managing the stressors of work and home will all be covered in this interactive workshop! RNs, LPNs, LMHTs, social workers, counselors, dietitians and dental hygienists will earn 6 contact hours. ACHAs will earn 6 (A) hours. Approval is pending for OTs and PTs.

$72.00

XNC 2795

Osteoporosis: Current Trends and Treatments

This course will review the pathophysiology of Osteoporosis, look at the

populations most at risk for this disease, common misconceptions regarding the diagnosis and treatment. We will identify the various testing methods for diagnosis and look at the recent clinical trials eluding to the current treatment recommendations and the role of hormone replacement therapies and estrogen receptor modifier medications that may play a role in treatment. We will discuss the current available medications for treatments, side effect profiles, efficacy rates and directions for use. We will discuss the cost and efficacy for the most common treatment modalities and the protocol for monitoring this disease process. RNs, LPNs and LMHTs will earn 3 contact hours for attending this course. ACHAs will earn 3 (RC) hours. Approval is pending for OTs and PTs.

$27.00

XNC 2798

Coaching Staff

In order for staff members to handle workplace challenges, managers must use coaching and reinforcement to help their people gain the confidence and experience required for success. This course introduces the skills managers need to guide individuals and teams to achieve successful results. Managers learn how to recognize and approach each coaching opportunity, prompting people toward successful results. RNs, LPNs, LMHTs, social workers and counselors will earn 3 contact hours for attending this course. ACHAs will earn 3 (A) hours.

$36.00

XNC 2799

Building Consensus

Decisions made in health care continue to come under close scrutiny, making it vital to apply a sound decision-making process and reach consensus on all decisions. This course centers on the dynamics of groups coming to agreement and the importance of having everyone's commitment. Participants learn seven techniques for making clear, high-quality decisions that ensure the buy-in and commitment of staff. RNs, LPNs, LMHTs, social workers, and counselors will earn 3 contact hours. ACHAs will earn 3 (A) hours.

$36.00

XNC 2800

Integrative Approach to a Healthy Lifestyle: A

Visionary's Legacy In the modern world of medical practice, illness is most often treated for the symptoms after the fact, rather than discovering the cause and providing treatment to stop and reverse the disease process. This seminar will focus on how we unknowingly sabotage our lives, health and happiness by our daily habits. You will learn about solutions to health problems through cellular approach to whole-body healing.

$20.00

XNC 2801

Ancillary Psychotherapies: Experience a New Dimension

Gain new skills that will augment and compliment all types of counseling practices. These therapies have the ability to encourage insight, soften polarities, enhance creative problem-solving, and enhance healthy boundary setting. These therapies offer new skills for all clinicians working with clients who may not respond to traditional therapy techniques. RNs, LPNs, LMHTs, social workers and counselors will earn 6 contact hours.

$72.00

XNC 2802

Social Gerontology: An Overview

Understanding and meeting the needs of elders has come to the forefront of

healthcare as the population becomes older. Older people today are not the same as their grandparents. They expect more, are more verbal, and will live far longer. Lifestyles, employment, retirement and healthcare needs are different so will our approach to caring for them. This workshop will explore the demographic factors of the aging population, normal biological, psychological and social changes that occur in aging adults. The causes, symptoms, and manifestations of depression and Alzheimer's Disease will be reviewed also. Participants will learn to compare and contrast aging in different environments. Students will also learn to identify the stages of grief and the stages of retirement. RNs, LPNs, LMHTs, social workers and counselors will earn 6 contact hours. ACHAs will earn 6 (RC) hours. Approval is pending for OTs and PTs.

$72.00

XNC 2803

Improving Staff Performance Part I

It's up to the manager to immediately address performance or work-habit issues with employees. Failing to do so can have a devastating effect on the morale and the overall performance of the entire group. This course equips managers with the skills to help people put together improvement plans, conduct effective improvement discussions, and handle the challenges that might arise when doing so. RNs, LPNs, LMHTs, social workers and counselors will earn 3 contact hours. ACHAS will earn 3 (A) hours

$36.00

XNC 2804

Improving Staff Performance Part 2

This course focuses on the importance of follow-up coaching or reinforcement for performance or work habit problems. Managers need to reinforce continued improvement. RNs, LPNs,. LMHTs, social workers and counselors will earn 3 contact hours.

$36.00

XNC 2805

HandLab Cassting Motion to Mobilize Stiffness

A description is not available for this course.

$20.00

XNC 2806

Communicating Effectively With Clients Who Have Dementia

Currently in America there are 5 million persons with Alzheimer's disease. This number will steadily increase as the Baby Boomer generation enters old age. Advances in medical treatment increase the survival rates of stroke victims, but often leave them with communication deficits. Healthcare professionals in all fields will increasingly need to develop skills to effectively interact with these types of clients that have language and functional deficits. RNs, LPNs, LMHTs. social workers, will earn 3 contact hours. ACHAs will earn 3 (RC) hours. Approval is pending for OTs and PTs.

$36.00

XNC 2807

Ethics, Boundaries and Grief at End of Life

This seminar will acquaint the healthcare provider with the changing view of end-of life care, and to help them be comfortable in making the appropriate transition from cure to palliation in individual cases involving end-of-live care. As our population ages and demographics change, paradigm shifts are necessary to incorporate this new model of care into the mainstream. Area professionals will speak about hospice and palliative care, pain management, hospice documentation, understanding grief, and death and dying. RNs, LPNs, LMHTS,

social workers and counselors will earn 6 contact hours. ACHAs will earn 6 (RC) hours. Approval is pending for OTs and PTs.

$72.00

XNC 2810

Jolene Brackey

A description is not available for this course.

XNC 2815

Geriatric Education Research Training Institute Comprehensive Orientation LTC

This course will provide extensive training in understanding how to improve the quality of life for all long term care residents through resident rights and the movement toward changing the culture of care to a homelike environment, focused on the person's individual strengths, needs, and desires. Interactive education relative to effective communication skills, conflict resolution, and team building for healthy employee habits that help prevent stress and burnout will also be included. The values of dependability, responsibility, respect, dignity, integrity and honesty will be explored and you will have the opportunity to examine and traits to incorporate into personality identity. Education in dementia and how these illness affect the resident's ability to communicate and meet their own needs will be emphasized so that greater understanding and skill can be developed in working with these special individuals.

$30.00

XNC 2816

Geriatric Education Research Training Institute Management Leadership in Long-term Care

This dynamic and interactive course is for all managers in all departments of any long-term care organization. This course is designed to develop managerial skills in order to be successful in the areas of budget, staffing, hiring, leadership and understanding their role as a manager in this highly regulated and complex industry. The participant will first grow in understanding of their own leadership style by completing the DISC personal profile and then applying those strengths to their own natural ability to lead and impace the outcome for their departments.

$12.00

XNC 2817

Understanding Alzheimer's Disease

Every participant in this course will receive a through knowledge of the specific ways in which dementia changes the person's ability to think, solve problems, perform usual tasks, speak and understand language and perceives the world around them. Each student will com away with specific, proven ways to approach, interact, and plan care for these residents. The medications and treatments for dementia and research on possible cures will be discussed.

$12.00

XNC 2818

GERTI - Advanced Education for Long Term Care

A description is not available for this course.

$30.00

XNC 2819

Motivating Employees: What Really Works

The purpose of this workshop is to help supervisors motivate and retain their employees. The theories and myths about motivation will be covered. A

discussion of why employees do not do what they are supposed to do will follow as well as things that motivate or deter motivation will be covered. Finally, tips for creating a climate of motivation will be presented. RNs, LPNs, social workers, counselors and dieticians will earn 3 contact hours. ACHAs will earn 3 (A) hours. Approval is pending for OTs and PTs.

$36.00

XNC 2830

Intermediate ICD-9 Coding

This course is designed for those with a background with ICD-9 coding. It will review the use of the ICD-9 CDM along with the official guidelines for coding and reporting developed by the Centers for Medicare and Medicaid Services. Hands on coding scenarios will be presented to challenge the participant in their coding knowledge. Code changes for 2005 will be reviewed. If you would like to do a general overview of your coding techniques, plan on attending this session. AAPC approval is pending.

$72.00

XNC 2835

Nutritional Supplements: What Do the Labels Really Mean?

Nutritional supplements - do we really need them? If we really should be getting our daily dose, what should be in that tablet, spoon or glass? How about a little green tea extract with your calcium and folic acid!   This seminar will explore the realities and myths surrounding this multi-million dollar business. The workshop will be interactive and participants are encouraged to bring product labels to discuss and evaluate. RNs, LPNs, LMHTs, social workers, counselors, psychologists, LMTs, dentists and dental hygienists will earn 3 contact hours. ACHAs will earn 3 (RC) hours. Approval is pending for OTs and PTs.

$36.00

XNC 2840

Estate Planning 101: What the Health Care Provider Should Know About End of Life Legal Issues

What is a power of attorney? How does it differ from a will? Do my patients have a living will? Am I prepared to follow it? How can elderly patients protect their assets? Where can my clients go to get the proper guidance? End of life legal issues are an important part of healthcare. As the population ages, there will be a greater need for caregivers to have basic knowledge of these subjects. This course will outline the basic questions that may come up when dealing with patients facing end of life choices. The legal obligations of the healthcare provider will also be covered along with the different forms that the provider may come into contact with.   RNs, LPNs, LMHTs, and LMTs will earn 3 contact hours. ACHAs will earn 3 (A) hours. Approval is pending for OTs and PTs.

$36.00

XNC 2845

Addictions: Designer Drugs, Designer Interventions

This course is designed to familiarize the participant with addiction, the disease model, various models of treatment, and the role of psychotherapy in addiction treatment. We will review many of the more common drugs and the newer designer and "date" drugs. RNs, LPNs, LMHTs, social workers, counselors and psychologists will earn 6 contact hours for attending this seminar This program meets social worker requirements for DSM-IV education.

$72.00

XNC 2850

Ethics: Philosophical Morality, Written Ethics and Practical Application

Ethics is a general term for what is often described as the "science of morality".

This seminar will provide an understanding of the four fundamental principles of morals along with their underlying foundation. This course will also detail ethics common to mental health practitioners, and will acquaint you with means of protecting your ethical practice from malpractice claims and litigation. RNs, LPNs, LMHTs, social workers, counselors and psychologists will earn 3 contact hours for attending this seminar. This program meets the mental health ethics requirement established by the Kansas Behavioral Sciences Regulatory Board.

$36.00

XNC 2855

Palliative Care: A Team Approach to Medical Care

This seminar will review the definition, history and evolution of palliative care and it's role within our health care system. Indications for palliative care, the assessment and management of pain and other distressing symptoms will be addressed. This course will review patient psychosocial and spiritual needs and hospital discharge planning. The development and role nursing, pharmacy, counseling, and spirituality in a hospital based palliative care team will be explored. Case studies will be used to illustrate team interaction to fulfill patient and family needs. RNs, LPNs, LMHTs, LMTs, social workers, counselors and psychologists will earn 4 contact hours. ACHAs will earn 4 (RC) hours. Approval is pending for OTs and PTs..

$48.00

XNC 2860

Precepting-Leadership: Bridging the Gap for Recruiting, Retention and Excellence

In today's health care crises with a decrease in health care professionals and the cost containment crises, it is essential to provide a structured, supportive, learning environment while continuing to teach excellence in practice. RNs, LPNs, LMHTs, and LMTs will earn 3 contact hours. ACHAs will earn 3 (RC) hours. Approval is pending for OTs and PTs..

$36.00

XNC 2865

Weight Loss Revolution - or is it a Revolt? Intelligent Weight Loss for Adults and Kids

It is a well-known, but poorly applied understanding in our American culture that physical inactivity and poor nutrition have been identified as a leading cause of mortality in the US. In 2000, about 400,000 deaths were linked to these behaviors and this represents a 33% increase since 1990. The prevalence of obesity is considered to be a major mediator of these increases. The changes in statistics related to children have also increased at an alarming rate and if not reversed in the near future, the combination of poor diet and inactivity may soon become the number one cause of death in America.   This seminar will focus the myths and realities of obesity, nutrition and exercise as they pertain to a healthy lifestyle for adults and children.. RNs, LPNs, LMHTs, social workers, counselors, dentists and dental hygienists will earn 3 contact hours. ACHAs will earn 3 (RC) hours. Approval is pending for OTs and PTs.

$36.00

XNC 2870

MIS: Minimally Invasive Surgery for Hip and Knee Repacement

Golfer, Jack Nicklaus and probably someone you know personally, are two of the 165,000 Americans who have undergone hip joint replacement surgery and the lengthy recovery process. Minimally Invasive Surgery (MIS) is addressing many issues associated with conventional/traditional joint replacement procedures. Reduction in the size of incision, reduced tissue trauma, decreased hospital and recovery time combine to make MIS a viable alternative. This seminar will explore this new procedure and how it will impact the patient and caregiver alike. RNs, LPNs, LMHTs, and LMTs will earn 3 contact hours. ACHAs will earn 3 (RC)

hours. Approval is pending for OTs and PTs.

$36.00
XNC 2875

Dependent Adult/Elder Abuse: Identifying the Problem and Seeking Solutions

The elderly population is increasing, especially with the baby boomers reaching retirement. This will only increase the challenges the medical community already faces in providing adequate care to dependant adults. As the care for dependant adults increases the strains on the medical community will also increase. These strains can only promote an increase in fraudulent activity against our most vulnerable members of society. This course will explore the need for a combined law enforcement and medical professionals approach to study, detect, treat, prosecute, and most importantly, prevent elder abuse, neglect and exploitation. RNs, LPNs, LMHTs, social workers, counselors, LMTs, dentists and dental hygienists will earn 3 contact hours. ACHAs will earn 3 (A) hours. Approval is pending for OTs and PTs.

$36.00
XNC 2880

Allergic Diseases: Allergic Rhinitis, Food Allergies, Atopic Dermatitis

A worldwide increase in allergic diseases has lead to a rise in patient visits to the physician, missed school days, absenteeism at work, and healthcare costs. In fact, allergies are one of the most frequent reasons for a patient to visit a physician. This seminar will focus on the many diseases that are caused by allergies and will help sort out these diseases and the different treatments that are available. RNs, LPNs, LMHTs, social workers, counselors, LMTs, dentists and dental hygienists will earn 3 contact hours. ACHAs will earn 3 (RC) hours. Approval is pending for OTs and PTs..

$36.00
XNC 2885

New Concepts Regarding Polycystic Ovarian Disease

Polycystic Ovarian Disease (PCO) will occur in approximately ten percent of women of reproductive age in the U.S. with an initial onset after menarche. This seminar will discuss classic symptoms, long term risks and effects and variable treatment options based on the patient conditions. RNs, LPNs, LMHTs, and LMTsl earn 3 contact hours. ACHAs will earn 3 (RC) hours. Approval is pending for OTs and PTs..

$36.00
XNC 2890

Work Smart, Not Hard: Guide to Improved Workplace Ergonomics/ Prevention of Repetitive Stress Injury

Repetitive stress injuries (RSI's) in the workplace are pervasive, effecting the employee and employer in lost time at work, diminished productivity, and lowered morale. Additionally, RSI's translate to higher costs in conducting business due to an increase in workman's compensation caims. This interactive course will explore the major causative factors of RSI's and both immediate and long-term prevention methods. RNs, LPNs, LMHTs and LMTs will earn 3 contact hours. ACHAs will earn 4 (A) hours. Approval is pending for OTs and PTs.

$48.00
XNC 2895

Common Anorectal Problems and Treatments

Colorectal cancer is the second most common cancer in the United States, striking 140,000 people annually and causing 60,000 deaths. Irritable bowel syndrome (IBS) is a common disorder affecting up to 30 percent of the population,

and hemorrhoids are of the most common ailment known. This seminar will look at common anorectal problems and treatments including hemorrhoids, fissures and incontinence. This course will explore the decision making process involved in laparoscopic vs open colon surgery and the latest colon surgical equipment will be reviewed. RNs, LPNs, LMHTs, and LMTs, will earn 3 contact hours. ACHAs will earn 3 (A) hours. Approval is pending for OTs and PTs.

$36.00

XNC 2900

The Health Care Professional Puzzle: How to Make All the Pieces Fit

For changes to occur in today's challenging healthcare world, professionals must speak with one unified voice and collaborate along the full continuum. Many times nurses see obstacles with physicians, physical therapists see obstacles with nurses, case managers see obstacles with any treatment team player and all healthcare workers encounter obstacles with the payer source. This seminar will encourage the participant to look at the full length of healthcare while developing methods and ideas that will foster communication, build teams and form relationships with all healthcare professionals. These situations will be examined and strategies designed to improve the working relationship. The changes can bring about increased effectiveness and value to the healthcare consumer. RNs, LPNs, LMHTs, social workers, counselors, LMTs, dentists and dental hygienists will earn 3 contact hours. ACHAs will earn 3 (A) hours. Approval is pending for LMTs, OTs and PTs.

$36.00

XNC 2995

Knowledge Overload

Today, healthcare knowledge can be obtained in many formats. The Internet, professional publications, journals and seminars are all valid resources but, as a whole, the information can be overwhelming to the professional and consumer alike. This workshop will define a model for those involved in healthcare resource management to assist in their expectation of knowledge, the appropriate use of knowledge and personal knowledge overload. RNs, LPNs, LMHTs, social workers, counselors, LMTs, dentists and dental hygienists will earn 3 contact hours. ACHAs will earn 3 (RC) hours. Approval is pending for OTs and PTs..

$36.00

XNC 3000

Improving Care for People with Asthma

Few things are more frightening than feeling as if you can't breathe and for the 13 million Americans who suffer from asthma, management of their disease is as essential as their next breath. Recognizing the signs and symptoms of asthma and its triggers, designing an appropriate treatment program and action plan are major components in disease management. This seminar will look at patient education and many other components that combine to improve the quality of care for people with asthma. RNs, LPNs, LMHTs, and LMTs, will earn 3 contact hours. ACHAs will earn 3 (A) hours. Approval is pending for OTs and PTs.

$36.00

XNC 3001

Biotech Workshop for Educators

A description is not available for this course.

XNC 3005

What is Case Management?

In the world of healthcare, case management has become a term often used for the collaborative healthcare management process. Those practicing as case managers vary in background, education, professional discipline, work setting and

experience. This workshop will cover the who, why, when and where of case management. We will also explore the opportunities in the field of case management. RNs, LPNs, LMHTs and LMTs, will earn 3 contact hours. ACHAs will earn 3 (A) hours. Approval is pending for OTs and PTs.

$36.00
XNC 3010

Patients Who Try Your Patience

This seminar is a primer on handling the most challenging behaviors in the hospital setting. Patients with personality disorders may display angry, manipulative, self-destructive behaviors that evoke frustration and anger in the caregivers. They adhere poorly to the treatment recommendations, develop severe anxiety, depression or intractable physical complaints, and may present with alcohol or drug problems. Patients with dementia or delirium can also become aggressive towards their caregivers while in the hospital. This course is designed to provide an overview of causes and characteristics and ways to manage and intervene with various types of challenging patient behaviors. RNs, LPNs, LMHTs, social workers, counselors, psychologists, LMTs, dentists and dental hygienists will earn 3 contact hours. ACHAs will earn 3 (RC) hours. Approval is pending for OTs and PTs..

$36.00
XNC 3015

Cardiovascular Disease and Depression: What's the Connection?

Coronary heart disease affects 6.9 million people, with 800,000 new heart attacks each year. One in three men and one in ten women will develop significant cardiovascular disease by the age of 60 and one quarter of the population has hypertension. Statistics alone would support frequent concurrence of cardiovascular disease and psychiatric disorders. Anxiety and depression are frequent after myocardial infarction and patients with significant cardiovascular disease appear to be at risk for developing psychopathology, particularly depression. This workshop will bring professionals up to date with the psychological aspects of cardiovascular diseases both prior to and after the illness. Emotional consequences, appropriate interventions, and treatments will be highlighted. RNs, LPNs, LMHTs, LMTs, social workers and counselors, LMTs will earn 3 contact hours. ACHAs will earn 3 (A) hours. Approval is OTs and PTs.

$36.00
XNC 3020

Diabetes: Evaluating, Treating, and Preventing an Epidemic

There are 13 million people in the U.S. who have been diagnosed with diabetes and 5.2 million who are unaware that they have this disease. Diabetes does not discriminate age, sex, ethnic or cultural boundaries. This seminar will discuss the complexity of this disease, the epidemiology, complications, prevention and treatment. The socio-economic impact on health care will also be addressed. RNs, LPNs, LMHTs, social workers, dietitians and counselors will earn 3 contact hours. ACHAs will earn 3 (RC) hours. Approval is pending for OTs and PTs.

$36.00
XNC 3025

HIPAA: Update: Your Privacy and My Security

This seminar will provide the participant with an update on the latest developments of the Health Insurance Portability and Accountability Act (HIPAA) of 1996. Content will focus on the Privacy Rule, on which new interpretation is available on a regular basis from the Office for Civil Rights, the enforcement arm of HIPAA, and on the Security Rule, which takes effect on April 21, 2005. In addition to didactic material, real world examples will be used to assist participants to critically analyze issues they are faced with in the healthcare environment. Strategies to achieve compliance under the Security Rule before April 21 will be explored and discussed. RNs, LPNs, LMHTs, social workers,

counselors, LMTs, dentists and dental hygienists will earn 3 contact hours. ACHAs will earn 4 (A) hours. Approval is pending for OTs and PTs.

$36.00

XNC 3030

Talking 9 to 5: Conversation and Conflict in the Workplace

Conflict? "Oh NO!" ?If this reaction sounds familiar, then this course is for you! The average day in the life of a healthcare worker abounds with opportunities for miscommunication, disagreements, conflict, frustration and headaches. Being able to confidently handle the difficult interpersonal situations that happen every day can decrease the overall stress of the workday and puts you in the position of being able to give better care. Learn skills and insights that turn conflict and disagreements into opportunities for making things better. Find ways to feel more in control of yourself, and the situation. Feel better walking away from the conversation whether or not everything went your way'. RNs, LPNs, LMHTs, social workers, counselors, dentists and dental hygienists will earn 3 contact hours. ACHAs will earn 3 (A) hours. Approval is pending for OTs and PTs.

$36.00

XNC 3035

Family Issues During Difficult Times

Currently, the U.S. divorce rate is the highest in the world, tripling in the last 25 years and forty percent of all current marriages in the United States are 2nd and 3rd marriages. This seminar will acquaint mental health professionals, educators, childcare and healthcare providers with information about significant family issues of the day. The day is four interrelated sessions devoted to principles of enriching marriage, exploring the blended family, encouraging values in children and establishing effective discipline patterns. Upon completing this seminar, participants will have the understanding to provide meaningful intervention into each of these important family components. RNs, LPNs, LMHTs, social workers, counselors, psychologists, LMTs, dentists and dental hygienists will earn 3 contact hours. ACHAs will earn 3 (RC) hours.

$72.00

XNC 3040

Coronary Artery Disease and Acute Coronary Syndrome

Discussions in this class will include pathophysiology, diagnosis, risk stratification, treatments, and commonly used medications. RNs, LPNs, LMHTs, social workers, counselors, LMTs, dentists and dental hygienists will earn 3 contact hours. ACHAs will earn 3 (RC) hours. Approval is pending for OTs and PTs..

$36.00

XNC 3045

Refresh, Restore, Renew: Health Professionals Appreciation Day

As a health care professional, you serve a vital role in the community. We honor you with a day that focuses on caring for the mind, body and spirit. The morning will start with exercise strategies to help you make it through your workday. Following will be a little funny business to encourage a daily dose of laughter. The day will close with music to lift your spirits and soothe the soul. RNs, LPNs, LMHTs, social workers, counselors, psychologists, LMTs, dentists and dental hygienists will earn 6 contact hours. ACHAs will earn 3 (A) hours. Approval is pending for OTs and PTs.

$72.00

XNC 3050

Understanding and Dealing with Difficult Children

In the past few years there has been an array of information regarding dealing with difficult children and adolescents. This workshop is designed to help

participants identify qualities and characteristics associated with normal and abnormal development of children and adolescents. It will distinguish common behavioral problems from more serious diagnostic concerns, such as disorders of depression, oppositional defiance, conduct, and hyperactivity. Participants will examine what parental patterns are associated with difficult behavior in children and explore behavioral techniques to discourage negative behavior patterns and encourage positive behavior patterns. RNs, LPNs, LMHTs, social workers, counselors and psychologists will earn 3 contact hours for attending this workshop. This program meets social worker requirements for DSM-IV education.

$36.00

XNC 3055

Development and Maintenance of Intimate Relationships: What the Research Shows

In the past few years new research has surfaced to describe ways in which couples have dealt with relationships and development of intimacy. This workshop is designed to help participants identify this research and integrate the dynamics of this research into practice. The workshop will provide an understanding of healthy relationship development, premarital intimacy, and identify issues of couple discord. Participants will be able to help couples assess strengths and weaknesses of their patients' relationships and identify and conceptualize thematic problems in relationships and develop strategies to deal with these concerns. A focus on sexual functioning will be addressed with techniques to assess and manage these issues in therapy. Rns, LPN, LMHTs, social workers, counselors and psychologists will earn 3 contact hours. This program meets social worker requirements for DSM-IV education.

$36.00

XNC 3060

Ethical Dilemmas at the End of Life

A description is not available for this course.

$25.00

XNC 3065

Issues After Breast Cancer

A conference to explore the clinical and emotional aspects of a breast cancer diagnosis.

$55.00

XNC 3070

Herpes: I to II, Chicken Pox to Zoster (More Than Ever About This Pesky Viral Family)

The herpes viral family will be discussed including the pathophysiology, demographics, CDC recommendations for vaccination, common and atypical presentations. The testing methods and treatment modalities including antiviral therapies, newest clinical studies regarding treatment and transmission, as well as therapies for postherpetic neuralgia will be covered. We will dispel many myths we learned in school regarding the transmittability of herpes, and look at the newest clinical data regarding prevalence and methods of reducing transmission in the United States. RNs, LPNs, LMHTs, LMTs, social workers, counselors and dietitians will earn 3 contact hours for attending this course. ACHAs will earn 3 (E) hours. Approval is pending for OTs and PTs.

$36.00

XNC 3075

Effective Presentation Skills for Healthcare Professionals

You'll learn how to easily organize your thoughts, confidently present your information, and maintain audience interest. RNs, LPNs, LMHTs, social workers

and dietitians will earn 5 contact hours for attending this course. ACHAs will earn 6 (A) hours. Approval is pending for OTs and PTs.

$72.00

XNC 3080

Healthcare is a Contact Sport

Let's face it, confused dialogue, noisy work areas, and failure to ask for clarification can create peril for your patients and customers - and frustration and lost time for you and your staff. This session combines humor and drama to help you turn frustrating communications into successful exchanges. This is a great all-purpose communication class for healthcare professionals. This interactive session teaches participants to "connect" with patients, family members and staff and keep misunderstanding and conflict to a minimum. RNs, LPNs, LMHTs, LMTs, social workers and dietitians will earn 5 contact hours for attending this course. ACHAs will earn 5 (A) hours. Approval is pending for OTs and PTs.

$60.00

XNC 3085

How to Keep Cool with Difficult People and Build Better Work Relationships

Today's workforce is diverse, each person carrying with them a unique set of values and communication styles. Add to this the fast pace and great stress of health care and you have the perfect formula for conflict within a work team. This workshop will help you understand difficult people and how to respond to them in a way that will help you get better results. You will also explore your own typical response patterns. Caution: some of the techniques may seem rude - but they work! RNs, LPNs, LMHTs, LMTs, social workers and dietitians will earn 3 contact hours for attending this course. ACHAs will earn 3 (RC) hours. Approval is pending for OTs and PTs.

$36.00

XNC 3090

Healing With Humor: Therapeutic Humor for Healthcare Professionals

A hearty laugh goes a long way in helping others feel good. This course is for healthcare professionals in all fields and is designed to provide participants with Smart Strategies to become more skilled at using therapeutic laughter, play and humor in a healthcare setting. Therapeutic humor is defined as 'any intervention that promotes health and wellness by stimulating a playful discovery or expression of the absurdity of life's situations." Laughter may be the best medicine; laughter mobilizes the patient's own forces of mind and body to combat pain and illness. RNs, LPNs, LMHTs, social workers and dietitians will earn 3 contact hours for attending this course. ACHAs will earn 3 (RC) hours. Approval is pending for OTs and PTs.

$36.00

XNC 3095

Dealing Effectively With Generational Differences

"Strive to reach the level of the enthusiasm of youth balanced with the wisdom of age." This quote by an unknown person captures one of the cornerstones of this seminar. We need to realize the "other generation" has much to offer and when all the generational groups close the misunderstanding gap we will benefit from the wisdom and the enthusiasm each has to offer. Terminology, trends and types will be covered for the traditionalist, boomer, 'x'-er and 'y'-er. RNs, LPN, LMHTs, LMTs, social workers, dentists and dental hygienists will earn 4 contact hours for attending this seminar. ACHAs will earn 4 (RC) hours. Approval is pending for Ots and PTs.

$72.00

XNC 3100

Contraindications for Massage Therapy: Lecture and Workshop

This seminar will present vascular, dermatologic, cardiac and a variety of infectious conditions which would contraindicate massage therapy. RNs, LPN, LMHTs, and LMTs will earn 3 contact hours for attending this seminar. Approval is pending for OTs and PTs.

$36.00

XNC 3101

Massage for Healthcare Professionals: More Than a Backrub

This interactive seminar provides healthcare professional information and techniques used in therapeutic massage that are helpful in reducing or eliminating commonly experienced patient discomforts, including headaches, sinus pain and achy shoulders, low back and leg pain. These techniques can reduce the need for medications and improves patient satisfaction with the overall healthcare experience. This course teaches the basics of therapeutic massage that all healthcare professionals can incorporate into their practice. RNs, LPNs, LMHTs, and counselors will earn 6 contact hours. Approval is pending for OTs and PTs.

$72.00

XNC 3102

Unlocking the Mysteries of the DSM-IV-TR

This seminar will start with a systematic look at various DSM diagnoses, some of the most prevalent and some of the trickiest, as portrayed by Hollywood. Comparing and contrasting these images and themes of presentation with DSM criteria, everyday professional issues related to diagnosis, treatment (psychopharmacological, behavioral, and psychological), and client compliance will be discussed. The critical question for all practitioners, `is there such a thing as trusting this mental health Bible too much' will be explored.  This seminar will also review threats to the DSM validity and reliability, questions, even scandals, related to the ethics behind particular diagnostic entries, and challenges that include, `Might there be too many diagnoses' and `Who decides what's a disorder' and who benefits'. RNs, LPNs, counselors, psychologists, and social workers will earn 6 contact hours.

$72.00

XNC 3103

Clinical Update in Dementia Research and Treatment

This seminar will introduce the student to the diagnosis and treatment of the main dementing disorders including Alzheimer's disease, vascular dementia, dementia with Lewy bodies and frontotemporal dementia. Research advances that may lead to future diagnostic and treatment strategies will also be discussed. RNs, LPNs, LMHTs, social workers, counselors will earn 3 contact hours. ACHAs will earn 3 (RC) hours. Approval is pending for OTs and PTs.

$36.00

XNC 3104

Cultural Competency: Strategies for a Diverse Healthcare Workplace

Cultural competency in healthcare describes care provided that is sensitive of health traditions of diverse cultural groups. This program will help update your knowledge and familiarize you with cultural competency and provide you with strategies to effectively manage a diverse healthcare workforce and patient population. Participants will utilizes a series of questions to conduct a detailed self-interview of their own cultural heritage and evaluate how their cultural attitudes may influence healthcare provided in their workplace. Discussions will focus on the cultural diversity of Kansas and the United States (US). In addition, health and illness experiences of US ethnic and refugee populations will be discussed. RNs, LPNs, LMHTs, social workers, counselors and psychologists will earn 6 contact hours. ACHAs will earn 6 (A) hours. Approval is pending for OTs and PTs.

$72.00

XNC 3105

Diagnosing Depression and Evaluating Suicide Risk

The historical aspects of depression and suicide will be traced through art and literature; barriers to recognizing depression and the risk of suicide will be identified. RNs, LPNs, LMHTs, social workers and counselors will earn 3 contact hours.

$36.00

XNC 3106

Solving Sleep Problems: From A to Zzzzz

Today clients and professionals are often surrounded by multi-media demands, immediate deadlines, and multi-tasking nightmares. These day-to-day rhythms drive people to ratchet up their levels of activity, adrenaline, and stress, as well as their self-expectations. Why would we be surprised, then, to see that it becomes harder and harder for individuals in all walks of life to ?turn it off,? calm down, take it easy, and settle in and get a good night?s sleep? The problems, and solutions, come from a variety of sources. Luckily, one of the most effective treatment options is based in classic cognitive behavioral theory and can be tailored to just about any client presentation. This workshop will explore cognitive behavioral therapies effective for resolving sleep problems. RNs, LPNs, LMHTs, social workers and counselors will earn 6 contact hours. Approval is pending for OTs and PTs.

$72.00

XNC 3107

Self-Centered, Petulant and Moody: Narcissistic and Borderline Personality Disorders

This course will seek to clarify the DSM IV-TR distinctions between Narcissistic and Borderline Personality Disorders and their corresponding, but less pervasive and severe, alternatives. While diagnosis is as much art as science, this course focuses on the science of identifying the differentiating symptoms and designing treatment plans that are both productive and realistic. A review of which diagnostic tools are useful in making the diagnosis as well as strategies to improve compliance with treatment recommendations will be reviewed. RNs, LPNs, LMHTs, counselors, psychologists, and social workers will earn 6 contact hours. ACHAs will earn 6 (RC) hours.

$72.00

XNC 3108

Alzheimer's Disease Research Forum 2008

Dr. Maria Carrillo, director of Medical and Scientific Affairs for the Alzheimer's Association National Office in Chicago, Illinois, along with a panel of area researchers, will return this year to discuss the latest directions in research. This year's forum will focus not only on medical research, but also focus on caregiver and long-term care issues. Dr. Carrillo will be the keynote speaker for this day of hopeful information identifying steps forward in Alzheimer?s disease research, both on the medical battle front and on the care battle front. A program recorded by individuals with early stage Alzheimer's disease will be viewed to inform and educate participants on their experience with having this disease and why research is so critical for their hopes of a cure. RNs, LPNs, LMHTs, social workers, counselors and registered dieticians will earn 6 contact hours. ACHA's will earn 6 (RC) hours Approval is pending for OTs and PTs.

$72.00

XNC 3109

"Just a Behavior?": Managing the Behaviors of Autism

Screaming, blurting out, swearing, hand flapping. ?Just a behavior, or is it the

disorder?? Parents often pose this question when a child with an autism spectrum disorder demonstrates a disruptive behavior. This course challenges the perspective that a problem behavior is just a behavior, arguing that all behaviors serve a communicative function. The process of discovering that function and the overall management of problem behaviors will be addressed through both the school and home lens. Special attention will be paid to the Functional Behavioral Assessment (FBA), an approach commonly used by schools to understand problem behaviors, and the Rumbling-Rage-Recovery Curve, a tool for understanding the dynamics of difficult behaviors at home or school. Proactive and reactive strategies for handling behaviors in all environments will also be discussed. RNs, LPNs, LMHTs, social workers, counselors, and psychologists will earn 4 contact hours. Approval is pending for OTs and PTs.

$48.00

XNC 3110

The Psychiatry of Sexuality

Sexuality is one of the most meaningful and complicated aspects of a human life. Because our sexuality is so complicated, many things can go wrong. Over 40% of couples report a sexual problem at some time in their relationship. It is helpful to view these problems from a medical perspective, since medical and psychological interventions are often therapeutic.   We will trace the historical aspects, including ancient documents, and the work of Kinsey, Masters and Johnson and others. RN, LPNs, LMHTs, social workers, counselors and psychologists will earn 3 contact hours hours.

$36.00

XNC 3111

Management and Leadership in Long-term Care

This 2-day course is for all supervisors in all departments of any long-term care organization. The purpose is to help managers be successful in the areas of budget, staffing, hiring, leadership and understanding their role as a manager in this highly regulated and complex industry. The participant will first grow in understanding of their own leadership style through the DISC personality profile, then apply those strengths to their own natural ability to lead and impact the outcome for their departments. RNs, LPNs, LMHTs and social workers will earn 12 contact hours. ACHAs will earn 12 (A) hours. Approval is pending for OTs and PTS.

$200.00

XNC 3112

Epidemiology of Infectious Diseases: An Update

Epidemiology is the study of how disease is distributed in populations. This program will help update your knowledge and familiarize you with infectious disease epidemiology and provide you with strategies to effectively minimize transmission in the healthcare environment. Discussions will focus on pathogens, hosts and methods of surveillance and investigation. In addition, the emergence and re-emergence of pathogens including avian influenza and human immunodeficiency virus will be discussed. Participants will investigate outbreaks of an infectious disease, identify the source of the outbreak and make recommendations for prevention and control. RNs, LPNs, and LMHTs will earn 3 contact hours. ACHAs will earn 3 (RC) hours. Approval is pending for OTs, PTs and dental hygienists.

$36.00

XNC 3113

Beyond Fight or Flight...Dealing Constructively With Conflict

In reality, there are more than just two responses to conflict. Each of us, and each DiSC style, reacts to conflict in a unique way. We have our own goals, our own fears and our own ways to get what we need. This course helps participants understand their reactions to conflict and how these reactions affect those around

them. It also helps then discover more constructive ways to deal with conflict. Using the DiSC assessment, participants will learn the building blocks of personal style as well as conflict and walk away with a robust understanding of both as well as a personal action plan for managing conflict. (DiSC behavior style assessment cost is included) RNs, LPNs, LMHTs, social workers and counselors will earn 6 contact hours. ACHAs will earn 6 (E) hours.

$99.00

XNC 3114

Systemic Health Starts with Good Oral Care

Today, oral health is well documented to influence systemic health and overall well being. Diseases of the teeth, gums and tongue greatly affect heart disease and other systemic illnesses. As the physician workforce shrinks and our aging population increase, the demand for medical support and long-term care needs may not be met with the current models of care. A larger portion of future health care may be in the dental office, not the physician?s office. This workshop will explore how the relationship with dentists and physicians will integrate to provide people with optimum systemic health. The pathology of heart, renal and other diseases as influenced by oral health will also be discussed. RNs, LPNs, LMHTs, dietitians and dental hygienists will receive 3 contact hours.

$36.00

XNC 3115

A History of Psychiatry: A Pill for Every Problem?

Mental illness is as old as mankind, but the concept of a medical specialist responsible for diagnosing and managing disturbances of emotion and behavior is a relatively recent development historical development. Why is it important to expand our medical understanding of emotion and behavior? Psychiatry has much to offer, but has it promised too much? RN, LPNs, LMHTs, social workers, counselors and psychologists will earn 3 contact hours for attending this seminar.

$36.00

XNC 3116

Diagnosis and Treatment of Multiple Sclerosis

Multiple sclerosis is an auto-immune neuromuscular illness with an unpredictable nature that is frequently difficult to diagnose in its early stages. MS can cause a variety of disabilities that range from mild to very severe. This course will discuss the diagnostic procedures used to differentiate MS from other illnesses with similar symptomatology. The different types of MS and varying treatment strategies will also be reviewed. RNs, LPNs, and LMHTs, will earn 3 contact hours. ACHAs will earn 3 (RC) hours. Approval is pending for OTs and PTs.

$36.00

XNC 3117

Sorting Through the Kids' "ADD Fog" - Practical Tips for Busy Clinicians

What?s up with all of the ADD diagnosis in so many kids these days? There are many reasonable clinical explanations and thankfully, some ?doable? solutions for families who must deal with the added challenges of raising these special kids on a daily basis. This workshop will be an interesting combination of current scientific research along with some good old fashioned suggestions that even Grandma can use! RNs, LPNs, LMHTs, social workers and counselors will earn 3 contact hours.

$36.00

XNC 3120

Thanks Goodness It's Monday: Putting FUN to Work

Is it possible for work to be fun? Can fun be a strategic weapon to achieve extraordinary results? Southwest Airlines, Men's Warehouse and many other

organizations have found that it may be one of the most important traits of highly successful businesses. Fun decreases stress and increases productivity, creativity, and "want to" in organizations. Learn the steps to create a fun work environment, create an action plan to make it happen, and take away fun energizers to infuse your work life with fun. RNs, LPNs, LMHTs, LMTs, social workers and counselors will earn 4 contact hours for attending this workshop. Kansas ACHAs will earn 4 (RC) hours. Approval is pending for OTs and PTs

$48.00

XNC 3125

The Power of Empowerment and the Secret to Forgiveness

When serving and leading others in a professional setting, we must be clear about who we are in relation to others. This interactive course provides health professionals with tips, tools, and insights for encouraging healthy connections between their patients and others. The course also helps professionals with the self-development they need to model healthy connections through their interaction with patients and other health professionals. Join us to learn the secrets to empowerment and forgiveness in your life and the lives of your patients. You will receive a signed copy of the book, Life Compass for Women. RNs, LPNs, LMHTs, LMTs, social workers and dietitians will earn 3 contact hours for attending this course. ACHAs will earn 3 (RC) hours. Approval is pending for OTs and PTs.

$36.00

XNC 3130

You Work Where? Nursing Homes Ain't What They Used to Be!

Tied up, doped up, bad food and bad smells are what most outsiders think of when the words nursing home are mentioned. Few know that a dynamic transformation is underway to change the life of residents and the staff who care for them in America?s long-term care facilities. The medical model is being replaced with a humanistic, life affirming psychosocial model that focuses on individuality, freedom of choice, meaningful pursuits and yes, even the Red Hat Society! In this workshop you will come to view nursing homes in an entirely different way and learn about the changes that are yet to come that will forever change the way we experience nursing homes.   RNs, LPNs, LMHTs, dietitians, social workers, and dentists will earn 3 contact hours. ACHAs will earn 3 (RC) hours. Approval is pending for OTs and PTs.

$36.00

XNC 3135

Infidelity: A Systems Perspective

Infidelity usually creates an emotional storm of betrayal, hurt, anger, distrust, and guilt. Couples vary in their ability to slow the emotional process enough to understand the infidelity and to put it in the context of the family. Those who are motivated to learn from this symptom can strengthen their marriage and/or take another step in differentiating a self. In this seminar, you will explore Bowen family systems theory as a framework for understanding infidelity and examine infidelity as a symptom of the family system. You will learn about a natural systems view of infidelity, infidelity as triangling, and the influence of the multigenerational family, emotional cutoff, anxiety, and differentiation of self. In the second part of the seminar, you will explore the clinician?s challenge to apply theory in the clinical setting. You will learn how to work with the emotional intensity, factors affecting resolution of the affair, ways of moving beyond the affair to the emotional process in the marriage and family, and concepts related to differentiation of self. Case examples will be presented to illustrate the clinical process. Social workers, psychologists, counselors and mental health nurse clinicians will earn 7 contact hours for attending this workshop.

$84.00

XNC 3140

Basic Life Support (CPR) for Health Care Provider

The student will develop a basic understanding of the cardiovascular and respiration systems, discuss medical and environmental emergencies as they might relate to CPR, as well as gain insight into the structure and function of the emergency medical services system. The student will demonstrate most current practical CPR skills including airway obstruction techniques on adults, children and infants. The automated external defibrillator (AED) will be introduced to the student. Upon successful completion of all American Heart Association standards, the student will receive affirmation at the Basic Rescuer level (Health Care Provider).

$45.00

XNC 3145

CPC Review Course

Brush up on your coding skills with this CPC review course. This course will prepare students for the Certified Professional Coders exam given by the American Academy of Professional Coders. This is not an introductory course. coging and guidelines will be discussed as well as test taking techniques through a series of documentation scenarios.

$125.00

XNC 3150

Weight Management, Losing Weight Has Never Been Easy

During the course, students will be taught to understand how and why we get fat. The ways and methods to controlling appetite, achieving our ideal weight will be discussed.

$144.00

XNC 3155

Performance Excellence for Direct Care Professionals

Ethics and integrity, personal accountability, teamwork and professionalism for members of the direct care team are vital to maintaining quality care. This course will address the need for ?professionalism? and provide participants with Smart Strategies to become more skilled and professional members of the direct care team. This audience includes the direct care staffs of hospitals, home health care agencies, nursing home and hospice staffs. It is also appropriate for mental health professionals including staff of group homes for the developmentally disabled, substance abuse counselors and work coaches. RNs, LPNs and LMHTs will earn 3 contact hours. Kansas ACHAs will earn 3 (RC) hours.

$36.00

XNC 3160

Updates on Mechanical Ventilation

This course will be a review of the concepts of mechanical ventilation and will include the indications and clinical conditions that lead to mechanical ventilation. The modes of ventilation and the appropriateness will be discussed. Manipulation of ventilator settings and troubleshooting of ventilator alarms and correction of those alarms will also be covered. RNs, LPNs, and LMHTs will receive 3 contact hours.

$36.00

XNC 3165

Current Trends in Ischemic Heart Disease

In this class we will review the current approaches to the single biggest cause of death in the U.S., coronary heart disease. Participants will learn the causes, prevalence, treatment and preventive measures. Current trends as per the ACC/AHA practice guidelines will be reviewed with special emphasis on the preventive measures. RNs and LPNs will earn 3 contact hours. Kansas ACHAs will earn 3 (E) hours. Approval is pending for OTs and PTs.

$36.00

XNC 3170

Cardiovascular Drugs and the Failing Heart

Coming from instructor

$72.00

XNC 3175

Lifestyle Management of Metabolic Syndrome

Metabolic Syndrome, also known as insulin resistance, syndrome X pre-diabetes and dysglycemia, has become an epidemic in modern America. A result of genetic predisposition interacting with poor diet and lifestyle choices, this sercious condition can be cured. The way a person eats, exercises and lives can make all the difference. Come learn about the ways lifestyle can be modified to cure this common syndrome. We will discuss specific dietary changes you can make, exercise programs and stress management techniques you can use to help with weight loss and to correct elevated blood pressure, high cholesterol and high or low blood sugar problems. RNs, LPNs, LMHTs, counselors and social workers will earn 3 contact hours. ACHAs will earn 3 (RC) hours. Approval is pending for OTs and PTs.

$36.00

XNC 3180

Osteoporosis: Incidence, Cost, Pathology and Treatment

This lecture will provide information on osteoporosis as a debilitating, but preventable disease. The presentation will include data on the structure and formation of bone, the classification of osteoporosis as a diagnosis and risk factors of the disease. The material will detail the incidence facts and figures, treatment options and financial costs. New therapies in research and clinical study dilemmas will also be covered. RNs, LPNs, LMHTs, will earn 3 contact hours. Kansas ACHAs will earn 3 (RC) hours. Approval is pending for OTs and PTs.

$36.00

XNC 3185

The ABCs of ABGs: Clinical Application of Arterial Blood Gas Analysis

This practical presentation emphasizes the interpretation and impression of arterial blood gas results and the clinical implications of changes in respiratory, metabolic and/or oxygenation status. RNs, and LPNs will earn 4 contact hours.

$36.00

XNC 3190

Heart Failure

Heart failure is the final common pathway for a number of conditions like hypertension, acute coronary syndromes, myocardial infarction and any other that reduces the hearts' pumping action. In this class the participants will learn the definition, causes, diagnostic approaches and treatment of heart failure. Special emphasis will be placed on the preventive actions where applicable and also on the rehabilitative measures for the afflicted based on the American College of Cardiology/American Heart Association (ACC/AHA) practice guidelines. RNs and LPNs will earn 3 contact hours. Kansas ACHAs will earn 3 (RC) hours. Approval is pending for OTs and PTS.

$36.00

XNC 3195

Ethical Social Work Practice

This course will review and discuss the Social Work Code of Ethics including the

six core values: service; social justice; dignity and worth of the person; importance of human relationships; integrity and competence. Participants will have an opportunity to examine and practice utilizing the direction of the Code of Ethics in regards to particular case vignettes. Social workers and counselors will earn 3 contact hours. (This course meets the DSM-IV requirement)

$36.00

XNC 3200

Finding Strengths and Solutions with Families

This course will identify and discuss key components of finding strengths and solutions with families facing multiple risk factors. An interactive course for professionals designed to provide tools to best attain assessment, engagement and goal setting with families. RNs,LPNs, social workers and counselors will earn 3 contact hours.

$36.00

XNC 3205

Best Practices in working with Offenders of Domestic Violence

Billions of dollars are spent each year for physical and mental health medical treatment, lost wages, and poor job productivity as a result of domestic violence. Accordingly, individuals, organizations, communities, justice systems and governments are very interested in decreasing the incidents of domestic violence. This course evaluates the best practices established for the treatment modality of offenders of domestic violence. Further, this course will provide participants with materials and activities that may be utilized when working with offenders of domestic violence. RNs, LPNs, LMHTs, counselors and social workers will earn 3 contact hours.

$36.00

XNC 3210

Childhood Obesity: Prevention of Long-term Morbidity

Obesity among children is becoming a major health issue today. The affects on these children, their families, society and the healthcare field will be profound as we try to deal with this preventable problem. This course will focus on the psychosocial and medical issues facing these individuals as they age. Interventions and treatments will be explored. RNs, LPNs, LMHTs, social workers, counselors, dieticians, and dental hygienists will earn 3 contact hours. Approval is pending for OTs and PTs.

$36.00

XNC 3215

Sorting the Facts for the Anti-Cancer Diet: What Really Works

It has been estimated that 30 to 40 percent of all cancers can be prevented by lifestyle and dietary measures alone. By implementing the guidelines covered in this workshop, an estimated 60 to 70 percent reduction in breast, colorectal, and prostate cancers and 40 to 50percent in lung cancers could be attained. Such an intentional food intake plan would not only be conducive to preventing cancer it would favor recovery as well. This comprehensive seminar will provide the learner with practical and science based guidelines for reducing the risk of cancer and improving the survival rates of those who have been diagnosed. RNs, LPNs, LMHTs, social workers, counselors, dietitians and dental hygienists will earn 3 contact hours. ACHAs will earn 3 (RC) hours. Approval is pending for PTs and OTs

$36.00

XNC 3220

Antisocial Personality Disorder

A frequent remark heard by mental health and criminal justice professionals is,

'they're antisocial'. Images of individuals famous and infamous come to our mind when this phrase is used. This program will explore the meaning of the clinical diagnosis of antisocial personality disorder. We will also explore some of the views and theories that are proposed to explain the causality of one becoming antisocial. Case studies of people who have been in the news who present as individuals with antisocial characteristics will be covered. Lastly we will look at some of the treatment modalities that are being utilized in working with such individuals. RNs, LPNs, LMHTs, social workers, and counselors will earn 3 contact hours. Approval is pending for OTs and PTs.

$36.00

XNC 3225

Kids Acting Badly

A description is not available for this course.

$36.00

XNC 3230

Spinal Cord Injuries: Where We Hope to Be

This course explores new advances in treatment that have lessened the devastating impact these injuries cam leave on patients. Advances in surgical and funcational rehabilitation, electrical stimulation, current and prospective pharmaceutical treatments will be reviewed in this workshop. RN's, LPNs and LMHTs, social workers, and counselors will earn 3 contact hours. ACHAs will earn 3 (RC) hours. Approval is pending for OTs, PTs and dieticians.

$36.00

XNC 3235

Antagonist or Protagonist: Does the Survey Process Prevent Culture Change?

Does the LTC survey process prevent resident-directed care? Since the advent of culture change, some providers have contended that the federal and state regulations prohibit implementing person centered care. Nothing could be further from the truth. Many long term care administrators, directors of nursing, staff nurses, and regulators believe in the movement and have been able to implement change in accordance with the regulations. This course will explain person centered care and show how the survey process supports the concept. RNs, LPNs, LMHTs, social workers, and counselors will earn 6 contact hours. ACHAs will earn 6 (A) hours. Approval is pending for OTs, PTs and dieticians.

$72.00

XNC 3240

Anxious Organizations and Noxious Workplaces: Co-Workers on the Therapist's Couch

Organizations are made up of people - fortunately and unfortunately with all the good and bad qualities thereof. Every day individuals in the workplace, from management to those 'in the trenches,' make decisions based upon their own sensitivity to the world. Ultimately, these countless choices affect the success of the organization. When decisions are grounded in reality, the behaviors of the organization will seem sound. However, if driven by anxiety, the behaviors of the organization will seem illogical at best, or self-destructive at worst. Even with a great product, smart leaders, and high profit, a number of organizations receive fines, incur legal charges, and experience high employee turnover. Chalk it up to organizational anxiety, a primitive survival instinct. Learn practical techniques for assessing the level of anxiety in any organization or workplace. The more anxious an organization, the clearer the symptoms and dynamics become. The behavioral dynamics also become very predictable with increased anxiety. Learn practical ways to manage yourself and your employees in the intensity. Bring any challenges you have for application and discussion. RNs, LPNs, LMHTs, social workers, psychologists and counselors will earn 3 contact hours. Approval is pending for OTs, PTs and dieticians.

$36.00

XNC 3245

Humor and Healing

Healthy people laugh - A LOT! Learn how to integrate humor into every aspect of your life - your personal health, your marriage/family, and the workplace. Spend time learning with others where EVERYONE gets to be the class clown. RNs, LPNs, LMHTs, social workers, counselors and psychologists will earn 3 contact hours. Approval is pending for OTs, PTs and dieticians.

$36.00

XNC 3250

Narcissistism and Borderline

A description is not available for this course.

$36.00

XNC 3255

Music That Speaks to Alzheimer's

In this workshop you will learn why and how music is a powerful tool for helping Alzheimer?s patients. Much of this workshop is experiential so you learn from a whole brain perspective. You will learn about practical musical solutions for relaxation to help the Alzheimer's patient. There will be an explanation of entrainment, the body's natural ability to synchronize with outside rhythms and the use of entrainment to help lower heart rate and blood pressure by experiencing music written at exactly 50 and 60 bpm. Participants will learn about the sound environment and how it effects the Alzheimer's patient. There will be a discussion of sensory issues, challenges and how to reduce agitation in the Alzheimer's patient by altering the sound environment. Learn many musical techniques for coping with dementia. No musical ability needed to benefit from this workshop. RNs, LPNs, LMHTs, social workers and counselors will earn 6 contact hours. ACHAs will earn 6 (RC) hours. Approval is pending for OTs and PTs.

$72.00

XNC 3260

Native American Flute: Therapeutic Aspects

In this experiential class, you will learn the basic techniques needed to play a Native American cedar flute. This instrument is one of the easiest to learn and a wonderful meditative tool. There are two ways to play it ? the Western scale and the 5-note Native scale. In this class you will learn the difference between these two scales, but the concentration will be on the Native scale because it allows even non-musicians to quickly learn to make music on this instrument. The cedar wood gives it a wonderful organic sound ? great for playing inside or outside. You will learn the therapeutic aspects of the cedar flute, as well as the spiritual significance in working with those who have lung disease, cancer, arthritis, and other medical conditions. A flute will be available for participant use during this class time. RNs, LPNs, LMHTs, social workers and counselors will earn 4 contact hours.

$48.00

XNC 3265

The Difficult Patient: Clinical and Ethical Issues

This one day workshop will give both the beginner and experienced clinician a chance to review and discuss basic concepts and issues in work with difficult-to-treat patients and families. In the morning, participants will divide up into ?fictional? families and role play the initial interview. Dr. Stamm will use the material that emerges from this role-play to talk about important clinical concepts such as making a proper diagnosis, forming a treatment alliance, and dealing with resistance. In the afternoon, Dr. Stamm will illustrate and talk about difficult treatment situations and the troublesome feelings some patients evoke in the

patient. The focus will be on how to maintain therapeutic and ethical boundaries with the patient and how to keep the treatment alliance in tact when the patient and/or family seems bent on sabotaging the process. RNs, LPNs, LMHTs social workers, psychologists and counselors will earn 6 contact hours.

$72.00
XNC 3270

Psychotropic Medications: When and Why to Use Them

The use of psychotropic medications for mental illness is a common practice among health care practitioners. This practice has led to the improved quality of life for many, but it is not without risk. More recent medications have a lower negative side-effect profile, but risks still remain including the increase in the number of suicidal thoughts, plans and attempts in adolescents. Behavior problems in adults with dementia are also treated with psychotropic medications. Being able to identify the use of any particular medication is dependent on target symptoms and side-effect profile. This workshop reviews common psychotropic medications, their appropriate use for mood and behavior problems and potential negative side-effects and drug:drug interactions. RNs, LPNs, LMHTs, social workers and counselors will earn 3 contact hours. ACHAs will earn 3 (RC) hours. Approval is pending for OTs, PTs and dieticians.

$36.00
XNC 3275

Cerebral Palsy: Old and New Concepts

Our concept of cerebral palsy has changed in recent years because of improved methods of examining the brain. CT, MRI & PET scanning have given us the ability to see inside into the structural and functional status of the brain. Genetic testing has also advanced our understanding of this condition. Most injuries to the neonatal brain are not due to lack of oxygen, but to developmental defects that occur during the first trimester of pregnancy. Many of these are due to genetic factors. This workshop focuses on the neurological diagnostics that health care professionals need to know to support individuals and their families living with this chronic condition. RNs, LPNs, LMHTs, social workers, counselors and psychologists will earn 3 contact hours. ACHAs will earn 3 (RC) hours. Approval is pending for OTs, PTs and dieticians.

$36.00
XNC 3280

T.E.A.M. Commandments: Tips for Positive and Productive Relationships

The 'Team' is the common structure in today?s workplace and how well people work together determines the success of the organization. In this presentation the audience gets involved in discussions and activities that explore 10 skills, attitudes, and beliefs common to successful teams. This learning experience is perfect for all people who have to work with other people. Join the fun and stretch your teamwork muscles in this program of energizing and interactive team-based activities. RNs, LPNs, LMHTs, dental hygienists, social workers and counselors will earn 3 contact hours. ACHAs will earn 3 (E) hours. Approval is pending for OTs and PTs.

$36.00
XNC 3285

Sexual Addiction and the American Family

Mental health professionals are increasingly being confronted with clients who report problematic sexual behavior. These clients often describe out of control, compuslive behaviors which put them and their primary relationships at risk. This course is designed to be an introduction to sexual addiction, its scope, impact on families, identification and treatment. This course is also designed to provide information regarding the resources and training which are available to clinicians who are interested in learning how to treat this population by giving them resources they can share with their clients who may be struggling with sexual

behaviors they find problematic. RNs, LPNs, LMHTs, social workers and couselors will earn 3 contact hours. ACHAs will earn 3 (RC) hours.

$36.00
XNC 3290

The Pregnant Heart: Keeping Two Hearts Beating During Pregnancy

Heart disease is a major complication of pregnancy. It occurs in about 1 percent of all pregnancies. Sometimes, heart disease is known before pregnancy. However, some women may have unknown heart conditions that only become apparent during pregnancy. RNs, LPNs, LMHTs, and social workers will earn 3 contact hours. Approval is pending for OTs, PTs and dieticians.

$36.00
XNC 3295

Metabolic Syndrome, Hyperglycemia and Heart Disease

Metabolic syndrome is a cluster of conditions that occur together, increasing the risk for heart disease, stroke and diabetes. Having just one of these conditions ? increased blood pressure, elevated insulin levels, excess body fat around the waist or abnormal cholesterol levels contributes to the risk of serious disease. In combination, the risk is even greater. RNs, LPNs, LMHTs , social workers and counselors will earn 6 contact hours. Approval is pending for OTs, PTs and dieticians.

$72.00
XNC 4000

Health Care is a Contact Sport

This session combines humor and drama to help turn frustrating communications into successful exchanges. This interactive session teaches participants to connect with their patients, family members, and staff to keep misunderstanding and conflict to a minimum.

$72.00
XNC 4001

Maintaining Relationships

Relationships determine the overall quality of life for healthcare providers and their clients and patients. Learn the five criteria for personal and professional relationships. Evaluate the interactions that you have with significant people in your life, at home and at work. Set an action plan in place for improving these relationships based on two practical models for determining health relationships and performance. Those who are responsible for giving feedback to employees and those who are committed to self-improvement within the healthcare environment will appreciate the models.

$48.00
XNC 4002

Staying Calm in Chaos

This course blends stress, time, priority and change management into an integrated response to the ever-demanding conditions of the healthcare industry. A spoonful of fun and a dash of humor will help you swallow the workplace medicine. You will learn the tools for coping with and taking charge of change while having more control over your stressors and priorities, including time crunches. Be calm for yourself, your patients and their families, and your coworkers; in doing so, you will create a healing environment.

$48.00
XNC 4003

Business Etiquette for HC Prof

A description is not available for this course.

$36.00

XNC 4004

Chronic Illness Alternatives

This course emphasizes evaluating and intervening illnesses with alternative management methods.

$36.00

XNC 4005

Women and Heart Disease

You will learn about gender differences as they relate to risk factors of heart disease in women. The unique characteristics of this silent epidemic will be explored.

$36.00

XNC 4006

Survivors of Suicide

This national satellite conference will allow participants to hear the current state of research on suicide, suicide prevention, and post-intervention activities occurring throughout the country.

$24.00

XNC 4007

Balance in a Busy Life: Living the Life You Want to Live

What does balance look like to you? Do you long for some quiet time just to 'be' instead of 'do'? You are not alone; most workers lack balance in their busy lives. They feel stuck in their 'busyness' and sucked dry of energy. Renewal begins with reflection on the things that really matter in your life. RNs, LPNs, LMHTs, counselors and social workers will earn 3 contact hours. ACHAs will earn 3 (A) hours. Approval is pending for OTs and PTs

$36.00

XNC 4008

Getting Your Groove Back

A description is not available for this course.

$36.00

XNC 4009

Case Management

This class will identify the required credentials to enter the field of case management. Job duties and requirements to seek employment will be covered as well.

$36.00

XNC 5000

Nitrous Oxide Sedation

A description is not available for this course.

$150.00

XNC 5001

Refined Clinical Techniques for Dental Hygienists

This course involves one-on-one instruction with emphasis on dental hygiene clinical skills. The dental hygiene instructor will assess basic clinical skills and identify strategies for improvement. Course participants will practice clinical skills at the JCCC Dental Hygiene Clinic. Paper products and disposable supplies will be provided. Student professional liability insurance is required. NOTE: This course is designed to refine basic clinical techniques and in no way guarantees successful completion of licensing exams.

$490.00

XNC 5002

Refresher Course for Dental Hygienists

This course provides a comprehensive review and update of current dental hygiene practice and techniques. It includes 16 hours of didactic instruction and 32 hours of one-on-one clinical practice. Meeting all requirements of the Kansas Cental Board, this course is designed to assist dental hygienists re-entering practice to increase competency and confidence.

$1,000.00

XNC 5004

Aromatherapy I

This class will focus on the benefits of aromatherapy in massage. Safe handling and blending essential oils will be practiced.

$36.00

XNC 5005

Reiki I

Learn about Reiki---a natural method of healing based on the application of energy. This form of healing is easy to learn and simple to use.

$48.00

XNC 5006

Reiki II

After learning the basics, you can discover various techniques of using Reiki to assist in healing.

$48.00

XNC 5007

Reiki III Master Level

This third degree level course is designed for those who with to become a Reiki teacher.

$48.00

XNC 5008

Special Needs Child Massage

This course will teach ways in which massage therapists and other health professionals can adapt and design techniques to provide massage for infants, children, and children with special needs. Contraindictions will also be discussed.

$72.00

XNC 5009

Touching the Elderly

This course teaches functional ways in which massage therapists and other health professionals can adapt and design specific techniques and integrate therapeutic sequences to provide massage for the elderly client.

$48.00

XNC 5010

Aromatherapy II

Participants will learn the basics of essential oil chemistry and will become familiar with carrier oils and learn to blend them.

$36.00

XNC 5110

Failing Heart: Old and New Approaches

A description is not available for this course.

$27.00

XNC 8000

Essential Leadership Skills

A description is not available for this course.

$54.00

XNC 8001

Essential Communication Skills

A description is not available for this course.

$54.00

XNC 8002

Coaching Job Skills

A description is not available for this course.

$54.00

XNC 8003

Improving Work Habits

A description is not available for this course.

$54.00

XNC 8004

Resolving Conflicts

A description is not available for this course.

$54.00

XNC 8005

Supporting Change

A description is not available for this course.

$54.00

XNC 8006

Effective Discipline

A description is not available for this course.

$54.00

XNC 8007

Delegating

A description is not available for this course.

$54.00

XNC 8008

Communicating Up

A description is not available for this course.

$54.00

XNC 8009

Managing Complaints

A description is not available for this course.

$54.00

XNC 8010

Performance Goals/Standards

A description is not available for this course.

$54.00

XNC 8011

Performance Feedback

A description is not available for this course.

$54.00

XNC 8012

Syncope

Fainting or syncope prompts about three percent of emergency room visits and it accounts for up to six percent of hospital admissions. This course is designed to provide better understanding of the prevalence and etiology of syncope, plus the evaluation, diagnosis, testing and therapy for a patient with syncope.

$36.00

XNC 8013

Preventive Cardiology

The time honored adage "prevention is better than a cure" rings true for cardiovascular disease (CVD) and the major risk factors leading to Obesity and Hyperlipidemia. This course will review current concepts in Hyperlipidemia, review prevalence, recognition and current concepts in management of obesity, and provide guidelines for exercise as a treatment and a tool for prevention.

$90.00

XNC 8014

Valvular Heart Disease

This course will provide a review of the most important aspects of valvular heart disease with major consideration of the Mitral and Aortic valves and the current

recommended approach to their management.

$48.00
XNC 8015

Guide to Cardiovascular Medications

Cardiovascular disease remains the number one cause of mortality in the US and is highly researched for the development of new treatments. This course will review current and newly approved medications for cardiovascular disease.

$72.00
XNC 8022

Cardiovascular Physical Assessment

Nursing assessment is the foundation for providing care. Proficiency in conducting a concise and systematic history and physical assessment is a key element. This program will provide the nurse with the skills to perform an adult cardiac assessment and to differentiate between normal and abnormal findings. RNs, LPNs, and LMHTs will earn 4 contact hours.

$48.00
XNC 8023

Patience with Patients! Successful Clinical Visits With Person With Alzheimer's

The person with dementia often becomes ill with other conditions and will need to visit a doctor or spend time in a hospital. The underlying illness that caused the visit to the doctor or hospital as well as the unfamiliar environment, treatments and procedures will precipitate in an agitated state for the patient. There are steps you can take to prepare for the visit, manage your approach and create a more successful experience. RNs, LPNs, LMHTs, social workers and counselors will earn 2.5 contact hours. ACHAs will earn 2.5 (RC) hours.

$30.00
XNC 8028

Mind Body Healing

Can the human mind heal the body? Learn more about mind-body healing methods such as meditation, visual imagery, hypnosis and prayer. Discover why more and more doctors make mind-body healing methods part of their treatments. RNs, LPNs, LMHTs, social workers and counselors will earn 2 contact hours.

$24.00
XNC 8030

Ethical Social Work Practice

This course examines the morals and values of social work practice in accordance with the Code of Ethics. Real practice examples and discussion are included in this course to promote comprehension and provide participants with practical application of ethics in their profession. Social workers and counselors will earn 3 contact hours.

$36.00
XNC 8032

Home Visitor's Guide to Best Practice

This course will identify and discuss key components of successful home visitation services with families facing multiple risk factors. An interactive course for professionals designed to provide tools to best attain engagement and goal setting with families. RNs, LPNs, LMHTs, social workers and counselors will earn 3 contact hours.

$36.00

XNC 8036

Psychological and Sexual Issues Related to Infertility

A description is not available for this course.

$36.00

XNC 8040

Emerging Infectious Diseases

This program will provide information about the symptoms, evaluation and management of various insect borne and infectious diseases affecting Americans currently. RNs, LPNs, and LMHTs will earn 4 contact hours. ACHAs will earn 4 (RC hours.

$48.00

XNC 8043

Open Adoption

A description is not available for this course.

$36.00

XNC 8045

Prevention of Workplace Violence-Operational Plan

Creating a climate for civility is the first step in prevention of workplace violence. The course manual will serve as a tool for formulating strategies and identifying "triggers" of workplace violence. The course will cover typical profiles of violent employees, supervisory interventions, resources, do's and dont's and an observation checklist. Be prepared so you can nurture a "safe" work environment. RNs, LPNs, and LMHTs, social workers and counselors will earn 4 contact hours.

$48.00

XNC 8047

Treatment & Prevention of Domestic Violence

Today, anger issues filter into our homes, the work place, our families and our relationships with others. Witness first hand how you can intervene and stop the violence! The course manual will serve as a tool for practicing interventions that can bring a halt to inappropriate behaviors. The course will cover case management of court-referred mediation, domestic violence and anger management programs. RNs, LPNs, LMHTs, social workers and counselors will earn 4 contact hours.

$48.00

XNC 8060

Corporate Compliance: Laws Affecting Healthcare

This course is designed for health care professionals who are responsible for maintaining Corporate Compliance within their facilities and for those who wish to learn about healthcare related law and how these laws affect their jobs. RNs, LPNs, LMHTs, and social workers will earn 3 contact hours.

$36.00

XNC 8062

Common Interactions Between Herbal Medicines and Prescription Drugs

In this course, important interactions between commonly used herbal medicines and prescription drugs will be covered in order to promote safety and efficacy for patients. The pharmacodynamics of major drug classes and herbal medicine

classes will be reviewed. The identity of know direct molecular, absorptive and metabolic interactions between herbal medicines and prescription drugs will be covered. RNs, LPNs, and LMHTs will earn 5 contact hours.

$60.00

XNC 8063

Common Interactions Between Rx Drugs, Nutrients and Nutriceuticals

In this course, important interactions between prescription drugs and both nutrients and nutriceuticals will be covered. The pharmacodynamics of major drug classes and the biological actions of major micronutrients will be reviewed. The following will be identified: Nutrient depletions caused by pharmaceuticals and the known molecular interactions between pharmaceuticals and micronutrients. RNs, LPNs, LMHTs and social workers will earn 4.5 contact hours.

$60.00

XNC 8064

Performing a Holistic Intake in a Modern Medical Outpatient Environment

This course will explore methods of expanding medical intakes in an outpatient environment. Emphasis will be placed on the importance of holistic medical intakes in furthering our understanding of medical conditions. The course will identify underlying commonalities among medical conditions and will identify the vocational, monetary, spiritual and emotional influences on health. RNs, LPNs, LMHTs, social workers and counselors will earn 3 contact hours.

$36.00

XNC 8065

Interdisciplinary Referrals

This course is an introduction to the important professional aspects of complementary medicine. Proper professional referral etiquette between conventional and alternative healthcare providers will be covered with an emphasis on models of complementary medicine working in other areas of the country.RNs, LPNs, LMHTs, social workers and counselors will earn 2.5 contact hours.

$30.00

XNC 8066

Pharmacy Technician Cert

A description is not available for this course.

Health Prof Independent Study (XNH)

XNH 1000

Avoiding Medication Errors

This independent study describes possible causes and contributing factors to medication errors and reviews ways to avoid them. RNs, LPNs and LMHTs will earn 6 contact hours for completing this course.

$51.00

XNH 1005

Assessment of the Geriatric Patient

This independent study describes the nursing assessment of the geriatric patient. Emphasis is placed on recognizing the difference between changes due to normal aging and those due to illness. RNs and LPNs will earn 6 contact hours for

completing this course. Kansas ACHAs will earn 6 (RC) contact hours.

$51.00

XNH 1010

Marketing Nursing at the Bedside

A description is not available for this course.

$51.00

XNH 1015

Assertiveness in Nursing

This independent study focuses on improving communication between the nurse and other people, including the patient, physician, manager and colleagues. The course guides you in developing assertive communication and behaviors, fundamental techniques needed for positive relationships, effective team- building and collaborative professional roles. RNs, LPNs and LMHTs will earn 6 contact hours for completing this course.

$51.00

XNH 1020

Efficient and Effective Care Plans

A description is not available for this course.

$51.00

XNH 1025

Writing the Professional Resume: Evaluating Your Professional Strengths

A description is not available for this course.

$51.00

XNH 1030

Time Management

A description is not available for this course.

$51.00

XNH 1035

Premature Infant

A description is not available for this course.

$51.00

XNH 1040

Burnout: Reducing Nursing Stressors

A description is not available for this course.

$51.00

XNH 1045

Delegation for Nurses: Where and How to

Delegate This independent study covers delegation principles and strategies that can be used in many different applications. Successful delegation includes assigning responsibility, providing authority and requiring accountability. RNs and LPNs will earn 6 contact hours for completing this course.

$51.00

XNH 1050

Fatigue: Reducing Patient or Nurse Fatigue

This independent study focuses on the problem of fatigue. It covers the physiology of fatigue, investigates physical and emotional factors as causes and discusses preventive strategies that increase energy. RNs, LPNs and LMHTs will earn 6 contact hours for completing this course.

$51.00

XNH 1090

Assessment of the Family at Risk

A description is not available for this course.

$83.00

XNH 1100

Having Fun: An Introductory Guide to the

Interdisciplinary Team This independent study describes the qualities associated with highly effective teams, distinguishes functional and dysfunctional teams and explores the stages of team development. It provides an opportunity for you to indentify the strengths of your personal work style as well as those of team members whose work styles are different from your own. RNs, LPNs and LMHTs will earn 6 contact hours for completing this course. Kansas ACHAs will earn 6 contact hours.

$53.00

XNH 1105

Ethical Questions: Challenges to Interdisciplinary

Practice This independent study discusses several values styles, provides a values profile to assist you to identify your own values and those of your team and explores the strengths and limitations of teams functioning with these styles. It identifies five ethical challenges to interdisciplinary practice and empowers teams to deal successfully with these challenges. RNs, LPNs and LMHTs will earn 6 contact hours for completing this course. Kansas ACHAs will earn 6 contact hours.

$53.00

XNH 1110

Patient Compliance: A New Look

This self-paced course identifies reasons that patients/clients do not comply with treatment recommendations, lists factors that influence compliance and discusses strategies to prevent and/or manage non-compliant behavior. RNs, LPNs, LMHTs and social workers will earn 5.4 contact hours for completing this course.

$59.00

XNH 1150

The Time of Your Life: A Guide for Managing Time

Effectively This self-paced course identifies common ways that health professionals lose time as well as methods to assist them to use time more wisely. RNs, LPNs, LMHTs and social workers will earn 2.6 contact hours for completing this course.

$32.00

XNH 1155

Superachievers and Coping Strategies

This self-paced course defines the terms "excellence anxiety" and "role confusion," explores some of the expectations superachievers place upon themselves and explains eight techniques to enable health professionals to manage stress more effectively. RNs, LPNs, LMHTs and social workers will earn 2.4 contact hours

$29.00

XNH 1180

Assertiveness: New Perspectives

This self-paced course identifies the benefits of assertive behavior, discusses fears that prevent assertive communication, describes characteristics of non-assertive behavior and provides seven strategies to enhance assertiveness skills. RNs, LPNs, LMHTs and social workers will earn 3.3 contact hours for completing this course.

$39.00

XNH 1190

Conflict Management: Skills for Uncertain Times

This self-paced course discusses potential benefits of conflict, styles commonly used to manage conflict and three steps of win-win negotiations. RNs, LPNs LMHTs and social workers will earn 5 contact hours for completing this course. ACHAs will earn 5 (A) hours.

$55.00

XNH 1200

Beyond Sadness: Major Depressive Disorder

This self-paced course, available online or in booklet format, provides a comprehensive overview of the detection and treatment of major depressive disorder. RNs, LPNs, LMHTs and social workers will earn 4 contact hours for completing this course. ACHAs will earn 4 (RC) hours.

$48.00

XNH 1201

Dual Diagnosis: Treatment, Intervention and Relapse

Prevention This independent study indentifies issues, treatment interventions and relapse prevention strategies for clients with an addiction and co-morbid psychiatric diagnosis. The course is designed for nurses and technicians in primary care and traditional mental health settings. RNs, LPNs and LMHTs will earn 3 contact hours for completing this course.

$29.00

XNH 1202

Aging and Spirituality: Implications for Nursing

This self-paced course provides a rationale for exploring the spiritual dimension with clients. RNs and LPNs will earn 3 contact hours for completing this course. ACHAs will earn 3(RC) hours.

$36.00

XNH 1300

Upset Workbook

This self-paced course discusses possible events when the health care professional is confronted by an upset individual and discusses strategies. RNs, LPNs, LMHTs and social workers will earn 8 contact hours for completing this course. ACHAs will earn 8 (A) hours.

$96.00

XNH 1305

Making the Connection: Keys to Quality Customer Service

This self-paced course discusses customer service approaches that make staff-patient interactions more meaningful, more enjoyable and less conflicted. RNs, LPNs, LMHTs and social workers will earn 5 contact hours for completing this course. NOTE: This course may not be taken with Taking Care of Residents.

$60.00

XNH 1310

Tactful Toughness: A Home Study Course for

Helping Professionals This self-paced course, available online and in booklet format, provides information about handling numerous "tough" situations--correcting or criticizing, setting expectations, stating a position, etc. RNs, LPNs, LMHTs and social workers will earn 3 contact hours for completing this course. ACHAs will earn 3 (A) hours.

$36.00

XNH 1315

Taking Care of Residents: A Customer Service

This self-paced course examines customer service skills necessary for providing residents with dignity and respect. RNs and LPNs will earn 5 contact hours for completing this course. ACHAs will earn 5 (RC) hours. Note: This course may not be taken with Making the Connection: Keys to Quality Customer Service in Health Care.

$60.00

XNH 1350

Heart Failure

This self-paced course outlines heart failure etiologies, pathophysiology, diagnosis and current treatment modalities. It emphasizes nursing implications and the need for interdisciplinary involvement to increase compliance. RNs, LPNs and LMHTs will earn 4 contact hours for completing this course. ACHAs will earn 4 (RC) hours.

$48.00

XNH 1375

Improving Quality of Life for Diabetic Clients

This self-paced course, available online and in booklet format, discusses concepts and approaches to effectively manage care in the diabetic client. RNs, LPNs and LMHTs will earn 3 contact hours for completing this course. ACHAs will earn 3 (RC) hours.

$36.00

XNH 1405

Lactation Management Strategies: Birth to Weaning

Weaning This self-paced course, available online and in booklet format, discusses various aspects of early and established lactation, including prevention and treatment of common problems that may affect the nursing dyad. RNs and LPNs will earn 3 hours for completing this course.

$36.00

XNH 1415

Bouncing Back: Increasing Personal and Professional Resiliency

This self-paced course, available online and in booklet format, focuses on the capacity of individuals to "bounce back," adapt and grow after reversals. RNs, LPNs, LMHTs and social workers will earn 6 contact hours for completing this course. ACHAs will earn 6 (A) hours. NOTE: This course may not be taken with Surviving: The Impact of the Stress, Anxiety, Tension Triangle, XNH 1416; Striving: Four Components of Resiliency, XNH 1417, or with Thriving: 10 Behaviors for Maximizing Resiliency, XNH 1418.

$72.00

XNH 1416

Surviving: Impact of the Stress, Anxiety, Tension

This self-paced course, available online and in booklet format, will acquaint you with the concept of resiliency and enable you to self-assess your capabilities for bouncing back. RNs, LPNs, LMHTs and social workers will earn 2 contact hours for completing this course. ACHAs will earn 2 (A) hours. Note: This course may not be taken with Bouncing Back.

$24.00

XNH 1417

Striving: Four Components of Resiliency

This self-paced course, available online and in booklet format, will discuss the roles of control, ownership, impact and longevity on resiliency. RNs, LPNs, and social workers will earn 2 contact hours for completing this course. ACHAs will earn 2 (A) hours. This course may not be taken with Bouncing Back.

$24.00

XNH 1418

Thriving: Ten Behaviors for Maximizing Resiliency

This self-paced course, available online and in booklet format, will introduce you to behaviors involved in increasing one's capacity to bounce back from adversity. RNs, LPNs, LMHTs and social workers will earn 2 contact hours for completing this course. ACHAs will earn 2 (A) hours. NOTE: This course may not be taken with Bouncing Back.

$24.00

XNH 1420

Difficult Decisions: Ethical Decision Making in Nursing Practice

This self-paced course, available online and in booklet format, explores ethical theories and principles that provide a basis for bioethics as well as ethics as it applies to nursing practice. RNs, LPNs and LMHTs will earn 3 contact hours for completing this course. ACHAs will earn 3 (RC) hours.

$36.00

XNH 1425

Difficult Decisions: Ethical Decision Making in Social

This self-paced course, available online and in booklet format, explores ethical theories and principles that provide a basis for bioethics as it applies to social work practice. Social workers will earn 3 contact hours for completing this course.

$36.00

XNH 1430

Bioterrorism: Responding to the Intentional Release of Biological Agents

This self-paced course, available online or in booklet format, explores the terrorist potential, clinical course, treatment and prevention of biological agents. RNs, LPNs and LMHTs will earn 4 hours for completing this course. ACHAs will earn 2

(A) hours and 2 (RC) hours.

$48.00

XNH 1435

Identifying and Responding to Fibromyalgia

This self-paced course provides an overview of the clinical manifestations, diagnosis and treatment of the patient with Fibromyalgia. RNs and LPNs will earn 2 contact hours for completing this course.

$24.00

XNH 1440

Three Score Years and Ten: Families and Elder Care

This course focuses on understanding the aging process within the context of family life and will address the importance of families in eldercare. RNs, LPNs, LMHTs and social workers will earn 6 contact hours for completing this course. ACHAs will receive 6 (RC) hours.

$72.00

XNH 1500

Help Your Patient Quit: A Guide to Smoking Cessation

This self-paced course describes the effects of nicotine and other substances found in tobacco, discusses ways to motivate smokers to quit smoking and provides interventions to help patients achieve success. RNs, LPNs, LMHTs and social workers will earn 2 contact hours for completing this course.

$24.00

XNH 1510

Hormone Replacement Therapy

This self-paced course, available online and in booklet format, presents a comprehensive overview of menopause, including physiological changes, common symptoms, the long term effects of lowered estrogen states and the types of hormones available. RNs and LPNs will earn 2 contact hours for completing this course.

$24.00

XNH 1515

Certificate in Perinatal Issues

The demand for knowledgeable providers to meet the needs of childbearing women, newborns, and families is dramatically increasing; new jobs are being developed and new services created. This program is offered completely online. If you are a health professional who works with this population, or would like to do so, this program will help you stay current with emerging trends in this specialized area of health care. Participants will earn 14 contact hours.

$168.00

XNH 1520

Abnormal Uterine Bleeding

This self-paced course, available online and in booklet format, presents a comprehensive overview of abnormal uterine bleeding. It includes pregnancy-related causes as well as age-specific etiologies for abnormal bleeding. RNs and LPNs will earn 4 contact hours for completing this course.

$48.00

XNH 1525

Hypertension: The Silent Killer

This self-paced course, available online and in booklet format, presents a comprehensive overview of the new guidelines for managing essential hypertension. It includes lifestyle modifications and antihypertensive drugs. RNs, LPNs and LMHTs will earn 4 contact hours for completing this course. ACHAs will earn 4 (RC) hours.

$48.00

XNH 1530

Depression in the Elderly

This self-paced course, available online and in booklet format, discusses the symptoms, diagnosis and treatment of depression in the elderly individual. RNs, LPNs, and social workers will earn 3 contact hours for completing this course. ACHAs will earn 3 (RC) hours. NOTE: This course may not be taken with Depression in the Geriatric Client.

$36.00

XNH 1535

Antibiotic Resistant Infections

Update your understanding of antibiotic resistant infections, including resources from the Center for Disease Control in Atlanta. RNs and LPS will earn 2 contact hours for completing this course.

$30.00

XNH 1540

Pre-existing Diabetes and Pregnancy

Update your understanding of diabetes and pregnancy, using the popular videotape "Steel Magnolias" in a case study approach. This course requires the purchase or rental of the videotape. RNs and LPNs will earn 4 contact hours for completing this course.

$48.00

XNH 1545

Substance Abuse: Alcoholism

Update your understanding of alcohol abuse, including definitions, physical symptoms, warning signs, action of alcohol, adverse effects and recovery. RNs, LPNs, LMHTs, social workers and counselors will earn 2 contact hours for completing this course.

$30.00

XNH 1550

Medical Terminology: A Word Association Approach

This online course teaches medical terminology according to each body system. Multiple graphics, study tips and unusual facts make for a most enjoyable course.

$96.00

XNH 1555

Understanding Alzheimer's Disease

This self-paced course, available online and in booklet format, provides an overview of Alzheimer's Disease and the care required by patients. RNs, LPNs, LMHTs and social workers will earn 1 contact hour for completing this course. ACHAs will earn 1 (RC) hours.

$12.00

XNH 1560

Certificate in Gerontology

Enhance your knowledge and skills to work with older adults. The program is multi-disciplinary, provides a broad understanding of gerontology and addresses emerging trends. Participants will earn 30 contact hours.

$330.00

XNH 1565

Depression in the Geriatric Client: An Overview

This self-paced course, available online and in booklet format, presents an overview of depression in the geriatric client. RNs, LPNs, and social workers will earn 1 contact hour for completing this course. ACHAs will earn 1 (RC) hour. NOTE: This course may not be taken with Depression in the Elderly.

$12.00

XNH 1570

Ectopic Pregnancy

This self-paced course, offered online and in booklet format, presents an overview of ectopic pregnancy, including risk factors, diagnosis, and treatment approaches. RNs and LPNs will earn 1 contact hour for completing this course.

$12.00

XNH 1575

Protect Your Nursing Practice: Know the Law

This self-paced course, available online and in booklet format, provides a comprehensive overview of laws that significantly impact nursing practice. RNs and LPNs will earn 4 contact hours for completing this course. ACHAs will earn 4 (A) hours.

$48.00

XNH 1580

Managing Behavioral Problems in the Elderly

This self-paced course, offered online and in booklet format, discusses the management of a variety of behavior problems commonly associated with dementia, delirium and depression in the elderly individual. RNs, LPNs and LMHTs will earn 2.5 contact hours for completing this course. ACHAs will earn 2.5 (RC) hours.

$30.00

XNH 1630

Pregnancy Induced Hypertension

Gain an understanding of this serious condition of pregnancy, including its pathophysiology, classifications, symptoms and treatment. Participants will earn 3 contact hours.

$29.00

XNH 1645

Certificate in Spirituality, Health and Healing

Increase your ability to provide compassionate, effective care and meet your patient's spiritual needs by examining issues and trends affecting their care. Participants will earn 36 contact hours.

$396.00

XNH 1650

Certificate in Complementary and Alternative Medicine

Enhance your professional marketability by gaining a broad understanding of alternative health care options. Participants will earn 27 contact hours.

$297.00

XNH 1680

Certificate in Pain Assessment and Management

Pain assessment and management is a crucial part of compassionate and effective patient care. Scientific advancements in the understanding of the mechanisms of pain, multidisciplinary methods of assessment and management, and the improvement of medications to treat pain have contributed to the wealth of knowledge in this area. This course is offered completely online. If you work with patients who are in pain, this certificate program will help you increase the accuracy of your pain assessment skills and become more effective in your pain management strategies. Participants will earn 24 contact hours.

$288.00

XNH 1710

Writing Effective Grant Proposals

Learn to prepare grant proposals that get solid results for your favorite organization or charity. Over $200 billion annually is available for worthy causes and most people don't know how to prepare the application that will deliver the needed funding. This program does not have prior approval for continuing education (12 hours). You may submit for approval through the Kansas State Board of Nursing (KSBN) via an Individual Offering Approval (IOA) at www.ksbn.org/forms.

$79.00

XNH 1715

Advanced Grant Proposal Writing

In this course, an experienced grantwriter will show you how to research and write winning proposals that get funded. An introductory grant wiring course or equivalent experience is required to take this course. This program does not have prior approval for continuing nursing education (12 contact hours). You may submit for approval through the Kansas State Board of Nursing (KSBN) via an Individual Offering Approval (IOA) at at www.ksbn.org/forms.

$79.00

XNH 1720

Ethical Considerations for the Health Care Professional

This course will provide health care professionals with tools for analyzing moral issues and problems, resolving conflicts and building understanding, and taking action to improve the care of patients. Participants will earn 30 contact hours.

$225.00

XNH 1725

Ethical Issues for Today's Nurse

This course will provide nursing professionals with an overview of ethical issues and a framework for addressing 30 contact hours. Your certificate will be issued by those issues. Participants will earn 30 contact hours.

$225.00

XNH 1730

The Therapeutic Relationship in Complementary Health Care

This course will provide nursing professionals with an understanding of the therapeutic relationship and how this relationship is central to self-healing. Participants will earn 30 contact hours.

$225.00

XNH 1735

A Nurse's Guide to Complementary Therapies

This course will provide an overview and brief history of the most common complementary therapies, such as acupuncture, traditional Chinese medicine, herbal medicine, homeopathy, massage, aromatherapy, biofeedback, hypnosis, reflexology, and therapeutic touch. Participants will earn 30 contact hours.

$225.00

XNH 1740

Perinatal Liability Issues

This course will provide nursing professionals with an understanding of the various types of law, specific elements of health care law, and the sources of liability for the nurse working in the perinatal setting. Participants will earn 30 contact hours.

$225.00

XNH 1745

Core Curriculum for Maternal-Infant Nursing

This course will prepare the maternal-infant nurse to take the national certification in maternal-newborn nursing. Participants will earn 30 contact hours.

$225.00

XNH 1750

Preceptor Training

Precepting is a deliberate pairing of a highly skilled individual with a less experienced person in order to help the less skilled person develop specific competencies. This course will provide the health care professional with factors to consider when developing preceptor training. Participants will earn 5 contact hours.

$45.00

XNH 1755

Diabetes in Pregnancy

This course will provide the health care professional with an overview of diabetes, the types of diabetes, and the metabolic changes that occur during diabetic pregnancies. Participants will earn 5 contact hours.

$45.00

XNH 1760

Prevention of Neonatal Group B Streptococcal Infection

The goal of this course is to provide health care professionals with an overview of the disease, and the latest recommendations by the American College of Obstetricians and Gynecologists (ACOG), the Centers for Disease Control (CDC), and the American Academy of Pediatrics (AAP). Participants will earn 3 contact hours.

$29.00

XNH 1765

Insulin Resistance: The Path to Metabolic Syndrome

This self-paced study program, available online and in booklet format, discusses Insulin Resistance (IR) detection and possible prevention of Metabolic Syndrome and Diabetes Type 2. RNs and LPNs will earn 4 contact hours for completing this course.

$48.00

XNH 1770

Certificate in End of Life Care

This program will provide you with the continuing professional education to help you gain a broad understanding of this special area of care and stay current with emerging trends. Participants will earn 26 contact hours.

$286.00

XNH 1775

Certified Medical Transcription

According to the current Occupational Outlook Handbook, Medical Transcription is one of the 10 fastest growing occupations in the U.S. This 240 hour self-paced online course provides students with knowledge of medical terminology and proficiency in the transcription of medical records. Digital transcription equipment, textbooks, and career development are included. This course is usually completed within 6 months, but an extension can be applied for. A three installment payment plan is available for this course.

$1,595.00

XNH 1780

Certificate in Growth and Development Through the Lifespan

More than ever before, new theories, techniques, and views of human nature offer hope for a more penetrating understanding of human development. This course is offered completely online. This certificate program addresses the characteristics, problems, and needs of people of various ages, giving you the additional knowledge and expertise you'll need to successfully care for all your patients. Participants will earn 31 contact hours.

$372.00

XNH 1785

Certificate in Legal and Ethical Issues in Nursing

In recent years, there has been explosive growth in the number of important legal and ethical issues that you must learn and understand if you want to work successfully in the nursing field. This course is offered completely online. This certificate program addresses these issues and will provide you with timely, concise, and crucial information on legal concepts and bioethical issues that most matter to you. Participants will earn 23 contact hours.

$276.00

XNH 1800

Phlebotomy Technician Course

This 90 hour on site course prepares professionals to collect blood specimens from clients for the purpose of laboratory analysis. Students will become familiar with all aspects related to blood collection and develop comprehensive skills to perform venipunctures completely and safely. Classroom and lab work includes terminology, anatomy and physiology; blood collection procedures; specimen hands-on practice; and training in skills and techniques to perform puncture methods. Note: There is no outside externship rotation included with this program.   Payment plan is available for this course.

$1,599.00

XNH 1805

EKG Technician Certification Program

This comprehensive 50 hour on site course course prepares the student to function as EKG Technician Electrocardiograph (EKG) Technician exam and other National Certification Exams. This course will include practice and background information on anatomy and physiology of the heart, medical disease processes, medical terminology, medical ethics, legal aspects of patient contact, laboratory assisting, electrocardiography and echocardiography. Additionally, students will practice with equipment and perform hands on labs including introduction to the function and proper use of the EKG machine, the normal anatomy of the chest wall for proper lead placement, 12-lead placement and other clinical practices. Payment plan is available for the course.

$999.00

XNH 2000

Violence in the Family
KCNN-JCCC Independent Study

$10.00

XNH 2001

Spontaneous Abortion: Causes, Management and Nursing Care
KCNN-JCCC Independent Study

$10.00

XNH 2002

Premenstrual Syndrome: Fact Not Fiction
KCNN-JCCC Independent Study

$10.00

XNH 2003

Identifying and Responding to Substance Abuse
KCNN-JCCC Independent Study

$10.00

XNH 2004

Assessing Your Patient's Fluid Status
KCNN-JCCC Independent Study

$10.00

XNH 2005

Successful Management of Endometriosis
KCNN-JCCC Independent Study

$10.00

XNH 2006

Assessment of Fetal Well-Being
KCNN-JCCC Independent Study

$10.00

XNH 2007

Identifying and Responding to Psychological Trauma
KCNN Independent Study

$10.00
XNH 2008

Hormone Replacement Therapy
KCNN-Independent Study

$10.00
XNH 2009

Diabetes Update
KCNN-Independent Study

$10.00
XNH 2010

Aging and Spirituality: Effective Nursing Intervention
KCNN-Independent Study

$10.00
XNH 2011

Immunization Update
KCNN-Independent Study

$10.00
XNH 2012

Helping Clients Change Behavior
KCNN-Independent Study

$12.00
XNH 2013

Contraception: Issues and Options
KCNN-Independent Study

$12.00
XNH 2014

Diabetes Update-Part II
KCNN-Independent Study

$12.00
XNH 2015

Managing Fibromyalgia
KCNN-Independent Study

$12.00
XNH 2016

Nurses as Educators: Principles of Adult Education in the Home Health Setting
KCNN-Independent Study

$12.00

XNH 2017

Drug Treatment of Mental Illness: Part 1 Treatment of
KCNN-Independent Study

$12.00

XNH 2018

Drug Treatment of Mental Illness: Part II-Treatment of
KCNN-Independent Study

$12.00

XNH 2019

Cyber Nursing on the World Wide Web
KCNN-Independent Study

$12.00

XNH 2020

Outpatient Management of Pediatric Asthma
KCNN-Independent Study

$12.00

XNH 2021

Women and Heart Disease
KCNN-Independent Study

$12.00

XNH 2023

Diabetes Part III Prevention of Complications
KCNN-Independent Study

$12.00

XNH 2024

Drug Treatment of Mental Illness: Part III-Treatment of Anxiety and Sleep Disorders
KCNN-Independent Study

$12.00

XNH 2025

The Magic of Waldo, Bubbles and Neverland: Helping Children through Painful Experiences
KCNN-Independent Study

$12.00

XNH 2026

Early Breastfeeding: Lactation Management Strategies
KCNN-Independent Study

$12.00
XNH 2027

The Write Stuff
KCNN-Independent Study

$12.00
XNH 2028

Female Adolescent Development
KCNN-Independent Study

$12.00
XNH 2029

Lyme Disease
KCNN-Independent Study

$12.00
XNH 2030

Cultural Diversity
KCNN-Independent Study

$12.00
XNH 2031

Express Yourself: Keys to Assertive Communication
KCNN-Independent Study

$12.00
XNH 2032

Art of Positive Conflict
A description is not available for this course.

$12.00
XNH 2033

ABCs of Viral Hepatitis
This self-paced course, available online and in booklet format, examines symptoms, transmission and treatment of Hepatitis A, B and C. RNs, LPNs and LMHTs will earn 3 contact hours for completing this course. ACHAs will earn 3 (RC) hours. NOTE: This course may not be taken with Hepatitis C, course XNH 4000.

$36.00
XNH 2034

Introduction to Managed Care
This independent study examines the basic difference among the following health plans: Indemnity, PPO, POS, EPO and HMO plans. RNs, LPNs and LMHTs will earn 3 contact hours for completing this course. Kansas ACHAs will earn 3 (A) contact hours.

$33.00

XNH 2035

Breathe Easy: Common Respiratory Complaints

This self-paced course, available online and in booklet format, uses a case-study approach to review three common respiratory complaints: dyspnea, sputum production and cough. RNs and LPNs will earn 4 contact hours for completing this course. ACHAs will earn 4 (RC) hours.

$48.00

XNH 4000

Hepatitis C: The Silent Epidemic

This self-paced course describes the transmission, symptoms, complications, treatment options and management strategies for Hepatitis C. RNs and LPNs will earn 1 contact hour for completing this course. ACHAs will earn 1 (RC) hour. NOTE: This course may not be taken with ABC's of Viral Hepatitis.

$12.00

XNH 4001

Art of Positive Conflict: Effective Conflict

Management Skills This self-paced course, available online and in booklet format, defines conflict, describes the stages of its development and explores factors that interfere with effective conflict resolution. RNs, LPNs, LMHTs, and social workers will earn 1 contact hour for completing this course. ACHAs will earn 1 (A) hour.

$12.00

XNH 8002

Veterinary Administrative Assistant Certificate

This 240 hour nationally recognized online course and training program prepares students for an exciting career as an administrative veterinary assistant. Students in the program learn about the care of animals as well as how to recognize signs of illness and disease. This online program also covers interpersonal communication, interaction with clients and their animals, as well as how to assist the veterinarian during examinations. Administrative duties, such as fee collection, banking, and accounts payable are emphasized, and the program contains basic information about pet insurance. A three part payment plan is available for this course.Textbooks are included.

$1,795.00

XNH 8003

Human Resources for Healthcare Providers Certificate

This 80 hour online course and training program provides a comprehensive human resource management foundation, grounded in practice, for those who intend to work, or are working, in healthcare settings. All of the modules in this online program instill a solid foundation in both human resources and healthcare administrative practices. A three part payment plan is available for this course.Textbooks are included.

$1,995.00

XNH 8004

Certified National Pharmaceutical Sales Representative

This 120 hour online course was developed in response to a rising need for entry-level certified pharmaceutical sales representatives (CNPR). The program is designed for individuals who want to gain entry into the pharmaceutical industry but who lack the required pharmacology and medical education. A three part payment plan is available for this course. Textbooks are included

$1,595.00

XNH 8005

Administrative Dental Assistant Certificate (1 CR)

This 240 hour nationally recognized online program teaches the essential administrative tasks for managing the business aspects of a dental practice and becoming an Administrative Dental Assistant. This online program includes instruction in dental terminology and anatomy, medical records management, accounts receivable and reimbursement management, insurance and patient billing, patient scheduling, and procedural and diagnostic coding. This certificate will prepare you for a new career working in a dental office. A three part payment plan is available for this course.Textbooks are included.

$1,595.00

XNH 8006

Medical Coding and Billing

Upon successful completion of this 240 hour self-paced online course the student will be prepared to an entry-level position as medical coding and billing professionals. This course prepares you for the CCA certification. You must also meet the Professional Associations's eligibility requirements for the examination. This course is usually completed within six months and all materials are included and a three part payment plan is available for this course.

$1,595.00

XNH 8007

ICD-10 Medical Coding: Preparation and Instruction for Implementation

ICD-10 is a radically upgraded diagnostic and procedural medical coding system and will soon be mandated by the Federal government for use in the health industry in insurance processing, reimbursement and statistical data gathering. This 200 hour online self-paced course presents a comprehensive overview of the significant changes in store. This course is usually completed in six months and all materials are included. A three part payment plan is available for this course.

$1,595.00

XNH 8023

Pharmacy Technician Certification Program

This self-paced online course teaches students pharmaceutical terminology, basic physiology as related to the pharmacology of medications, and medication dosage calculations. The course is self-paced and pairs students with an instructor for one-on-one assistance. There are seven online modules to complete prior to the 40 hour externship. The course is usually completed within 6 months, but an extension can be applied for. A three installment payment plan is available for this course.

$1,795.00

XNH 8072

Hypertension 101

Despite all the progress that has been made in identifying the risks associated with hypertension and all the efforts to develop ways to control it (therapeutic or lifestyle modifications) the situation in the US leaves a lot of room for improvement as the following figures will attest. This course will help the healthcare professional health care providers to understand hypertension better and by so doing be in a position to give optimal care. RNs, LPNs, and LMHTs will earn 4 contact hours.

$48.00

XNH 8073

Cardiovascular Emergencies

Despite recent progress in the management of cardiovascular disorders generally, and cardiac arrhythmias in particular, sudden cardiac death remains both a problem for the practicing clinician and a major public health issue. In this course, you we will re-acquaint you with the more common of these emergencies including chest pain, severe hypertension, dysrhythmia and cardiopulmonary arrest. You will review the health care providers approach to the disorder, treatment and recommended follow up where applicable. RNs, LPNs, and LMHTs will earn 4 contact hours.

$48.00

Health and Lifestyles (XPG)

XPG 5003

Luscious, Low-Fat, Lightning-Quick Meals

Uncover the secrets of making lowered-fat recipes taste terrific. Learn how to get in and out of the kitchen quicker, and explore a registered dietitian's tricks for encouraging reluctant family members to eat more healthfully.

$85.00

Home Ownership (XPK)

XPK 1008

Is Reverse Mortgage Right for You?

Learn about reverse mortgages; who can qualify, how they work, is a reverse mortgage a good idea for you.

$12.00

XPK 1011

Community Homebuyers Program (Spanish)

You may be able to afford more home than you've thought possible. This four-hour course will help you decide, as it addresses the basic steps involved in achieving home ownership. You will acquire essential information on budgeting, credit reporting, qualifying for the purchase, home inspection and maintenance. Participation in this program is a prerequisite for qualifying for several government-sponsored and conventional loan programs. The class includes information on a new public Web site on financing options and programs available to consumers in the Kansas City Metro Area. Note: The course is co-sponsored by the Kansas City Regional Association of Realtors and will be taught in Spanish. The $10 registration fee entitles you to one instructional packet and one certificate of completion.

$10.00

XPK 1012

Community Homebuyers Program (American Sign Language)

Description: You may be able to afford more home than you've thought possible. This four-hour course will help you decide, as it addresses the basic steps involved in achieving home ownership. You will acquire essential information on budgeting, credit reporting, qualifying for the purchase, home inspection and maintenance. Participation in this program is a prerequisite for qualifying for several government-sponsored and conventional loan programs. The class includes information on a new public Web site on financing options and programs available to consumers in the Kansas City metro area. Note: The course is co-sponsored by the Kansas City Regional Association of Realtors and will be taught in American Sign Language. The $10 registration fee entitles you to one instructional packet and one certificate of completion.

$10.00

XPK 1020

Community Homebuyers Program

You may be able to afford more home than you've thought possible. This four-hour course will help you decide, as it addresses the basic steps involved in achieving home ownership. You will acquire essential information on budgeting, credit reporting, qualifying for the purchase, home inspection and maintenance. Participation in this program is a prerequisite for qualifying for several government-sponsored and conventional loan programs.The class includes information on a new public Web site on financing options and programs available to consumers in the Kansas City metro area. Note: The course is co-sponsored by the Kansas City Regional Association of Realtors. The $10 registration fee entitles you to one instructional packet and one certificate of completion.

$10.00

XPK 1021

Selling Your Home: Helpful Hints

Sell your house quickly and even increase its selling price by making your home look welcoming. Learn about accessories, accent points, must repairs, depersonalizing and more. Bring in photos for advice and find out what home appraisers consider when determining the worth of your home.

$12.00

XPK 1025

All About Mortgages

Getting a mortgage can be painless if you're "armed" with information on various types of loans, the loan process, and factors that determine your interest rates. Special emphasis on avoiding the mortgage pitfalls and traps out there and what some lenders don't tell you. New trends in mortgage insurance are discussed.

$12.00

XPK 1050

Consumer Tips for Building or Remodeling a New Home

It's no secret that home-building and remodeling can be stressful. From instructor Ginger Cook's own experiences, learn how to become better-informed about the building/remodeling process. Topics will include selecting a general contractor, builder or architect; safety and security concerns; and lot selection and landscaping. Homebuilding and remodeling can put a m marriage to the test, so you'll also learn ways (from Daniel Melbourne, Ph.D.) to improve communication with everyone involved, so that you can enjoy the process! You will also receive a "Home Buyer's Information Packet" from the city of Overland Park.

$13.00

XPK 1155

Patents, Trademarks and Copyrights

This class will give you a basic understanding of what is patentable, what can be trademarked, and when to obtain a copyright. A patent attorney will instruct the class.

$5.00

House and Garden (XPI)

XPI 1006

Cutting Gardens

If you've ever hesitated to cut some flowers to bring inside because you would leave "holes" in your flower beds, then you need a cutting garden! We'll have a slide program and handouts illustrating the different cultivars of suitable annual and perennial flowers, how to start them from seed, grow them, and some flower-arranging tips as well.

$12.00

XPI 1021

Bulbs for Spring Bloom

Learn easier and more effective ways of adding spring-blooming blubs to your existing flower beds. Get answers to your questions on why your tulips don't always come back, which bulbs are resistant to deer, which bulbs do well in part-shade and more. This class comes with a handout and gorgeous slide program, and is for novice and seasoned gardeners alike.

$12.00

XPI 1023

Rain Gardens

Turn your problems into landscaping opportunities! This is the class for you if you have an area of your yard that gets swampy for a day or two after a heavy rain, if you are needing to solve a problem with rain-water runoff from your gutters or your neighbors, or are curious about this latest trend in horticulture. This class includes an extensive handout and slide program describing what problems raingardens can solve, how they are constructed, useful plants for sun or shade, and examples of local raingardens. We'll debunk mosquito myths and talk a bit about plant maintenance as well. For novice and seasoned gardeners alike.

$12.00

XPI 1026

Plants for Problem Locations

Many of us have struggled with areas that are periodically sodden, too windy, too steep, too rocky, get too much of the wrong kind of traffic, et cetera. Stop trying to "fix" the site, and instead find plants that like those kinds of locations! (For shade prblems, see "Made in the Shade Gardens" class.)

$12.00

XPI 1035

Container Gardening

Learn how to make container growing more successful and accessible, including discussions of pot types, medium, color and texture considerations, fresh ideas for plant combinations, flowers for hot or shady conditions, and growing edibles. Session includes slide program and handout.

$12.00

XPI 1090

Seed Starting

If you're frustrated with your windowsill efforts, look no further for answers about growing flower, vegetable and herb seedlings without a greenhouse. We'll examine plants with special germination needs and interpreting catalogues. Session includes slide program and handout.

$12.00

XPI 1126

Growing Great Vegetables

In the first session we will discuss dozens of ideas for making growing your own

vegetables easier and more accessible, including how to get more production from less space. The second session focuses upon how to grow specific cool-season and warm-season crops. Both sessions include slide programs and handouts.

$17.00

XPI 1200

Herb Gardening for the Novice

This class provides a full sensory experience: a full slide program of different herbs and herb gardens. We will explore the differences between annual and perennial herbs and discuss seed starting. You will also get to smell and taste herbs in a few recipes, receive pages of handouts with recipes and uses. Learn how to make herbal oils, vinegars and more. (Class is devoted to culinary, not medicinal herbs.) For novice and seasond gardeners alike.

$12.00

XPI 1205

Cottage Garden in Suburbia

Cottage-type gardens replete with an abundance of old- fashioned annuals and perennials are enjoying a resurgence in popularity. Find out how you can create one of these gems for your own sunny yard, and view a slide show of plants suitable for our climate. This class is for novice and seasoned gardeners alike. Fee includes handouts and bibliography. Note:landscaping consultation not provided.

$12.00

XPI 1210

Made-in-the-Shade Gardening

Shade gardeners don't worry about sunburn, tomato wilt or wind-whipped plants. But what do you grow in the shade besides impatiens and hostas? What can you do about (eeuw) slugs and snails? Learn about flowering shade plants beyond impatiens and hostas. Class includes a slide program of three seasons of flowering plants and handout. For novice and seasoned gardeners alike.

$12.00

XPI 1215

Midwestern Rock Gardens

Even experienced gardeners often shy away from rock gardens because many of the traditional alpine plants are unfamiliar or will not grow in humid weather. However, anyone can have a rock garden. They are neither hard to make nor hard to stock with plants that like Kansas City weather. Class includes handouts, slide program showing suitable plants, rock gardens and directions on how to create your own. For novice and seasoned gardeners alike.

$12.00

XPI 1225

The "Dirt" on Composting

Composting can be as easy or as enthusiastic as you want. We will discuss a heap of ways to add inches of nutritious, soil-loosening compost to your beds. Dig into the details of how to trouble-shoot your pile and what to do about all those leaves! Class includes a slide program and handout. For novice and seasoned gardeners alike.

$12.00

XPI 1240

Xeriscaping: Cottage Gardens on the Prairie

Xeriscaping doesn't mean "zero-landscaping", but rather landscaping that holds up better in years of drought. Learn how our native wildflowers and other tough, well-adapted flowers and ornamental grasses will allow you to create an old-fashioned style "cottage garden" for the sunny areas of your yard. Class includes a slide program and handout. For novice and seasoned gardeners alike.

$12.00

XPI 1241

What's Bugging You?

Entomologist Andrea Ray-Chandler focuses on answering your flower, herb and vegetable queries with a colorful slide program, humorously describing how you can use IPM methods to solve pest problems, encourage beneficial predators, help save the bees, generally have fun with insects and de-bug some myths as well!

$12.00

XPI 1245

How (Not!) to Ruin Your Garden

Is mint taking over your herb bed? Do your flowers have their faces in the mud after a rainstorm? Are your front door and windows disappearing behind junipers? Did your tulips end up a Straggling Thin Line of Soldiers? A tongue- in-cheek approach to identifying common gardening mistakes, how to remedy old problems, and prevent future ones. Class includes a slide program and handouts. For novice and seasoned gardeners alike.

$12.00

XPI 1250

Butterfly Gardening

Join the growing number of people who enjoy this exciting hobby that combines the best of gardening and butterfly watching. This gardening class includes a slide program of butterflies, the flowers that attract them and gardens. The handout has descriptions of suitable plants for local butterflies. This class is for novice and seasoned gardeners alike.

$12.00

XPI 1260

Habitat Landscaping

Interest is growing in our native plants and providing a habitat for birds and other wildlife. Learn how to extend beyond birdfeeders to providing shelter, water, natural food sources and more, while maintaining a pleasing and suitable style of natural landscaping. Discussion will include wildflower gardens as well as trees and shrubs. Handouts includes bibliography, sources and descriptions of suitable plant materials.

$12.00

XPI 1265

Perfect Perennials and Awesome Annuals

Perennials are sometimes advertised as "just plant and that's all"; well, not quite. What we have here is a plan for pinching, pruning and dividing to keep your flowers blooming longer and plants tidier and healthier. Class includes a slide program illustrating different techniques, and a handout detailing how you can keep your garden "in the pink" with a minimum of fuss. For novice and seasoned gardeners alike.

$12.00

XPI 1280

Flower Bed Design

This visually-oriented program on design concepts will use the first class to introduce you to the uses of color, visual texture, foliage effects, plus address the quantity of materials needed and using hardscape elements in your flower garden. The second session allows you to then put these concepts into practice in instructor-guided and small-group work. Classes include a slide program and handout. For novice and seasoned gardeners alike.

$17.00

XPI 5000

Growing Plants for Fun and Profit

Turn your love of plants into an enjoyable and profitable home business. Learn how to grow and market plants on a small scale without major capital investment, select and produce plants appropriate to your climate zone, and how to produce quality material.

$85.00

Insurance (XNI)

XNI 2377

Insurance Ethics - 1 Ethics

In this one-hour session you will work with the instructor to secure a consensus on the meaning of the term "ethical behavior." You will then discuss examples of company, client and agent/broker behavior for evaluation from the standpoint of the consensus meaning. CECs: 1 Ethics, Kansas and Missouri Insurance Departments.

$39.00

XNI 5008

NFIP: The Elevation Certification

Filling out the NFIP Elevation Certificate (EC) has not always been easy, judging from comments the Federal Insurance Administration (FIA) has received about the EC's format and the relevance of the data collected on it. However, the process of identifying and rating flood risks just got a little easier. Attend this course to learn more about the new Elevation Certificate. Use of the new certificate will become mandatory on January 1, 2000, if the certification date is on or after that date. No fee for this class.

$0.00

XNI 6025

NFIP 2006-2008

You will be given an overview of the National Flood Insurance Program and the NFIP's Elevation Certificate Program changes. The federal government has created a new Elevation Certificate and its use became mandatory in October 2000. This training provides a review by comparing each section with the correlating instructions and carefully analyzes the process of this highly technical document. Several hands-on exercises will be presented to ensure that you have a complete comprehension of the Elevation Certificate.

$30.00

Intensive English (XGI)

XGI 1020

American Idioms and Slang

Prerequisite: Appropriate placement. 3 HRS. Students are introduced to a broad selection of common idioms used in a wide variety of contexts, from love to last wishes. Students will learn to recognize, understand, and use idioms and slang appropriately through various listening, reading, speaking, and writing activities. Students will also become familiar with resources that help continue building knowledge of idioms and slang.

$195.00

XGI 1030

Study Skills

This course is designed to focus on developing practical study skills to enhance academic and life skills success. Skills taught in this class are time management, concentration, listening, note-taking, exam preparation and testing, use of library resources, and personal issues that face many university students.

$130.00

XGI 1043

English Pronunciation Improvement Class

Do you think your pronunciation needs improvement? Are you worried that your accent keeps people from understanding you when you speak? If so, then this class is for you! Learn various pronunciation skills that will help you to express meaning and feel confident in many different types of spoken communication. This class will give you strategies, learning tools and practice while you focus on the important English pronunciation issues, such as rhythm, stress and intonation.

$100.00

XGI 1080

American Culture

Learn about and understand American customs and practices including idioms and slang.

$189.00

XGI 1083

US Culture

Students focus on the traditional values that have attracted people to the United States for over 200 years and traces the effects of these values on American life. Themes include diversity, the family, education, government and politics, religion, business, and recreation. Cross-cultural activities --- from discussion topics to writing projects --- encourage students compare their own values with those discussed in the readings.

$189.00

XGI 1092

Computer Mediated Communication

We live in a world which increasingly relies on digital communication. Not only do individuals communicate with each other via different electronic media, but businesses and educational institutions are also taking advantage of the unique opportunities provided by such communication. As such, this course aims to familiarize students with a broad range of computer-based communication formats. Among other topics, students will explore and develop the ability to effectively utilize a course website, engage in synchronous (real time) and asynchronous (delayed) communication with other English learners, and reflect upon these experiences by using a class blog. Ultimately, students will acquire the skills and tools necessary to succeed in an academic setting as well as the work force.

$189.00

XGI 1093

Multiple Skills

Multi Skills 1093 001-003 and 004-006: Students with various levels of English proficiency use all English skills to develop fluency through the discipline of reading and writing in the MW class and may enroll in a separate section to develop fluency through the discipline of oral communication in the TR class. Various subjects and topics will be taught and discussed using various resources and materials. Students may enroll in either one or both sections.

$189.00

XGI 1094

JCCC Information Systems and Keyboarding Improvement

The student will achieve a basic working ability on the computer for word-processing. To teach basic keyboarding skills to students who are not familiar with the Standard American Keyboard, or who type less than 15 WPM with 75% accuracy.

$63.00

XGI 1110

Oral Communication 1110

Prerequisite: Appropriate placement test score. 3 HRS. Students develop listening and speaking skills and strategies necessary for critical thinking, listening to lectures, participating in discussions, giving presentations, taking notes and working in study groups with an emphasis on clarification through rewording and asking questions.

$195.00

XGI 1112

Pronunciation 1112

Prerequisite: Appropriate placement test score. 3 HRS. This course provides the students with knowledge, strategies, tools, and opportunities to improve conversational and academic North American English pronunciation and sounds both individually and in continuous speech. Students will learn and practice to express meaning and feel confident in different oral communication situations. The goal is for the students to understand and to be understandable to a native speaker of North American English.

$195.00

XGI 1120

Oral Communication 1120

Prerequisite: Appropriate placement test score or XGI 1110. 3 HRS. Students continue to develop listening and speaking skills and strategies necessary for critical thinking, listening to lectures, participating in discussions, giving presentations, taking notes and working in study groups with an emphasis on clarification through rewording and asking questions.

$195.00

XGI 1122

Pronunciation 1122

Prerequisite: Appropriate placement test score or XGI 1112. 3 HRS. This course provides the students with knowledge of academic pronunciation and prepares such students for future participation in U.S. based college and university classes. Students will learn and practice high level strategies and activities which will develop oral and aural proficiency improving the student's ability to understand conversational and academic North American English and to be able to produce English sounds individually and within the context of continuous speech at an

advanced level. The goal is for the students to understand and to be understandable to a native speaker of North American English.

$195.00

XGI 1130

Oral Communication 1130

Prerequisite: Appropriate placement test score or XGI 1120. 3 HRS. Students develop communication, organization, and pronunciation skills necessary for effective academic presentation and discussion with an introduction to lecture note taking.

$195.00

XGI 1132

Pronunciation 1132

Prerequisite: Appropriate placement test score or XGI 1122. 3 HRS. This course provides the students with knowledge of academic pronunciation and prepares such students for future participation in U.S. based college and university classes. Students will learn and practice high level strategies and activities which will develop oral and aural proficiency improving the student's ability to understand conversational and academic North American English and to be able to produce English sounds individually and within the context of continuous speech at an advanced level. The goal is for the students to understand and to be understandable to a native speaker of North American English.

$195.00

XGI 1140

Oral Communication 1140

Prerequisite: Appropriate placement test score or XGI 1130. 3 HRS. This course is designed to focus on developing practical study skills to enhance academic and life skills success. Skills taught in this class are time management, concentration, listening, note-taking, goal setting, exam preparation and testing, use of library resources, and personal issues that face many university students.

$195.00

XGI 1142

Pronunciation 1142

Prerequisite: Appropriate placement test score or XGI 1132. 3 HRS. This course provides the student with knowledge of academic pronunciation and prepares such students for future participation in U.S. based college and university classes by providing tools, strategies, and techniques to speak clearly and accurately. Students will learn and practice high-level strategies and activities which will develop oral and aural proficiency improving the student's ability to understand conversational and academic North American English and to be able to produce English sounds individually and within the context of continuous speech at an advanced level. The goal is for the students to understand and to be understandable to a native speaker of North American English.

XGI 1210

Structure 1210

Prerequisite: Appropriate placement test score. 3 HRS. This course is designed to provide students numerous opportunities for practice in all grammar areas that are important for the beginning grammar student to become a better writer of English. A variety of exercises and activities, both written and oral, enhance this practice with guided study in the classroom and independent work outside the classroom. Weekly computer labs provide further self-paced practice, both during and outside of class time. The goal of this course is to set a foundation for bridging the gap between the study of English as a Second Language and the use of academic English in the college classroom setting.

$195.00

XGI 1220

Structure 1220

Prerequisite: Appropriate placement test score or XGI 1210. 3 HRS. This course is designed to provide students sufficient practice in all the grammar structures that are important for the intermediate grammar student to become a better writer of English. A variety exercises, both oral and written, supplement this practice with guided study in the classroom and self-study outside the classroom. Weekly computer labs give further self-paced practice, both during and outside of class time. The goal of this course is to begin bridging the gap between the study of English as a Second Language and the use of academic English in the college classroom setting.

$195.00

XGI 1230

Structure 1230

Prerequisite: Appropriate placement test score or XGI 1220. 3 HRS. This course is designed to provide students intensive practice using the target grammar structures that are important for the high-intermediate grammar student to become a better academic writer of English. Students will focus on the form, meaning and use of those grammar structures most pertinent to high-intermediate-level rhetorical styles and writing requirements, through extensive and diverse practice exercises, both oral and written. This practice is provided by means of guided study in the classroom, self-study outside the classroom, and weekly computer labs for further self-paced practice, both during and outside of class time. The goal of this course is to further reduce the gap between the study of ESL and the use of academic English in the college classroom setting.

$195.00

XGI 1240

Structure & Writing 1240

Prerequisite: Appropriate placement test score or XGI 1230. 6 HRS. Students develop the ability to comprehend and interpret authentic college-level writing assignments across the disciplines and to respond to them by applying appropriate writing strategies (i.e., comprehend and select material, plan, draft, and revise their written text).

$390.00

XGI 1250

Structure Workshop 1250

Prerequisite: Appropriate placement test score or XGI 1210. 3 HRS. Study, practice, and use the various structures of English to become a better speaker and writer.

$189.00

XGI 1310

Writing 1310

Prerequisite: Appropriate placement test score. 3 HRS. Students review basic English sentences structures and develop the ability to write accurate, fluent, multiple sentences about basic academic topics with an emphasis on the use of specific detail and sentence combining.

$195.00

XGI 1320

Writing 1320

Prerequisite: Appropriate placement test score or XGI 1310. 3 HRS. Students continue to develop academic writing with an emphasis on writing level-appropriate academic paragraphs in the traditional modes: observing, describing, defining, comparing and/or contrasting, explaining processes and/or classifying, and explaining cause(s) and/or effect(s).

$195.00

XGI 1330

Writing 1330

Prerequisite: Appropriate placement test score or XGI 1320. 3 HRS. Students develop the ability to compose (i.e., comprehend, select, plan, and draft) and produce lengthier texts on diverse general education academic topics by applying appropriate writing strategies.

$195.00

XGI 1410

Reading 1410

Prerequisite: Appropriate placement test score. 3 HRS. Students develop the ability to read texts on familiar, basic academic topics with an emphasis on application of critical reading skills.

$195.00

XGI 1411

Vocabulary 1411

Prerequisite: Appropriate placement test score. 3 HRS. Students expand vocabulary and develop vocabulary skills.

$195.00

XGI 1420

Reading 1420

Prerequisite: Appropriate placement test score or XGI 1410. 3 HRS. Students continue to develop academic reading abilities including texts on contemporary academic and literary topics with an emphasis on extensive reading and the enhancement of critical reading skills.

$195.00

XGI 1421

Vocabulary 1421

Prerequisite: Appropriate placement test score or XGI 1411. 3 HRS. Students continue expanding vocabulary and developing vocabulary skills.

$195.00

XGI 1430

Reading 1430

Prerequisite: Appropriate placement test score or XGI 1420. 3 HRS. Students continue to develop academic reading abilities including texts on contemporary academic and literary topics with an emphasis on extensive reading and the enhancement of critical reading skills.

$195.00

XGI 1431

Short Stories 1431

Prerequisite: Appropriate placement test score or XGI 1420. 3 HRS. Students

develop academic reading abilities by being introduced to the works of famous American authors, while building reading, vocabulary, writing, and discussion skills and analyzing and understanding literary terms and techniques. The texts feature original and adaptations of classic stories that progress in difficulty and which highlight important people and periods in American cultural, social, and political history.

$195.00

XGI 1440

Reading 1440

Prerequisite: Appropriate placement test score or XGI 1430. 4 HRS. Students develop academic reading abilities including texts on contemporary literary and academic topics with an emphasis on extensive reading and the enhancement of critical reading skills. Students develop the ability to understand and use academically appropriate new words.

$260.00

Law Enforcement (XNP)

XNP 0140

Basic Leadership/Johnson County Sheriff's Department

Upon successful completion of this course, the student should be able to define the supervisor's role within a company and identify the skills necessary to successfully fulfill that role. In addition, the student should be able to determine the supervisor's role in supervising employees on an individual basis and as a group. The student should also be able to apply the principles of supervision in simulated work situations. (10 sessions)

$121.00

XNP 5000

Pediatric Advanced Life Support & Trauma Course

Instructor: Barnett

$210.00

XNP 5002

Law, Leadership, and Liability for Law Enforcement

Emphasis will be placed on the practical realities of day-to-day police work, merging the dynamics of 21st century policing with the need for protection of constitutional and human rights. The program orientation will be positive, proactive, and practical.

$0.00

XNP 5010

EMT Recertification

A description is not available for this course.

$99.00

XNP 5011

EMT Intermediate Update

This course will provide information regarding new trends and equipment in intravenous therapy. There will be time to practice your skills as well. Completing this course will meet your recertification requirements for EMT-I by the Kansas Board of EMS.

$29.00

XNP 5012

EMT Defibrillator Update

This course will provide information and practice session for EMT's to update their knowledge and skills in defibrillator therapy. Completing this course will meet your recertification requirements for EMT-D by the Kansas Board of EMS.

$29.00

XNP 5013

EMT "B" Refresher

(4 sessions)

XNP 5014

EMT-P Refresher

A description is not available for this course.

$250.00

XNP 5020

Emergency Care: Are We Doing It Right?

Paul Pepe, one of the country's leading physician researchers in emergency medicine, will lead this day- long seminar on evolving issues in resuscitation and emergency medicine. Seminar topics will include directions in the early management of post-traumatic hemorrhage, improved criteria for both termination and waiver of resuscitation efforts, ACLS and new directions in the pre-hospital management of severe trauma.

$59.00

XNP 5030

Internal Affairs Personnel Management

Instructor: Southeastern Center

$295.00

XNP 5040

Basic Crime Scene Processing

Instructor: Chapin

$100.00

XNP 5050

Administration and Supervision of Field Training Officer

Instructor: Kaminsky

$350.00

XNP 5060

Sexual Harassment

Instructor: Brewer

$65.00

XNP 5070

Overview of the Internet

A description is not available for this course.

$0.00
XNP 5080

BLS INStructor Reaffirmation
A description is not available for this course.

$50.00
XNP 5090

Law Enforcement 40-hour Block Training
A description is not available for this course.

$200.00
XNP 5100

Ethics and Integrity in Law Enforcement
A description is not available for this course.

$99.00
XNP 5110

Identifying Lies & Disguise
A description is not available for this course.

$450.00
XNP 5120

W-Z Seminar on the Reid Method of Criminal Interviews & Interrogation
The purpose of this course is to crystallize the experience of the trained investigator and to focus on those aspects of interview and interrogation which will prove most useful in the investigative process. For the new investigator, it will form the basis for growth by providing a structured format that can be used while the investigator gains experience. The approach of the course is one of practical application rather than theory. (3 sessions)

$499.00
XNP 5121

Reid's Adv Interview/Interrog
A description is not available for this course.

XNP 5125

Clear, Concise Report Writing
A description is not available for this course.

$65.00
XNP 5130

Principles for Effective Drug Enforcement
A description is not available for this course.

$195.00
XNP 5131

Drugs and Impaired Driving

A description is not available for this course.

$57.00
XNP 5140

Physical Fitness Standards & American Disabilities Act

A description is not available for this course.

$195.00
XNP 5160

Instructor Development

A description is not available for this course.

$0.00
XNP 5170

Accident Investigation Course

Instructor: Plumly

$600.00
XNP 5171

Death Investigations

A description is not available for this course.

$29.00
XNP 5179

Field Training for CTO

Following requests from dispatchers and communication center supervisors for 'a course of our own, we offer this three and a half-day program based on the widely used "San Jose " model to assist you in creating, re-designing and implementing a CTO program in your agency. Topics covered will include key elements for success, legal and ethical issues, the evaluation process, the role of the supervisor, and more. Interactive video practice sessions will be included.

$429.00
XNP 5180

Basic Field Training Officer Course

This five day program is designed to prepare newly selected FTOs and/or program supervisors for their respective roles. Additionally, the course incorporates various components of program development and operation. This information is particularly useful for agencies undertaking the initial program or agencies wishing to "measure" an existing model against known standards.

$519.00
XNP 5181

Field Train Officer/Supv Adv

A description is not available for this course.

$395.00
XNP 5182

Coaching Within an Evaluation Program

A description is not available for this course.

$350.00
XNP 5190

Supervision of Police Personnel

Prepare your first-line supervisors with the training they need to fulfill their leadership responsibilities. This two-week, 80 hour program assists supervisory personnel in making the transition form office to supervisor. The role of law enforcement supervisor is a challenging one, requiring the ability to maintain a balance between the objectives and responsibilities of workers and upper-level management, and the ability to manage the ever-increasing volume of job-related data. Topics covered include responsibilities of a staff officer, ethics, professionalism, community image, communication, motivational principles,. supervisory challenge, diversity, disciplinary process, complaint investigations, planning and decision making, leadership, managing problem employee, employee performance appraisal, the personal profile system (DiSC) and case studies.

$995.00
XNP 5200

School Resource Officer Training

A description is not available for this course.

$400.00
XNP 5201

Sro/Solutions/Violence

A description is not available for this course.

$340.00
XNP 5300

Developing Your Leadership Style

A description is not available for this course.

$90.00
XNP 5301

Knife Defense

A description is not available for this course.

$40.00
XNP 5302

Search and Seizure

A description is not available for this course.

$25.00
XNP 5303

Search and Seizure

A description is not available for this course.

$50.00
XNP 5304

Gangs

A description is not available for this course.

$25.00

XNP 5305

Hand Gun Retention

A description is not available for this course.

$25.00

XNP 5307

Law Enforcement Internet

A description is not available for this course.

$45.00

XNP 5308

Pract. Kines. Rdside & Fld Int

This course teaches multi-phase behavioral analysis and tactical interrogation methods using advanced kinesic interview and interrogation theories. It is designed to provide the street/road patrol interdiction officer with knowledge and understanding of truthful and deceptive verbal, nonverbal, and emotional behaviors exhibited by subjects during vehicle stops or when taking incident reports. The course discusses practical kinesic principles, verbal cues, stress response states, body language cues and confession behaviors.

$395.00

XNP 5310

Weapons of Mass Destruction and Their Biological Threat

A description is not available for this course.

$50.00

XNP 5311

Crime Scene Refresher

A description is not available for this course.

$25.00

XNP 5312

Risk Mgmt for Supervisors

Gordon Grahm speaks on "Five Concurrent themes for Success, Why Things Go Right, and Ethical Decision-making"

$99.00

XNP 5313

Risk Mgmt for Officers

Gordon Grahm speaks on "Five Concurrent themes for Success, Why Things Go Right and Ethical Decision-making"

$99.00

XNP 5314

Critical Incident Resp Tips

A description is not available for this course.

$165.00

XNP 5315

Adv. Officer Survival

Advanced Officer Survival and Mobile Platoon Deployment - offered by James R. Davis

$185.00

XNP 5316

911 Oper.- Fund. of Terrorism

Fundamentals of Terrorism for 911 Dispatchers and Call Takers - by James R. Davis

$165.00

XNP 5317

Homicide Investigations

The goal of the training program is to acquaint the novice investigator withy all facets of death investigation, including the esoteric terminology that is unique to homicide cases. Attendees will become familiar with the indicators of suspicious death and learn just how equivocal the death scene can be. They will also become confident in assessing the crime scene and determining what type of action should be taken through the prioritization of viable lead.

$0.00

XNP 5400

Police Staff and Command

A description is not available for this course.

$4,500.00

XNP 5500

DISABILITY AWARENESS FOR LAW ENFORCEMENT

This course raises awareness among the law enforcement community of the problem of victimization of people with disabilities. Other components provide law enforcement officials with a broad understanding of disability issues including: state and federal laws pertaining to people with disabilities; how to recognize a disability and how to effectively communicate and interact; how to deal with an offender with a disability; and the structure and availability of disability services and resources in the community. (2 sessions)

$99.00

XNP 5600

High Risk Patrol Operations

A description is not available for this course.

$175.00

XNP 5700

OBJECTIVE PRE-EMPLOYMENT

There is a direct relationship between people who do not meet a hiring agency's basic qualifications or behavioral requirements and their tendency to exaggerate, fabricate, minimize, or omit critical information needed to make hiring decisions. Legislation has been proposed that would eliminate government's use of polygraph and various psychological tests (already illegal in the private sector). Record checks (criminal, credit, academic, traffic, etc.) require that a record exist (seldom the case, particularly with regard to criminal misconduct, violence, or

conflicts of interest) and drug tests can be defeated by simple temporary abstinence. In short, it's becoming increasingly more difficult - and expensive - to obtain accurate information regarding sworn and civilian candidates for employment. This course is appropriate for recruiters, personnel officers, background investigators, members of the oral board, and administrators charged with the selection of police and other public personnel for positions of trust. It does not attract negative media or legislative attention and often provides critical employment information unattainable from any other source. (2 sessions)

$319.00

XNP 5705

Basic Leadership

This course is designed for first-line supervisors. The supervisor's role will be defined and skills to successfully fill that role will be discussed. Areas of study include the functions of management, differences between managing and leading, the role of creativity, team building and problem solving for a supervisor, characteristics necessary for a supervisor to get the most from his/her direct reports, a supervisor?s role in the total management structure of an organization, how a knowledge of demographics, abilities, values, attitudes, perception, and personality influence individual behaviors, the theories of motivation and how they can be applied to successfully guide employees toward accomplishing organizational objectives, the communications process, how to use it effectively, and barriers to it, and managing all the stress, The Life Styles Inventory (LSI) will be completed.

$359.00

XNP 5710

Advanced Leadership for Law Enforcement

Advanced Leadership for Law Enforcement is a 40-hour course directed toward law enforcement managers, lieutenants and higher. Basic concepts of leadership are reviewed, and knowledge and skill areas appropriate to the increased responsibilities of administrative staff or line command positions are studied in depth. These areas include teams and team building, trust, change management, organizational culture, the Organizational Culture Inventory (OCI), conflict resolution, the Conflict Style Inventory and negotiation.

$349.00

XNP 5715

Jo. Co Sheriff Department

A description is not available for this course.

$79.00

XNP 5720

Concealed Carry: Legal Rights and Officer/Subject Safety Issues

A discussion of the new Kansas Concealed Carry law; how it compares with similar states; what are the requirements for citizens to carry; and what officer can expect on the road and in regards to cultural shifts.

$69.00

XNP 5722

Concealed Carry Follow-Up

A follow-up to the Concealed Carry: The Police Perspective class by the Kansas Attorney General's office.

$10.00

XNP 5725

Legal Update: What Law Enforcement Officers Need to Know

This course will cover recent changes to Kansas criminal laws. New statues affecting police and court procedures in criminal cases will be discussed. In addition, important decisions by the U.S. Supreme Court and the Kansas appellate courts will also be analyzed, along with their impact on law enforcement.

$49.00

XNP 5730

Objective PreEmployment Screen

This course is appropriate for recruiters, personnel officers, background investigators, members of the oral board, and administrators charged with the selection of police and other public personnel for positions of trust.

$319.00

XNP 5735

Civil Liability for Line Officers

A description is not available for this course.

$0.00

XNP 5740

Courtroom Testimony

This class will focus on the police officer's role as a witness. Styles is testifying, do's and don'ts and the needs of the prosecutor will be explored. Focus will be made on preparing the officer for cross examination, and how to effectively combat defense tactics. This class has been extended to 6 hours in order to allow adequate time to cover courtroom scenarios.

$79.00

XNP 5745

Understanding Organizational Culture

Think about your law enforcement agency. What messages are being communicated by its organizational culture that may influence individual or group behavior. This class will address this and other issues involved with working in and through your agency's culture.

$79.00

XNP 5750

Emotional Survival for Law Enforcement

The goal of the course is to have the law enforcement professional review the potential impact the career causes in the personal life and develop strategies for overall emotional survival. The strategies are designed to permit the professional to continue functioning effectively and ethically without "burning-out" and without resorting to emotional isolation from friends and colleagues.

$165.00

XNP 5751

Emotional Survival for Law Enforcement Families

Dr. Gilmartin discusses the impact of the law enforcement profession on families, spouses and significant others. Learn how you can take an active part in the emotional survival of a loved one whose chosen profession is law enforcement.

$49.00

XNP 5755

Basic Gang ID and Update

A description is not available for this course.

$79.00

XNP 5760

On-line Sexual Predators

This course is a detailed exploration of the increasing problem of online sexual predators. It will cover past and ongoing investigations. The focus includes Internet habits of teens as well as predators and the techniques that Johnson County Sheriff's department utilizes to investigate online child sexual offenders. This course will also include an overview of state, local and federal laws surrounding this criminal behavior.

$79.00

XNP 5765

Interpersonal Communication Skills I

TBA

$65.00

XNP 5766

Interpersonal Communications Skills II

TBA

$65.00

XNP 5770

Firearms Qualification I

TBA

$65.00

XNP 5771

Firearms Qualification II

TBA

$65.00

XNP 5772

Firearms Qualification III

TBA

$65.00

XNP 5773

Firearms Qualification IV

TBA

$65.00

XNP 5774

Future Trends in Crime and American Policing: Survival Skills for the 21st Century

The American culture has and will continue to undergo significant and dramatic changes. The increased diversification of the population, the role of technology in crime and in crime fighting and the changing nature of American violence are just

a few of the trends and discuss how they will impact crime and American policing in the coming decades.

$119.00

XNP 5775

Search and Seizure Law Update

TBA

$65.00

XNP 5780

Identity Theft

This lesson will include an overview of Identity Theft. The presentation encompasses video, scenarios, law review, and a simulated Identity Theft investigation. The simulated scenario will focus on obtaining new techniques in combating financial crimes by utilitzing audience input to capture a broad range of expertise from the initial police complaint to presecution. Conscious of the statistic that 1 out of every 4 people will have their identity compromised within the next two years, the course design encourages an attendee to listen as a responding officer as well as a potential victim. Prevention tips on guarding ones identity will be discussed, examples of schemes and new trends will be shared, and details on courses of action in the event an identity is compromised will be included.

$65.00

XNP 5785

Computer Crimes

This course will provide a comprehensive look at the current trends in the growing subject of computer-related crimes. Instruction will include topics of on-line fraud, electronic storage of evidence of criminal activity, child pornography, on-line enticement, and financial crimes. This course will also instruct attendees on the basic seiaure of electronic evidence and proper packaging techniques. The instructor will also present some personal case studies to demonstrate how investigations were conducted and mistakes that were made. Several new technology devices and "toys" will be presented in the class. The instructor intends for the course to be interactive and discussion from the participants is highly encouraged. Some material may be offensive, but is Law Enforcement related and intended for educational purposes only. The instructor will also attempt some humor and will keep the mood very casual. This course is directed to Law Enforcement Officers who have had very little computer exposure, to those who have a great deal of expertise in the subject.

$65.00

XNP 5790

Crime Scene Basic Photography

This will be a four hour class on basic police and crime scene photography. Topics covered will include the basic operation of the digital cameras that most agencies utilize for crime scene photography and their associated media, downloading/emailing/editing images, storage/evidence issues, special features found on most digital cameras, how to photograph various types of crime scenes, the use of scales, the proper use of perspective in photography, legal issues regarding digital images vs. 35 mm photos, do's and don'ts of crime scene photography. The course will consists of the viewing and analyzing of actual crime scene photos taken from various types of cases that the instructor has been involved in including homicide, rape, child abuse, aggravated battery, robbery, and property crimes.

$65.00

XNP 5791

Crime Scene Patrol Level

Understanding each crime scene is unique but that each requires similar processes, procedures, and documentation is the first step to a systematic approach to each scene. This class is for patrol officers and covers topics from gathering initial information and doing a walk through to crime scene diagrams and evidence collection.

$65.00

XNP 5795

Stress Management

This course will teach officers how to be pro-active throughout their careers in regard to the emotional problems consistent within law enforcement. This class will follow the model provided through PHD Kevin Gilmartin, author "Emotional Survival for Law Enforcement" and will discuss the varying stresses an officer can expect to encounter through their social, family and duty roles. The class will examine such topics of entitlement, balance and perspective that are primary issues in a law enforcement career.

$65.00

XNP 5800

Ethics

TBA

$35.50

XNP 58005

Advan'd Accident Investigation

The course is a technical motor vehicle crash investigation class in which students will learn and apply basic principles of physics and mathematical equations to estimate speeds and causes of motor vehicle crashes. The proper procedures for measuring, completing scale diagrams, and recording physical evidence and facts available only at the crash scene will be taught.

$129.00

XNP 5810

Advanced FTO

Designed for Training Officers and Supervisors who have completed a basic Training and Evaluation Program course based on the San Jose Model. The advanced strategies used in this presentation are designed to maximize the effectiveness of those responsible for training and supervising the newly hired employee.

$319.00

XNP 5815

Criminal Interdiction

In this class, officers will learn how, during routine traffic stops, to identify indicators that may lead to investigation of other criminal activity. The course will also teach officers to identify hidden compartments; both those existing naturally in vehicles, and those that have been mechanically installed by sophisticated drug smugglers. Topics will include: Indicators, legal issues, racial profiling, rental cars, false compartments and use of K-9.

$99.00

XNP 5820

Pharmaceutical Diversion Investigation Training

This course will provide the student with a national overview of the abuse of

prescription drugs, an understanding of the Controlled Substance Act as it applies to prescription controlled substances and a description of prescription drug crimes and their victims. Suggestions will be provided for the targeting, investigating and reporting of these offenses.

$19.00

XNP 5825

Officer Involved Shooting Investigations

The purpose of this course is to provide attendees with a basic investigative model that is applicable to all officer involved shootings, incidents, regardless of the size of their department. Police officer involved shootings are vastly different from any other type of investigation. The stakes for the shooting officer and his department are so high that it is imperative that the investigation be conducted in a prescribed manner. This course will provide those in attendance with the knowledge, skills and confidence necessary to handle any deadly force incident.

$0.00

XNP 5830

Command Officer Development Course

The course has been developed to provide participants with a group of management tools that can be applied on the job. This training provides a comprehensive overview of management practices. The course was built around a traditional police administration course. Additional classroom hours were added to provide an in-depth treatment of specific topical areas.

$3,445.00

XNP 5835

Domestic Terrorism

The session examines the wide variety of hate groups currently active in the United States - their history, activities and leaders. Beginning with a broad overview of the various factions of the hate movement, which include the Ku Klux Klan, neo-Nazis, racist Skinheads, black supremacists and others, it will then focus on the most prominent national organizations and state and local chapters. The session also offers several open-source, public Internet resources that can be used to examine these groups and their websites.

$19.00

XNP 5840

Columbine Debriefing

Dr. John Dunaway will complete a de-briefing for law enforcement on the Columbine High School shootings, which took place in Littleton, Colorado on April 19, 1999. John was the Undersheriff of Jefferson County at the time of the incident and was heavily involved in handling it from start to finish. His de-briefing will cover the actual incident, the aftermath and ways to avoid having something like it happen again. This class is for Law Enforcement Officers only.

$19.00

XNP 5845

The Bullet Proof Mind

One of the world's foremost experts and speakers on the psychology of conflict, Army Ranger, West Point Psychology Professor, author of the Pulitzer nominated books: On Killing, and his new book, On Combat, Lt. Col. Dave Grossman, addresses: A new era of 'record' body counts in international and domestic terrorism, Salient historical events that may influence terrorist behavior, The possibility of school violence, and school/workplace violence prevention, A virus of violence in America and world-wide, its causes, and its effect, The psychological cost of conflict, The physiology and psychology of a conflict situation, PTSD: What is it and how to prevent it, The resistance to killing in every healthy human,

Non-firers throughout history, A revolution in combat: Use of training to overcome the resistance to killing, Training kids to kill: The virus of violence and how kids are being enabled to kill, Survival after the battle and in the years to come.

$165.00

XNP 5850

Linguistic Statement Analysis Technique

All humans use the same subconscious strategies to lie by using differnt words and phrases, statement structure, and content in their written and spoken statements. Decades of research by experts in the fields of language, psychology, and deception detection have led to the identification of these trends in language that are referred to as linguistic signals. Using LSAT, investigators can identify the linguistic signals that differentiate deceptive statements from truthful ones.

$219.00

XNP 5855

Law Enforcement Operations

This program will be a presentation on law enforcement operations, focusing on risk management, systems design, customer service, accountability, and integrity. Also included in the program is a system for ethical decision making and many operational risk management ideas for identifying and addressing problem areas. This class is specifically designed for law enforcement supervisory and management personnel.   Attendees wil learn about techniques to maximize customer service, the decision making process, the "risk/frequency" analysis to better insure things go right, utilization of discretionary time, and where improvement is currently needed in our operations of these critical areas. This program is featured at the FBI National Academy program, the National Executive Institue, and the LEEDS program.

$119.00

XNP 5900

Defensive Tactics

Closed class only for B.V.S.D. employees.

$45.00

XNP 5905

HAZMAT

TBA

$65.00

XNP 5910

WMD Awareness I

TBA

$65.00

XNP 5911

WMD Awareness II

TBA

$65.00

XNP 5912

WMD Awareness III

TBA

$65.00
XNP 5915

Use of Force Law Update
TBA

$32.50
XNP 5920

Computer Forensics
TBA

$65.00
XNP 5925

Racial Profiling
TBA

$32.50
XNP 5930

Frontline Negotiation
TBA

$65.00
XNP 5935

Domestic Violence
TBA

$65.00
XNP 5940

CPR/First Aid/AED
TBA

$65.00
XNP 5945

Defensive Tactics I
TBA

$65.00
XNP 5946

Defensive Tactics II
TBA

$65.00
XNP 5950

Media Relations
TBA

$35.50

XNP 5955

Handgun Retention
TBA

$32.50

XNP 6000

Blood Borne Pathogens
TBA

$65.00

XNP 6010

Defensive Driving
TBA

$65.00

XNP 6015

Crime Scene Investigation I
Crime Scene Investigations I examines the very basic aspects of Crime Scene Investigations. Topics that will be addressed include, crime scene safety, search techniques, evidence collection, crime scene documentation, photography, and trace evidence collection.

$349.00

XNP 6020

Emotional Survival for Law Enforcement Families
Dr. Gimartin discusses the impact of the law enforcement profession on families, spouses and significant others. Learn how you can take an active part in the emotional survival of a loved one whose chosen profession is law enforcement.

$25.00

XNP 6025

Crime Scene Investigation I
Crime Scene Investigations I examines the very basic aspects of Crime Scene Investigations. Topics that will be addressed include, crime scene safety, search techniques, evidence collection, crime scene documentation, photography, and trace evidence collection.

$349.00

XNP 6030

Arab, Muslim, Sikh Cultural
Topics include: Cultural competency as it relates to Arabs, Muslims, and Islamic faith both in America and the Middle East; overview of religious diversity in the U.S. and worldwide; post-9/11 reprcussions; overview of Islam; practical guide for law enforcement in understanding Arabic terms, numbers, customs and in understanding Arabic names and culture.

$65.00

XNP 6035

Managing Police Discipline
One of the most pressing administrative problems for many law enforcement

agencies today is dealing effectively with discipline. This interactive seminar deals with the most comtroversial and highest liability issues facing administrators in a straightforward manner, emphaizing practical, positive and proactive solutions that work.

$399.00

XNP 6036

Managing Police Discipline

One of the most pressing advinistrative problems for many law enforcement agencies today is dealing effectively with discipline. This interactive seminar deals with the most controversial and highest liability issues facing administrators in a straightforward manner, emphasizing practical, positive, and proactive solutions that work.

$399.00

XNP 6040

Active Shooter Seminar

A description is not available for this course.

$0.00

XNP 6045

Expandable Baton Instructor Certification

A description is not available for this course.

$199.00

XNP 6050

Tactical Anatomy

A description is not available for this course.

$209.00

XNP 6055

Adult Learning Techniques for the FTO

A description is not available for this course.

$129.00

XNP 6056

Crime Scene Investigation I

Crime Scene Investigations I examines the very basic aspects of Crime Scene Investigations. Topics that will be addressed include: crime scene safety, search techniques, evidence collection, crime sceen documentation, photography, and trace evidence collection.

$379.00

XNP 6057

Kansas Intelligence System Training

Train the Trainer classes for the Kansas Intelligence System.

$0.00

XNP 6058

Law Enforcement Fitness Specialist

This 5-day course is designed specifically for the law enforcement and public safety professional who is involved in developing and delivering physical fitness programs in their academy or department.

$649.00

XNP 6059

Commitment and Leadership

The overall objective of the presentation is to provide a better understanding of the necessary commitment and leadership required in order to be successful, especially when operating in a difficult, adverse, and less than perfect condition.

$99.00

XNP 6060

Courtroom Testimony

A description is not available for this course.

XNP 6061

Law Enforcement Ethics

This class will look at the real life case study in law enforcement that went to the heart of ethical behavior. This case study will be sued to examine how moral, exemplary, personal behavior is at the very core of ethical responsibilities of every police officer.

$65.00

XNP 6062

Crisis Intervention

This class will cover responding to mental health crisis issues and a process for involuntary committals and suicide prevention.

$65.00

XNP 6063

Basic Explosives Recognition for the LEO

This 4-hour block will discuss and examine: 3 types of explosions, recognition of explosives and safety issues, explosive effects, explosive firing train, explosive product features (color, type of detonator, time fuse, etc.), and improvised explosive devices.

$65.00

XNP 6064

Crisis Intervention and Suicide Prevention

This 4 hour block covers common mental illnesses and how to handle crisis situations involving them. Also covered is the committal process in Johnson County and services provided by JOCO Mental Health to assist the police in dealing with Mental illness in the community. Police Officer suicide and how to prevent it is also covered.

$65.00

XNP 6065

Glock Armorer's Ceritifcation

A description is not available for this course.

Leadership (XBZ)

XBZ 2106

Delegating for Productivity and Growth

You will learn skills for successfully matching people, responsibility, and authority to maximize involvement, productivity, motivation, and growth for individuals, groups, and the organization.

$99.00

XBZ 2200

Coaching for Improvement

Individuals need to take responsibility for addressing unacceptable performance or work habits that impact others and the organization-but leaders must know how to help them do it. This course helps leaders conduct effective improvement discussions and provide the feedback and ongoing support people need to improve performance.

$99.00

XBZ 2201

Coaching for Success

This course develops leaders who help people achieve goals and avoid problems, a positive experience for themselves and those being coached. Leaders learn a proven coaching process to ensure they identify coaching opportunities, provide needed coaching and support, observe performance, and measure results until desired outcomes are achieved. They learn how coaching for success benefits individuals, strengthens work groups, and supports company objectives and priorities.

$99.00

XBZ 2202

Delegating for Results

In this course, leaders overcome their hesitation for delegation by learning skills for successfully matching people, responsibility, and authority. This allows them to maximize involvement, productivity, motivation, and growth for individuals, groups, and the organization.

$99.00

XBZ 2203

Developing Others

Organizations need to get the most out of their people, and employees want the opportunity to do more, grow and develop. Developing others is critical to retaining key talent, driving higher levels of employee engagement, and ultimately impacting an organization's success. This course provides leaders, coaches and mentors with a practical process and the skills necessary to develop talent.

$99.00

XBZ 2204

Essentials of Leadership

The essence of being an effective people leader lies in establishing good interpersonal work relationships and having the ability to spark action in others. This course teaches you how to get results through people.   Learners acquire a set of proven interaction skills, discover seven Leadership Imperatives key to meeting today's challenges, and realize their role as a catalyst leader who inspires others to act.

$99.00

XBZ 2205

Leading Change

This course focuses on leaders' crucial role in effectively leading change initiatives in the workplace. Leaders learn how to introduce a change initiative and lead discussions with employees to explore how best to implement the changes. They also learn to help others overcome their resistance to change. These skills enhance a leader's ability to minimize the potentially negative effects of change on morale, processes, and productivity.

$99.00

XBZ 2206

Resolving Conflict

Differences of opinion can quickly escalate into an out-and-out battle. In the workplace, it's the leader's role to recognize the signs of conflict and then to quickly choose the appropriate level of involvement to help resolve the issue. This course teaches leaders how to recognize that a conflict is escalating and minimize damage by using the most appropriate resolution tactic-regardless of which stage a conflict is in. Leaders also learn the true cost of conflict to an organization and techniques for handling even the most challenging conflict-related discussions effectively.

$99.00

XBZ 2207

Getting Started as a New Leader

It's an exciting day in the workplace when an individual is recognized for their performance and rewarded with a promotion to the leadership ranks. This course arms new leaders with the knowledge and skills they need to confront the challenges associated with getting their footing and getting results more quickly in their new leadership role. They learn how to focus their time and efforts on tasks that are most important to the organization's success.

$99.00

XBZ 2208

Making Meetings Work

Most people say they hate meetings, but what they really dislike are non-productive, poorly run meetings. Meetings are a great tool for achieving business results when the right people meet with a clear purpose and specific agenda. This course helps leaders save time and resources by leading meetings that support business needs. Leaders learn how to plan, facilitate, and follow-up on meetings (including virtual meetings) to ensure that there is a payoff for the time invested in meetings.

$99.00

XBZ 2209

Reaching Agreement

In today's fast-paced and competitive environment, organizations must be able to make high-quality decisions as efficiently as possible. You need leaders who can get all of the ideas out on the table and then get everyone to agree on and commit to a course of action. This course teaches leaders seven techniques for making high-quality decisions group members will support and execute.

$99.00

XBZ 2210

Assessing Talent

The move from an individual contributor to a leadership role marks a critical and challenging career transition. Many people who are outstanding in their functional

area prove to be less than successful leaders when it comes to motivating, developing, and retaining top talent. This program is set up as a day-in-the-life format so that you complete tasks and engage in role-plays that simulate challenges that typically occur on the job. You will be assessed on oral communication, coaching, gaining commitment, planning and organizing, and decision making. Two weeks after the assessment center is completed, you will receive a follow-up phone call and feedback report which provides information in key leadership competencies and includes a development guide containing activities that help develop leadership skills.

$1,499.00

XBZ 2211

Leading High Performance Teams

This course provides team leaders with the tools and skills to perform three primary responsibilities-diagnose, coach and reinforce-that support their team's growth.   Leaders learn to diagnose behaviors and conditions that limit team performance. They are equipped to assess their teams strength and weakness, as well as to use coaching and reinforcing skills to be a catalyst for high performance and continuous improvement.

$99.00

XBZ 2212

Retaining Talent

This course helps leaders understand their critical role in retaining organizational talent. They learn to identify what it takes to keep employees happy and satisfied, and how to conduct "quick check" discussions critical for retaining valuable employees. By taking a proactive approach to retaining people, and encouraging people to openly discuss what it will take for them to stay, leaders can create an environment in which people feel valued and satisfied in their jobs.

$99.00

XBZ 2213

Influential Leadership

In today's flatter, ever-evolving organization, leaders need to get things done through people who work outside their line of reporting-and in some cases who even "outrank" them. Welcome to the new age of influence, where effective leaders don't, or can't, throw their weight around to make things happen...even with their direct reports. Leaders learn influencing strategies and how to package ideas to gain the commitment of even the most skeptical coworkers and partners.

$99.00

XBZ 2214

Managing Performance Problems

This course builds leaders' skills in handling chronic performance, work-habit problems or serious misconduct. They learn how to document the problem and explain what the employee must do to address it. Leaders are skilled in discussing and imposing formal consequences while adhering to their organizations' disciplinary policies and procedures.

$99.00

XBZ 2215

Building Winning Partnerships

This course helps leaders to identify their role in establishing alliances among work groups, management, customers and suppliers. They learn how to establish effective partnerships to meet customer needs by developing strategies for gaining people's commitment to working together.

$99.00

XBZ 2216

Reviewing Performance Progress

This course helps leaders drive performance and accountability by replacing the "dread" of performance reviews with the "human touch" that builds trusting relationships with the people who report to them. Leaders learn to conduct effective discussions that recognize people's success and plan for their future development.

$99.00

XBZ 2217

Building an Environment of Trust

Because of the crucial link between trust and business success, leaders must realize the power of trust as a business tool. In this course, leaders learn how to avoid the trust breakers and take action to create an environment in which people take risks, identify and solve problems, and work together to create and sustain high levels of trust.

$99.00

XBZ 2218

Setting Performance Expectations

This course helps leaders drive performance and accountability by helping people understand what is expected of them and gaining their commitment to achieving it. When leaders conduct effective setting expectations discussions, people feel more motivated to perform well because they see how their efforts make a difference.

$99.00

XBZ 2219

Launching a Successful Team

Starting a new team, taskforce, or work group, or re-starting a floundering team is the focus of this course. Leaders learn the process of setting up a team charter, including goals, ground rules, and other important elements of a successful team. The course provides practical, actionable tools to help members stay on track, avoid the problems that plague many teams, and achieve success.

$99.00

XBZ 2220

Achieving Your Leadership Potential

According to surveys of CEOs and HR managers, effective leadership is a competitive advantage for their organizations. Unfortunately, these same surveys show that people at all organizational levels lack confidence in their leaders and in the ability of their organizations to develop good leaders.   This course bridges the widening gap between what is needed and required of today's leaders. A three step process-Diagnose, Plan, and Execute-helps learners stretch their capabilities and accelerate their leadership development.

$99.00

XBZ 2221

Interaction Skills for Success

Improving people?s interaction skills will improve the way your workforce thinks and acts. This course presents the basics on how to work well together, reduce wasted time, lessen conflict, and influence interactions in a positive way.

$99.00

Legal Education and Mediation (XNL)

XNL 1000

Principles of Core Mediation: How to Settle Disputes

You will gain valuable information about the mediation process and how it can be used to effectively settle conflicts. Our instructors are state-approved mediators who will teach you the stages of core mediation, which involves neighbor-to-neighbor disputes, as well as the guidelines for using mediation in your current position. Upon completion of this course and the Practicum you can apply with the state of Kansas to be an approved core mediator.

$449.00

XNL 1005

Core Mediation Practicum

The Core Mediation Practicum involves co-mediating three actual court cases under the supervision of a state-approved mediator. To become state-approved you must co-mediate all three cases in the content are in which you wish to specialize (core, civil, domestic, juvenile dependency or parent/adolescent). Note: This Practicum will meet the Core requirement only. Contact the Professional Education office at 913-469-4420 for more information.

$299.00

XNL 1010

Domestic Relations Mediation Training

You will learn to apply mediation principles to situations involving divorcing parents who are in dispute over their children, disputes pertaining to access to their children or co-parenting matters. Course materials include a review of mediation principles, application to divorce situations, child development, conflict theory, ethics, Kansas laws, resource development and networking. You will participate in several role-play activities to practice your skill development. This course has been approved by the KS Supreme Court to meet the educational/classroom requirements for approval as a domestic mediator. Upon completion of this course and the Domestic Practicum you can apply with the state of Kansas to be an approved domestic mediator. Prerequisite: Principles of Core Mediation.

$429.00

XNL 1015

Civil Mediation Training

You will focus your mediation skills to practice resolving disputes between employers and employees, management and labor, businesses and consumers, government and environmental groups, residents and communities. The training techniques include lecture, video, class discussion, demonstrations and student role-plays. This course has been approved by the KS Supreme Court to meet the educational/classroom requirements for approval as a civil mediator. Upon completion of this course and a Civil Practicum you can apply with the state of Kansas to be an approved civil mediator. Prerequisite: Principles of Core Mediation.

$429.00

XNL 1016

Civil Mediation Practicum

The Civil Mediation Practicum involves co-mediating three actual court cases under the supervision of a state-approved mediator. To become state-approved you must co-mediate all three cases in the content are in which you wish to specialize (core, civil, domestic, juvenile dependency or parent/adolescent). Note: This Practicum will meet the Civil requirement only. Contact the Professional Education office at 913-469-4420 for more information.

$349.00

XNL 1126

Mentoring New Mediators

This course will prepare experienced mediators to become Kansas Supreme Court-approved "mentor mediators", ready to supervise and guide new mediators in their actual practice. Participants need to have conducted 10 or more full mediation cases in any setting - core, domestic, civil, parent-adolescent, victim-offender, etc. Participants are encouraged to read "The Making of a Mediator" by Michael Lang and Alison Taylor prior to the class.

$69.00

XNL 1150

Conflict Management Skills for Professionals

You will learn a simple and effective framework for approaching conflict in professional settings. You will gain an awareness of potential disputes, foster communication about differences and respond constructively to clients, staff and colleagues. With these skills you can manage your own reaction to difficulties and create positive outcomes.

$59.00

XNL 1157

Employment Mediation

Not all workplaces lend themselves to mediation. In this course you will learn to create a positive environment that uses mediation when needed. You will review conflict theory and negotiation theory as applied in appropriate environments. You will also develop strategies for using mediation in your workplace. Prerequisite: Read and be ready to discuss "Getting to Yes". This book is included as part of the course fee.

$119.00

XNL 1160

Negotiating Win/Win Solutions

You will enhance your negotiation skills by discussing ways to separate the people from the problem, focus on interests not positions, develop creative options for mutual gain while insisting on the use of objective criteria. You will discover your preferred negotiation style and how it compares to others. The required textbook will be provided.

$129.00

XNL 1172

Communication Strategies and Techniques for Mediators/Negotiators

Whether you are mediating disputes or negotiating agreements on your own behalf, your success depends largely on the manner in which you communicate with other parties. In this highly interactive course you will review the role of perception in negotiation, examine your nonverbal and listening strategies, and improve your skills in constructing messages, word choice, diplomacy and tact.

$99.00

XNL 1174

Mediating Conflict in Organizations

You will learn to use your mediation skills to effectively deal with all types of conflicts within public and private sector organizations. You will learn to convert conflict from an unpleasant encounter into a positive interaction, break the reactive cycle of accusations, neutralize emotions, frame issues appropriately and create new perspectives through powerful questions.

$99.00

XNL 1177

Beyond Impasse Attitudes and Skills

You will learn to generate new energy and creativity as a mediator with techniques such as positive approaches, humor and mindset to help parties move past obstacles towards solutions.

$49.00

XNL 1180

Negotiating with Power, Influence and Leverage

Do you need to upgrade your negotiating strategies? This course will cover the relationship between perception and power, sources of power, strategies to increase your leverage at an uneven table, and strategies to enhance your ability to persuade and influence others in interpersonal, group and organizational negotiations.

$59.00

XNL 1181

Working With High Conflict Families

Are you ready to arm your practice with a positive mindset and new strategies for working effectively with the high conflict families who use the most service time and community resources? This course highlights interdisciplinary approaches to adult learning and cognitive behavioral change. You will learn simple but effective skills to manage emotions, streamline communication and negotiate with challenging clients.

$59.00

XNL 1182

Mediation Strategies for Dealing with Difficult Situations and Behaviors

You will explore ways to deal with complex conflict situations that go beyond the realm of simple disagreements and learn how to get better results when mediations involve contentious issues. You will learn what you need to do differently when dealing with multiple parties and issues; how to best deal with controversies; how to set the stage for positive outcomes by the way you develop the negotiation agenda; and how to reduce the stress level and improve group dynamics. You will also learn how to deal more effectively with various types of difficult behaviors, including how to handle emotional outbursts, threats, and ultimatums.

$99.00

XNL 1183

Mediation Skills for Changing Times

In today's quickly changing, dynamic, and sometime volatile world, mediation skills are more important than ever before. This highly participatory and dynamic course has been designed to provide you with strategies that can be used to improve outcomes in all types of mediations. In particular, you will learn how to select the best mediation style, how to use timing techniques effectively, how to neutralize emotionalism, and when and how to make creative solutions, compromises and concessions.

$99.00

XNL 1184

Everyday Conflict Resolution Skills

Conflict is normal at work and in life! Avoiding conflict may not be possible or productive. This course will help you expand and adapt your approach to any problem at hand. Learn simple but effective strategies for managing your

emotions, defusing conflict, clarifying others' concerns, and choosing productive responses. Build on your unique characteristics and natural problem-solving methods with new strategies. This interdisciplinary, interactive course focuses on appreciating and managing differences between colleagues and within work teams with a positive, centered approach to conflict management.

$59.00

XNL 1185

Mediation and Peacemaking Skills for Leaders and Managers

This course shows you how to become a more effective mediator who guides others through the conflict resolution process. You will explore essential mediation behaviors, ways to deal with emotionalism, how to stay objective, how to uncover underlying needs, and how to achieve creative solutions. You will also learn the art of organizational peacekeeping, with strategies for developing a culture in which people feel comfortable and safe in expressing divergent views.

$99.00

XNL 1186

Grief 101 for Mediators

A common denominator in all disputes and conflicts is grief, the dynamic of responding to and resolving life changing events. Greater success during mediations is possible if you recognize these dynamics and understand how they play into resolution of the issues. At the end of this course you will be able to identify various manifestations of the grief process, understand the components of the process, and utilize a variety of approaches for turning grief into agreement.

$59.00

XNL 1187

Mediating with Emotional Intelligence

You will explore four personal and social competencies that can enhance your capabilities as a mediator: self-awareness, self-management, social awareness and relationship management. You will learn how to tune into your core instincts, avoid overly negative inner dialogue when assessing people, and control your emotions. Also, you will learn how to deal with different emotional thresholds, utilize the styles that enable you to drive emotions in a postivie way, and be more emotionally in sync with mediation participants.

$99.00

Lifetime Learning (XLN)

XLN 1012

Cooking for Two or One

Do you have a problem with recipes that are for more than just one or two people? You will discover solutions to this question as well as many more on how you can downsize recipes to fit your household.

$6.00

XLN 1031

Regional Police Academy Tour

Visit the Johnson County Regional Police Academy and see how the Interactive Training Range FDU (firearm diagnostics unit) plays such an important role in a police officer's training. Q&A session will follow. Class will meet in the Academy Lobby. Note: Class limit is 30.

$6.00

XLN 1046

Orphan Trains in Kansas

The "orphan trains" brought poor children from the eastern cities to rural Kansas from 1867 until the 1920's. Firsthand accounts of orphan train riders challenge our picture of childhood in the "good old days". There is no charge for this class but you must register. This is a Kansas Humanities class.

$0.00

XLN 1086

Railroading: The Inside Story

Come and visit the ITC building and see how every specialization is taught to conductors, engineers, maintenance, dispatches, signalman and diesel mechanics. Note: Limited to 36 participants.

$6.00

XLN 1087

So You Want To Be a Chef

See an exciting cooking demonstration and tour the state of the art kitchen at JCCC. This is your chance to see and hear what really goes on in the restaurant kitchens throughout the Kansas City Metro area. Class is limited to 35 people.

$6.00

XLN 1127

JCCC Campus Art Tour

See the latest in new campus art including sculptures and permanent art installations. This class is a walking tour around campus, please wear comfortable clothes and walking shoes. Meet in the lobby in front the Gallery of Art, main level in the Carlsen Center. Note: Enrollment limited to 25.

$6.00

XLN 2001

Fitness and Nutrition after 55

Discussions will be on the importance of physical activity, Wellness, and the knowledge of excercise and how imperative it is to the individual's physical fitness, emotional health and intellectual growth. There will also be a tour of the facilities.

$6.00

Literature and Writing (XKL)

XKL 1014

Writing Mystery Fiction

Join Lawrence and Suella Walsh, authors of children's mystery novels and former mystery editors, and learn how to begin a mystery, how to create suspense and how to plant the clues. This session will include class discussion and writing exercises.

$12.00

XKL 1043

Writing Fiction That Moves

Do you know how to "show don't tell?" How to move through a scene, viewing everything through your protagonist's eyes? How to insert, flashback without

stopping your story? Join professional writers, Laurence and Suella Walsh, and learn techniques that will keep your story moving.

$18.00

XKL 1143

Writing Fiction for 'Tweens

In the entertainment business, pre-teens represent today's hottest market - including books. The author of eight critically acclaimed novels for ten-eleven-and-twelve-year-olds shares how-tos, tips, and anecdotes that will help you command the written word to amuse, teach and nurture.

$12.00

XKL 5000

The Craft of Magazine Writing

Have you ever thought about writing for magazines? Turn your dreams into bylines and help yourself to a bright future as a magazine writer. It's fun, it's easy, and a great source of extra income.

$85.00

XKL 5001

Write Your Life Story

Have you thought about writing your story, sharing life-altering events? This course walks you step-by-step through the process of writing your life story. It's fun. It's exciting. It's a story only you can tell.

$85.00

XKL 5002

Writeriffic: Creativity Training for Writers

Banish writer's block forever. This class will ignite your creative energies in simple, fun and easy steps. In just six weeks, you'll be a liberated, imaginative and versatile writer ready to tackle or finish that book that is inside you.

$85.00

XKL 5004

A to Z Grantwriting

This course will equip you with the skills and tools needed to enter the exciting field of grant writing! Learn how to research and develop relationships with potential funding sources, organize grant writing campaigns, and prepare a complete proposal package.

$85.00

XKL 5006

Fundamentals of Technical Writing

Learn the skills you need to succeed in the well-paying field of technical writing. You'll discover the secrets of successful technical writers, including technical writing conventions, interviewing skills, documentation management, publishing and formatting techniques, and how to get your first job as a technical writer.

$85.00

XKL 5007

Beginner's Guide to Getting Published

A published writer shows you how to give yourself the credibility you need to get your books and articles published.

$85.00

XKL 5010

Get Grants!

Learn how to develop successful, fundable grants from experts whose proposals have garnered millions in funded projects. This course will give you the skills you'll need to prepare professional, competitive, and compelling grant proposals.

$85.00

XKL 5011

Writing Great Technical Documents

Learn to write better technical documents. You will learn how to choose the right words, write powerful sentences and paragraphs that flow, use technical terms, improve your grammar and punctuation, use graphics, and format your technical documents to get results.

$85.00

XKL 5016

Grammar Refresher

Gain confidence in your ability to produce clean, grammatically correct documents and speeches. Grammar refresher will also cover the basics of English grammar.

$85.00

XKL 5018

Pleasures of Poetry

If you want to write poetry, this course will help you create your best possible work, whether you're looking to be published or simply wish to craft a beautiful poem as a gift for a friend.

$85.00

XKL 5019

Writing for Children

Published children's author shows you how to touch the hearts of children by creating books for them. You'll explore the changing world of children's literature and understand the various formats--from baby's first books to novels for young adults.

$85.00

XKL 5020

Mystery Writing

Using vivid examples from bestselling mystery movels, this course will teach you the techniques you need to become a successful author. Topics include three-act structure, the difference between plot and story, theme, premise, characters and viewpoint, plus you'll develop your own story.

$85.00

XKL 5021

Writer's Workshop, Beginning

If you've dreamed of writing creatively, this course is a great place to start. Get a taste of the writing life, improve your writing skills, and discover new ways to stretch your creative muscles and experience challenging hands-on exercises.

$85.00

XKL 5022

Write Fiction Like a Pro

A Hollywood writer and author teaches you how professional writers use story outlines to structure any type of story. You'll develop your own original story, beginning with your passion and theme.

$85.00

XKL 5023

Travel Writing

Profit from your experiences in exotic lands (or your own backyard) by learning how to write and sell travel articles and books. This class will help you translate what is seen, heard, tasted, touched, smelled and felt (intuitively and physically).

$85.00

XKL 5024

Introduction to Internet Writing Markets

Ignite your writing career with the power of Internet. The Internet is the writer's fastest source for locating publishers, research material, and submitting, but even better, it offers unlimited opportunities for writers to publish and create content.

$85.00

XKL 5025

Writing Effective Grant Proposals

Learn to prepare grant proposals that get solid results from your favorite organization or charity.

$85.00

XKL 5026

The Keys to Effective Editing

If you aspire to be an editor, this course will teach you the fundamentals of top-notch editing for both fiction and non-fiction. If you're already working as an editor, you'll not only brush up on your skills, but will also learn about recent advances in your chosen profession.

$85.00

Management Development (XDM)

XDM 0502

Working Smarter: Using Technology to Your Advantage

This course is designed to teach you how to use technology to your advantage so that you work smarter. We will cover topics like the best ways to use time-saving software (including e-mail, instant messaging, contact management software, and scheduling applications), creating policies and procedures to make sure company resources are used properly, and using ergonomics to prevent Repetitive Strain Injuries (RSI).

$99.00

XDM 0503

Effective Supervisory Skills

As a supervisor, you're asked to empower your workforce using a team approach for greater productivity. You'll learn how to provide leadership for groups and hold them accountable for their own productivity, how to involve employees in their

own appraisals and strategies for training new employees.

$169.00
XDM 0505

Listen as if your Job Depends on It!
We spend more time listening than any other communication skill, yet we spend the least time in learning how to do it well. Good listening assists you to lead, serve and perform well. This short course will give you the opportunity to practice good listening techniques, and you will be able to use them immediately with your boss, coworkers, and customers.

$99.00
XDM 0512

Facilitation Skills
How can you facilitate, rather than control, group decision-making and team interaction? With no formal training, people may find it difficult to make the transition from "instructors" to "facilitators". With its focus on asking rather than telling, and listening to build consensus, facilitation is the new leadership ideal, the core competency everybody needs.

$299.00
XDM 0516

Behavioral Interviewing
The single-best predictor of future job performance is past job behavior in similar situations. You will go through the process of planning and conducting effective hiring interviews, evaluating candidates, and arriving at the right hiring decisions.

$169.00
XDM 0517

Emotional Intelligence
Today, emotional intelligence (EI) is increasingly being recognized as a major contributing factor to a leader's success. You need to be able to utilize both thinking skills and emotional intelligences in order to maximize your productivity and the productivity of your team. In this course you will be exposed to the fundamentals of emotional intelligence and how it applies to leadership. You will understand why emotional intelligence is essential to leadership effectiveness, understand your own emotions and how they have contributed to your effectiveness as a leader, be able to apply emotional intelligence skills to a variety of workplace situations, and create an action plan for enhancing your emotional intelligence.

$99.00
XDM 0518

Negotiating for Results
This workshop provides you with an interactive approach to negotiations. The skills you acquire will help you in your role as mediator and negotiator as well as in your day-to-day responsibilities. You will be encouraged to focus on interests rather than positions, so you can develop relationships of mutual trust, fairness and respect for one another. This is a common-sense approach based upon developing a balanced and lasting partnership to solve workplace problems. You will learn and practice effective communication skills, problem-solving and consensus building, with the intention of turning face-to-face confrontation into side-by-side problem solving.

$99.00
XDM 0539

Increased Personal Productivity

It takes more than good intentions to manage your time. Learn how you can take control to increase your personal productivity by developing goals that get results, setting priorities and staying on track. Plan what you want to achieve and make it happen. These specific strategies and tools for time management will decrease stress and increase success.

$169.00

XDM 0566

Understanding the Human Resources Function

This course is designed to help people without experience in human resources to understand this very vital link in the organizational chain. It will prepare both managers and business owners to handle basic human resource functions in a way that will ensure the best possible result.

$99.00

XDM 0588

Principles of Sales Management

Learn how to deliver superior sales-team results from a sales management veteran. This exciting six-week online course begins with a detailed examination of sales management's roles and responsibilities. The balance of the journey teaches you valuable tips, techniques and strategies for success and reinforces how critical planning is to successful sales management. You will learn how to prepare and lead better sales meetings and how to resolve team conflict. You'll also learn how to develop sales plans and budgets, recruit and interview new sales professionals, and set team goals and objectives. Finally, you'll have mastered the art of sales training. At the end of this course, you will have almost all of the tools you'll need to effectively motivate and manage sales teams.

$99.00

XDM 0591

Effective Business Writing

Do you have a nagging suspicion that a small improvement in your writing skills might also improve your career prospects? Don't let small gaps in your business writing skills prevent you from reaching your full potential! It doesn't matter whether you're a clerical worker, an engineer, or an executive. If you communicate with others in writing, this course can help you identify and eliminate problem areas. By the end of this course, you'll know the secret to developing powerful written documents that immediately draw readers in and keep them motivated to continue until your very last, well-chosen word.

$99.00

XDM 0600

Administrative Assistant Fundamentals

Rapid growth in the health, legal services, data processing, management, public relations, and other industries have created many new job opportunities for administrative assistants. This course will help you discover and master the essentials of managerial and staff support, information and records management, communications technology, travel and meeting coordination, space planning, and office ergonomics.

$99.00

XDM 0613

Employment Law Fundamentals

Learn the basics of employment law so you can legally hire, evaluate, and manage employees. This course is a must for anyone who is (or aspires to be) a supervisor, manager, or human resources professional.

$99.00

XDM 0614

Customer Service Fundamentals

Customer service personnel interact with current and potential customers every day. But do they truly spend time finding out what customers really want and giving them the highest service possible? In this six-week online course, you'll discover dynamite methods for bringing out the best in your team, measuring customer service, and anticipating the needs of your reps and your customers.

$99.00

XDM 0621

Accounting Fundamentals

If you're interested in increasing your financial awareness and accountability while also gaining a marketable skill, this course is for you. You'll learn the basics of double-entry bookkeeping, while also learning how to analyze and record financial transactions, as well as prepare various financial reports at the end of the fiscal period. Accounts receivable, accounts payable, payroll procedures, sales taxes, and various common banking activities will be discussed.

$99.00

XDM 0622

Fundamentals of Supervision and Management

This course will help you master the basics of business by learning the language of management. You will learn how to make a successful transition from employee to manager and you'll learn how to manage your time so that you can deal with the constant demands of a managerial job. You will learn the skills required to delegate responsibility and motivate your employees. Finally, you will learn how to solve problems and resolve conflicts so you can accomplish your job more effectively.

$99.00

XDM 0623

Fundamentals of Supervision and Management II

Have you ever felt technically prepared for a supervisor's role, yet felt defeated by all of the people issues that seem to arise? In this course, you will master the basics of communication, because effective communication is essential in your quest to be a good manager or supervisor. In addition, we will discuss how you can develop your interpersonal skills, by understanding and dealing with the various people issues that arise at work. You will be able to assess your own personality, as well as the personalities of your co-workers and boss, and you'll develop a plan of action to improve both your interpersonal skills and your work relationships.

$99.00

XDM 0643

Accounting Fundamentals II

This course will build on the knowledge you gained in our Accounting Fundamentals I course to provide you with a solid understanding of corporate accounting practices. You'll be able to analyze transactions and prepare various corporate financial reports. You'll also gain practical experience working with dividends, plant assets, depreciation, accrued revenue and expenses, retained earnings, stockholders' equity, and more.

$99.00

XDM 0652

Administrative Assistant Applications

Gain the skills and knowledge you'll need to prepare for the Certified Administrative Professional exam and begin a rewarding career as an administrative assistant. Discover how economics, accounting, business law, organizational behavior, and management affect administrative assistant responsibilities and activities. Determine how the world economy can affect an enterprise, learn the basics of accounting, including the general ledger and key accounting terms, and see how financial statements and controls help keep your organization moving in a positive direction. This course may help you prepare for the internationally recognized Certified Professional Secretary (CPS) and Certified Administrative Professional (CAP) exams offered by the International Association of Administrative Professionals.

$99.00

XDM 0653

Mastery of Business Fundamentals

Are you interested in acquiring practical business experience in strategic planning, management, and finance without enrolling in an MBA program? This course is for you! You'll learn about various organizational structures and determine how to use leadership, motivation, and control for maximum impact. You'll master the fundamentals of accounting and increase your knowledge about key financial terms, cash flow management, financial statements, and cost control. You'll even understand the basic principles of business law, contracts, and the principal-agency relationship.

$99.00

XDM 0654

Mastery of Business Applications

Learn the essence of business applications. Understand how marketing differs from sales, how the marketing concept helps a firm succeed, and why consumer behavior is such a challenging topic. Increase your knowledge of the basics of international business and learn about the various options and requirements for success. Discover the nature of information technology and realize how operations management helps increase efficiency and effectiveness. Learn the definition of quality, discover the nature of Six Sigma and total quality management (TQM), and find out how to implement a quality culture. Understand the nature of project management and learn about the different phases of the project life cycle.

$99.00

XDM 0655

Introduction to Business Analysis

Give yourself an employment advantage by developing analytical skills that are consistently in high demand. This course will teach you powerful quantitative methods that will have you making better, more informed, and more effective business decisions. The days of making critical business decisions by instinct or coin toss are long gone. If you are planning a career in business, you cannot afford to miss this course!

$99.00

XDM 0656

Business and Marketing Writing

Whatever your background, this fun, introductory course will teach you to write or identify copy that achieves business and marketing goals. Improve your work, your knowledge, your company's image, and your chances of getting hired, promoted or applauded! You'll learn how business and marketing objectives affect writing choices. You'll get practical writing instruction in grammar, clarity, structure and more.   Whether you seek to improve your own writing or learn to identify effective copy, this course will help you understand the power of writing - and use it to present a solid, cohesive message to your target audience.

$99.00

XDM 0657

Professional Sales Skills

Today, there are no shortages of opportunities for skilled salespeople. In good times or bad, companies never stop looking for sales representatives that can help them meet their financial goals. If you've always dreamed of becoming successful in sales, this course is exactly what you need. You'll learn how to turn prospects into buyers, how to provide proper customer service, how to develop a sales plan, and more!

$99.00

XDM 0658

Effective Selling

The goal of Effective Selling is not to teach you how to make a sale today, but to help you discover how you can easily convert a potential customer into a long term asset. Effective Selling will help you lay the groundwork for repeat business and your future success. In sales, there are no quick fixes. However, with the knowledge, planning skills, communication techniques, and the understanding of human nature that you will gain from this course, your sales will grow as if by magic.

$99.00

XDM 0660

Accounting Career Certificate Program

As the number of business establishments increases, so does the need for accounting professionals. This program will provide you with the knowledge and skills to succeed in this dynamic and fast-growing field. A Career Certificate in Accounting will show future employers that you're well trained in financial, managerial, and cost accounting; mathematics for business and finance; and financial management.

$998.00

XDM 0661

Bookkeeper Career Certificate

This program will give you the wide range of skills and knowledge required to become a professional bookkeeper. You'll learn all the basics needed to obtain entry-level employment in the field. You'll complete a comprehensive project that prepares you to work in the real world, and along the way you'll become proficient with Microsoft Excel.

$698.00

XDM 0662

Managerial Accounting

This course will introduce you to managerial accounting, the process that uses financial information to organize and govern finances within an organization. It will give you a basis for understanding and analyzing financial statements and prepare you to make effective financial decisions at a managerial level.

$199.00

XDM 0663

Principles of Marketing

In this course, you will learn how to analyze buyers, markets, and products, and how to determine whether an ad really does its job. You will have an insider's understanding of the purpose of marketing and what it takes to develop an effective marketing plan.

$199.00

XDM 0664

Building Teams That Work

Teams are becoming a staple in today's workplace. You will learn the components of a successful team and the stages of its development. You will master the skills you'll need to effectively manage projects, make decisions, and solve problems in a team setting. Plus, you will have a chance to learn the pitfalls of unhealthy group interaction and minimize any of its effects on your team.

$99.00

XDM 0665

Achieving Success with Difficult People

Do you know people whose behavior makes completing even the simplest tasks difficult? Would you like to learn how to have more successful relationships with difficult bosses, co-workers, students, neighbors or family members? Join this class and get helpful information for understanding yourself, solving people problems, and improving your professional productivity.

$99.00

XDM 1478

Lean Six Sigma Green Belt

Get locally certified as a Lean Six Sigma Green Belt. Be qualified to work directly with cross-functional project leaders to carry out identified improvement projects using Lean and Six Sigma methodologies and tools.   Topics Covered: *   Minor statistical tools and techniques. * Project identification. * Lean practices. * Lean tools.   * Learn to identify business improvement projects and apply a structured problem solving methodology. * Learn key principles in the DMAIC model.

$1,999.00

XDM 1479

Lean Six Sigma Champion

Students will be given an awareness and general understanding of the Lean & Six Sigma methodology to become Lean Six Sigma conversational. The goal of this course is to help individuals understand how Lean and Six Sigma methodologies work together in organizational improvement efforts.   They will also guide the selection of projects and training paths of other colleagues within their organization. This course blends classroom instruction with required on-line assignments. Those in attendance should walk away with a high-level view of the value of implementing Lean and Six Sigma methodologies into a business process. Attendees should have an awareness of terminology and a clear understanding of the necessity of Lean Six Sigma as a part of the business process.

$349.00

XDM 1480

Lean Six Sigma Black Belt

As a Lean Six Sigma (LSS) Black Belt, you'll be trained to be an expert in Lean and statistical process control techniques. Learn essential DMAIC principles to improve business processes and the Lean tools to reduce waste and increase productivity. You should have all the necessary tools to lead cross-functional teams in the implementation and completion of projects through an active blend of classroom instruction with required on-line assignments/exams.   Topics Covered: * Lean & Six Sigma. * DMAIC model. * Value Stream Mapping. * Statistical tools and techniques. * Kaizen Sigma. * Project Identification.   The course aids individuals in identifying processes that would benefit from the application of the Lean & DMAIC principles and developing an action plan to implement these principles.

$5,999.00

XDM 1481

Lean 101: Lean Overview

Description This seminar gives a high-level view of the history, tools, and methodology of Lean that can be implemented into any business process. Participants will be exposed to Lean Principles that have impacted the business community with major improvements for decades. This course can lay a firm foundation for practical application and continued in-depth study. Includes two hours online instruction.

$195.00

XDM 1482

Lean 102: Value Stream Mapping

Description Value Stream Mapping is one of the initial tools used in shaping the Lean Enterprise. This course offers the understanding and utilization of this powerful tool and a method of discovering a company's current state and reveals ways to eliminate waste, link material flow and information, and organize improvements in the current process. By visualizing the current state of a process and determining ways to streamline the process, cost savings and an increase in productivity can be realized. Through cases studies, examples, and hands-on learning, individuals are exposed to the necessary methodology to use in his/her respective company. This course requires project completion and presentation.

$525.00

XDM 1483

Lean 103: Standard Work Design

Description The implementations of Standard Work are a vital part of any organization. Cellular manufacturing involves rearranging traditional operation-based factory layouts into process-based cells that promote a smooth production flow by cutting waste. These two principles are the key technique used to error proof a process and reduce quality costs. Focused discussions and activities used in error proofing a process or system will direct learning. Learn the waste reducing benefits of organizing the workstations in cells, so that work flows smoothly in the process sequence.

$385.00

XDM 1484

Lean 104: Kaizen/SMED

Description Change can be a good thing. However, incremental change is often necessary in any operation. Kaizen events help organizations bring about this change. Proper facilitation of the tools and process is needed to achieve optimal success and return on investment. This course creates a challenging and focused approach to understanding, planning, and facilitating a Kaizen event.

$495.00

XDM 1485

Lean 105: 5 S/Visual Workplace

Description The key principle of 5S is to create a clean, organized, and safe work area. Participants will be exposed to the methodology associated with 5S and how to implement this methodology to create a visually safe and appealing workplace.

$385.00

XDM 1486

Lean 106: TPM

Description In any business, it is critical that equipment is always properly maintained and available when needed. In this workshop you will be exposed to

the method of keeping equipment in peak operating condition and how to avoid unscheduled downtime. The course covers the different types of maintenance, the six big losses, and the importance of safety. You will also be exposed to how TPM blends with the Lean organization elements, rules, and other tools.

$495.00

XDM 1487

Lean 107: Mistake Proofing

Description Participants in this course will be exposed to the tools and training used to prevent and detect defects, eliminate problems, and human error. The conditions that cause common errors and how to recognize those conditions will be presented and discussed.

XDM 1488

Lean 108: KANBAN

Description KANBAN is an essential part of the Pull System and is used to ensure that materials are replenished in the right quantity, at the right time, and in the right place. Participants in this course will be exposed to the concepts and usage of KANBAN in a Lean organization. The course aids in understanding the calculations and importance of FIFO.

$395.00

XDM 2005

GTI

A description is not available for this course.

XDM 9999

Future Day Video Conference

A description is not available for this course.

$199.00

Massage Therapy (XNM)

XNM 4005

Chronic Illness Intervention

A description is not available for this course.

$36.00

XNM 5000

Bodywork I

This training module will introduce you to the theory and practice of bodywork. The history, philosophy, art, techniques and experience of Swedish Massage will be presented. You will be taught the five basic Swedish Massage techniques (vibration, friction, effluerage, tapotement, and petrissage) and how to combine them into a full-body massage. Other topics will include review of anatomy and body structures, benefits, contraindications, breathing and grounding skills, practitioner self-care, use of oils and draping techniques. (72 hours)

$936.00

XNM 5001

Anatomy and Physiology

You will study the relationship of structure to function in the organ systems of the

human body. Emphasis will be on the location of anatomical features and their functions. This course is designed to study anatomy and physiology as it relates to the field of massage. You will receive 100 contact hours for this course. Call to determine if previously earned credits or hours are equivalent and/or transferable.

$1,300.00

XNM 5002

Anatomy & Physiology Exam

A description is not available for this course.

$125.00

XNM 5003

Orientation

A description is not available for this course.

$199.00

XNM 5004

Human Anatomy & Physiology

Human Anatomy & Physiology This course teaches human structures and their functions. Students will learn how various structures relate to organ systems. Focus is on anatomical features as they relate to the field of massage therapy. (25 sessions)

$1,100.00

XNM 5005

Advanced Standing Communicable Diseases

A description is not available for this course.

$0.00

XNM 5006

Bodywork

A description is not available for this course.

$300.00

XNM 5007

Professional Business Development

This course will serve as the foundation for establishing and maintaining a successful professional massage practice. Students will go through a series of exercises designed to stimulate their awareness of establishing business fundamentals. Ethical issues, documenting massage sessions using medical terminology, and maintaining a safe and nurturing work envioronment will be covered. Students will also apply learning skills toward public speaking, conceptual planning, and mastering marketing tools.

$572.00

XNM 5010

Kinesiology

Kinesiology is the study of movement as it relates to the human body. This course will include an intense review of muscular-skeletal anatomy, and elements of physics, geometry, and physiology. The curriculum is designed to provide instruction in Kinesiology as it pertains to therapeutic massage, and as students you will practice palpation and assessment of body motion with the intent of being able to apply appropriate body work. (40 hours)

$520.00

XNM 5011

Credit by Exam/Kinesiology

A description is not available for this course.

$220.00

XNM 5020

First Aid and CPR

Adult CPR and Basic First Aid are taught in this lecture and hands-on training. Airway obstruction, basic life support, wounds, bleeding, injuries, sudden illness and dressings are a few of the topics discussed.

$65.00

XNM 5021

First Aid/CPR Recertification

This reaffirmation course is open to adults who are currently certified and who wish to obtain recertification. Material covered includes assessment of victim, what to do in case of bleeding, shock, poisoning, thermal or heat burns, hypothermia, stroke, fracture management, and other medical emergencies.

$39.00

XNM 5030

Communicable Diseases

This course, designed for JCCC's Therapeutic Massage Certification program, explains infection control and why it is necessary. Topics include identification of common communicable diseases; high risk behaviors; how infection is spread; and how to reduce the risk of such diseases.

$39.00

XNM 5040

Bodywork II

This is the second class in fulfilling the certification requirements. It is the continuation of the therapeutic massage techniques, with emphasis on integration of the parts into a full body massage. New strokes will be introduced for a broader and deeper application to the muscles. Time will also be spent on how to lengthen and shorten individual and muscle groups, as well as continued muscle locations. (72 hours) Prerequisite: Introduction to Bodywork

$1,080.00

XNM 5041

Sports Massage

A description is not available for this course.

$115.00

XNM 5050

Pathology

This course is an in-depth study of pathology that discusses disease processes and altered functions affecting the human body. It will emphasize indications and contraindications for therapeutic massage. The students will learn how a massage therapist needs to adapt their technique to meet specific conditions.

$676.00

XNM 5060

Hydrotherapy

This course will provide instruction on the use of water as a therapeutic tool in conjunction with massage therapy, including body temperature regulation and the physiology of heat and cold, using techniques such as herbal body wraps, shower modalities, and hand and foot baths. The student focuses on the application of water and associated modalities in treating diverse human disorders. The course content broadens the student knowledge so that he/she can provide a much more diverse approach to his/her individual art of therapeutic massage and bodywork. (15 hours)

$195.00

XNM 5070

Clinical Bodywork Module III

This is the third class in fulfilling the certification requirements. It is the continuation of deeper tissue work with an introduction to myofascial release techniques and trigger points. You will learn the integration of all techniques in dealing with specific injuries. Prerequisite: Clinical Bodywork Module II. (64 hours)

$960.00

XNM 5075

Professional Business Practices I

This is a foundation course for establishing and maintaining a successful professional massage practice. Topics discussed: ethical and professional issues; documentation of massage sessions using medical terminology; maintaining a safe and nurturing work environment; meaning of professionalism in a massage practice.

$156.00

XNM 5080

Professional Business Practices II

This course will take students through a series of exercises designed to stimulate their awareness of the setting up of business fundamentals. Applied learning skills will be used on some of these topics: public speaking, conceptual planning, mastering marketing tools. Prerequisite: Business Practices I (40 hours)

$598.00

XNM 5090

Bodywork Clinics

A supervised student clinic will be held in the second and third modules so students get first hand experience in client in-take and build self-confidence through massage practice. Time for individual student processing of their clinic experience will be emphasized. Student liability insurance is included in your student fees.

$200.00

XNM 5091

Professional Clinic for Bodywork II

A description is not available for this course.

$325.00

XNM 5092

Professional Clinic for Bodywork III

A description is not available for this course.

$325.00

XNM 5095

Advanced Anatomy and Physiology

A description is not available for this course.

$325.00

XNM 5100

Pharmacology

Numerous clients receiving massage therapy are taking prescription or over-the-counter medications and/or supplements. Drug therapy of any sort causes physiological and chemical changes in the body. Massage therapists must be familiar with the effects of drug therapy that may enhance or disrupt the effects of massage. This knowledge will lead to changes in how the therapist applies massage therapy in individual cases and how to assess outcomes. This course explores the primary pharmacological agents, their mechanisms of action, disease processes they are prescribed for and contraindications for massage.

$208.00

XNM 5500

Advanced Standing Pathology

Credit by Examination

$275.00

XNM 6000

Back Stack Workshop

The Back Stack Workshop is designed for massage practitioners needing CEU's and additional knowledge. This hands-on learning will focus on locating pain in back stack, reducing pain in back stack, working with headaches, providing low back comfort and opening shoulder girdle. Pending approval for NCBTMB CEU'S.

$85.00

XNM 6001

Body Mechanics

This CEU course is designed to enlighten you on the benefits of practicing proper body mechanics while administering massage theraphy on your clientele. Other topics will include self-care, injury protection and stress management.

$95.00

XNM 6002

Introduction to Craniosacral Balancing

Craniosacral theraphy is a gentle healing art which uses soft touch to facilitate sound physical, mental and emotional changes in the client. This CEU course will introduce this theraphy and the beginning evaluation and treatment of the craniosacral system.

$95.00

XNM 6003

Touch Technique

This CEU course is designed to integrate all parts of your body to enhance skills and depth of work. You will learn pressure, speed, range, depth, stillness, movement and intuition of touch.

$95.00

XNM 6004

Sports Massage

Massage therapists may attend this training to be certified in KS and MO as Sports Massage practitioners. Lecture and practice will be taught on the following topics: event massage theory and skills, proper techniques, physiology of injury and healing process, trigger point, neuromuscular, and myofascial skills.

$225.00

XNM 6005

Ethics of Massage

Students will learn ethics and standards of practice for massage therapy. Topics include industry standards, laws, morals, rules and regulations. Role playing exercises and example scenarios will be utilized. This six hour course fulfills the ethics portion of NCBTMB recertification. Licensed massage therapists will earn 6 contact hours of continuing education.

$78.00

XNM 6006

Nutrition for the Real World

Let a nutritional consultant explain macronutrients: water, carbohydrates, proteins and lipids (fats and oils). Micronutrients are vitamins and minerals. To be discussed: healthy digestion, terminology, and references.

$95.00

XNM 6007

Introduction to Work with Human Energy Field

$150.00

XNM 6008

Acupressure and Soft Tissue Manipulation

This course is intended to address neuromuscular and myofascial dysfunction with a unique blend of acupressure and many of the popular soft tissue manipulation techniques. There will be a brief overview of the fourteen main Chinese meridians and acupoints. Some of the soft tissue manipulative techniques include myofascial release, neuromuscular technique, and positional therapy.

$120.00

XNM 6009

Advanced Reflexology

A description is not available for this course.

$139.00

XNM 6010

National Massage Certification Test Review

This class covers material which will help prepare students sitting for the national certification exam.

$129.00

XNM 6011

Sacred Art of Massage

Designed for the massage therapy practitioner or energy worker who is looking to explore a deeper consciousness of their truth and vision for themselves and for their professional practice, allowing then for creativity and change through appreciation for their wholeness as well as the wholeness of their client. (2 sessions)

$149.00

XNM 6012

Advanced Esalen

This interactive course will practice and review the principles of Esalen massage. Student s will explore new stretches and rotations, many of them inspired by Thai massage. Our goals are to increase your confidence and expand your repertoire of options when giving a massage. Participants should have previous Esalen massage training. Licensed massage therapists will earn 15 contact hours of continuing education.

$225.00

XNM 6013

Advanced Aromatherapy

A description is not available for this course.

$139.00

XNM 6014

Stress Prevention Now

A description is not available for this course.

$0.00

XNM 6015

Reflexaology

A description is not available for this course.

$120.00

XNM 6016

Lymphatic Drainage Techniques

LDT is a hands-on technique that influences the efficacy of the superficial lymphatic system. Understanding the lymphatic system and learning to apply the proper hand technique results in the body?s return to homeostasis. LDT is effective for treating a myriad of symptoms and conditions including headaches, migraines, constipation, acne, bruising and swelling due to injury or accident. Students in this course will earn a Certificate of Completion by attending and participating in the full 16 hours of class time. Participation and learning outcomes will be assessed. Students who do not satisfactorily complete the course requirements will not be awarded the contact hours.

$240.00

XNM 6017

Myofascial Release

Myofascial release is a technique that stretches and releases restricted connective tissue fibers (fascia) that cover and connects our muscles, organs and skeleton. These restrictins can be caused by trauma, scar tissue, emotional ane environmental factors Myofascial release is effective in reducing discomfort and improving bodily function and posture. This class is available to massage therapists, RNs, and PTs Participants should bring a set of sheets.

$240.00

XNM 6018

Body Mechanics for Massage Therapy (1 CR)

Every year, numerous massage therapists are forced to give up their careers due to injuries sustained while performing services. The proper use of body mechanics by the massage practitioner increases their strength, power and fluidity, while at the same time reducing their risk of injury. This class will enable therapists to apply specific techniques and strategies to work smarter instead of harder, therefore allowing them to work longer, safer and more effectively. Class participants should wear loose, comfortable clothing that allow them to move freely. Participants are also requested to bring a massage table, as one table is needed for every two participants. Massage therapists will earn 4 contact hours.

$48.00

XNM 6020

Ancient Thai Massage

In this course, students will learn history and philosophy of ancient Thai massage, location of 10 main Sen lines, 4 positions of ancient Thai massage, 6 points of Nuad Bo-Ran, and proper techniques and postures to perform a one-hour Thai massage.

$225.00

XNM 6021

Plantar Fasciitis Treatment

Plantar Fasciitis is a difficult and often troubling condition to treat. In this course, the student will learn the anatomy and neural pathways that are responsible for this disorder. The student will learn through lecture and hands on practice the five step process of the MyoKinesthetic System and how to address each muscle with stretching and stimulation to successfully treat this disorder. Massage Therapists, RNs and LPNs will earn 7 contact hours.

$105.00

XNM 6022

Headaches: Effective Non-pharmacological Treatment

Headaches are one of the primary conditions that cause people to miss work. They are often difficult to treat and more often difficult to find their cause. In this course, the student will learn the anatomy and neural pathways that are responsible for this disorder. The student will learn through lecture and hands on practice the five step process of the MyoKinesthetic System and how to address each muscle with stretching and stimulation to successfully treat headaches without medication. Massage Therapists, RNs and LPNs will earn 7 contact hours.

$105.00

XNM 6023

Fibromyalgia, Myofascial Pain and Chronic Fatigue Syndromes

This course explores these painful and difficult to treat conditions. Pain Cycles, common sites of muscular pain and the body's biomechanical compensations will be reviewed. Tissue healing and the stages of repair as well as normal biomechanics verses compensatory mechanisms of dysfunctional syndromes will be discussed. Traditional and alternative forms of treatment will be reviewed. Appropriate Massage Therapy interventions will be explored and practiced in this interactive course. Massage therapists will earn 6 contact hours. This course is approved through NCBTMB.

$90.00

XNM 6025

Seated Chair Massage

In this class, students will learn a basic routine for chair massage, fundamental concepts for proper body mechanics, and important concepts for marketing seated chair massage.

$180.00

XNM 6026

Hot Stone Massage Therapy

Students will learn a multi-faceted approach to using traditional hot stone therapy. In addition to learning basic hot stone application(s) for relaxation the student will apply the techniques to a 'hot spot' massage which targets specific areas of client discomfort. Routines will be adapted from traditional 90 to 60 minute routines to 30 minute add-on services. Each student will be proficient in giving a safe, relaxing/therapeutic massage at the end of the class. Cost includes a starter stone set. Each student is asked to bring 3-4 bath towels.

$200.00

XNM 6030

Pregnancy Massage

This course is designed to train participants in methods of Pregnancy/Postpartum Massage. Topics include anatomy and physiology, complications, and benefits. You will also learn massage techniques, labor support, relaxation and aromatherapy. Bring body support cushions or 6-8 pillows and massage lotion. Licensed massage therapists will earn 16 contact hours of continuing education.

$240.00

XNM 6035

Reiki I and II

Reiki is an ancient, gentle and spiritual healing technique, focusing on understanding the energy system. Students will learn to use hand positions, symbols and techniques to help balance energy functions of the body. This class uses lecture, discussion, demonstrations and hands-on practice. Licensed massage therapists will earn 16 contact hours of continuing education.

$240.00

XNM 6041

Beating Burn-Out: A Holistic Approach

Whether you've been performing massage for 20 years or 2 months, it can be a challenge to keep it fresh, maintain passion and joy for your work, and keep your body and spirit healthy and motivated. You are not a slave to your practice! In this class we will address these issues from a holistic standpoint - it's not just about body mechanics and managing schedules - it's about consciously creating balance and joy in your life! Together we will share experience, discuss concerns, and explores ways in which each of us can take back our power - in our massage practice and in life - to create happiness, success and reclaim the joyfulness in being of service. Come prepared to create new possibilities!

$104.00

XNM 6042

Frozen Shoulder

This class will focus on shoulder injuries like rotator cuff problems, frozen shoulder, shoulder pain, anterior scalene syndrome, pain at the deltoid tuberosity, midback burning, numbness in the shoulder and more. We will look at some causes to these injuries, how other professions treat some of these problems and how we can get rid of these problems with Dr. Uriarte's MyoKinesthetic System work in 4 treatments or less.

$104.00

XNM 6060

 Watsu

A description is not available for this course.

$150.00

XNM 6061

Intro. to Professional Clinics

Course is a part of Bodywork II Module. Intro. to Clinics explains the duties and protocol to each student clinician. Students will learn the procedures for checking in/out of clients, review of S.O.A.P. charting, and the care of linens, equipment and dress code.

$52.00

XNM 6062

Body Mechanics

Course is part of Bodywork II Module. The emphasis of this class is the prevention of injury to the therapist by learning self-care techniques. Body awareness, correct movements, stances and physical health self-care are emphasized.

$104.00

XNM 6063

Advanced Swedish

Course is part of Bodywork II Module. Advanced Swedish Massage is designed to introduce students to another perspective of Swedish massage. Body mechanics, rhythm, breathing, intention and the fundamental Swedish techniques will be discussed in conjunction with a routine.

$364.00

XNM 6064

Chair Massage

Course is part of Bodywork II Module. The student will be introduced to the basic techniques and marketing ideas for a successful chair massage practice. The therapist will become familiar with a basic seated chair massage routine, proper body mechanics and contraindications for seated chair massage. Other topics will include state and local laws, employment opportunities, personal hygiene and sanitation practices in the work place. Marketing and entrepreneurial skills will be addressed. Information presented will be useful when sitting for the NCTMB exam.

$104.00

XNM 6065

Sports Massage

Course is part of Bodywork II Module. This course explores the knowledge and techniques in the Pre Event and Post Event massage for the athlete. Students will be able to identify the most common trigger point areas associated with the athlete; explain contraindications for sports massage as well as describe the most common sports injuries that athletes receive.

$208.00

XNM 6066

Asian Bodywork

Course is part of Bodywork II Module. By definition, Asian bodywork is the treatment of the body, mind, and spirit by pressure and/or manipulation and

includes the body's energy field. Students will have exposure to various treatment approaches such as Shiatsu, accupoints, therepory, meridians, Five Elements and Chakras. Information presented will be useful when sitting for the NCTMB exam.

$104.00

XNM 6067

Community Service Project

Course is part of Bodywork III Module. The Community Service Project creates a business setting for the student clinician to work within. Students are required to meet with the instructor twice. Students are required to select their project and get final approval from the instructor and the JCCC risk manager or Program Director for Health and Human Services. The first meeting establishes project guidelines. The second class session is a presentation of the completed service project in written/oral format.

$104.00

XNM 6068

Advanced Techniques

Course is part of Bodywork III Module. Included in this course will be various treatment options for specific issues a client may present such as: tennis elbow, headaches, rotator cuff injuries, Psoas release, plantar fasciitis, MEET (muscle energy technique) for releases and exposure to myofascial spreading/release as well as deep tissue techniques. Information presented in the class will be useful when sitting for the NCTMB examination.

$260.00

XNM 6069

Pregnancy Massage

Course is part of Bodywork III Module. Students will receive a comprehensive background on pregnancy including maternal physiology, anatomy changes, as well as fetal development. Treatment guidelines will be emphasized as well as contraindications for massaging the expectant mother. Students will have an opportunity to give massage to pregnant volunteers. Information presented throughout this class will be useful when sitting for the NCTMB exam.

$104.00

XNM 6070

Reflexology

Course is part of Bodywork III Module. Upon completion of the class, students will have a basic knowledge of the history/theory of this ancient form of treatment. Students will have an understanding of the reflex points located on the feet and hands through applied pressure. Energy blocks can be released in corresponding zones to rebalance the entire body. Basic techniques such as walking and point work will be taught. Contraindications for treatment will be addressed. Information presented in the class will be useful when sitting for the NCTMB exam.

$52.00

XNM 6071

Massage for Frail/Elderly

Course is a part of Bodywork III Module. Students will learn massage benefits as well as indications/contraindications specific to this special needs population. The importance of active listening and presence will be emphasized along with information regarding suggested supplies for visits to care facilities and home visits. Information presented will be useful when sitting for the NCTMB examination.

$104.00

XNM 6072

Aromatherapy

Course is part of Bodywork III Module. Also called essential oil therapy, aromatherapy is the use of plant-derived essential oils for therapeutic purposes. Massage and aromatherapy are often combined to enhance the therapeutic value of each other. The students will work with numerous essential oils, distinguishing their historic, physical, mental and spiritual uses. The class will prepare the students to use basic aromatherapy oils for massage. Information presented is useful when sitting for the NCTMB examination.

$52.00

XNM 6073

Energy Work

Course is part of Bodywork III Module. This is an introductory class to working with the subtle energy field surrounding all living organisms (human body, animals, plants, etc.). Various energy techniques are explored in the class such as Attunement, Bio-Energetic Healing, Cranio-Sacral, Radionics and Reiki. Information presented in the class will be useful when sitting for the NCTMB examination.

$104.00

XNM 6074

Final Evaluation

Course is part of Bodywork III Module. This class is designed to evaluate the student's overall massage skills. Instructor and students will also review overall program objectives. Q & A session prior to graduation.

$52.00

XNM 6075

NCBTMB Board Review

This course will provide the student preparing to take their national exam A thorough overview of the NCBTMB's required Anatomy and Physiology, Kinesiology and massage techniques.

$78.00

Money Management (XPM)

XPM 1000

Basic Investments

Have you ever wished that someone would explain how investments work in such a way that anyone could understand? This class is for the novice investor who needs finance explained on a basic level. Try it, you'll like it!

$40.00

XPM 1001

Advanced Investments

Two class session for those beyond the basics. We evaluate stocks, bonds, mutual funds, also study economic drivers, types of risks and allocation methods will be discussed. Bring calculator to class.

$21.00

XPM 1004

Retirement Reality Check

Do you have enough to retire? For those in a five-year window before or after retirement, methods that worked for accumulation stage may not be helpful in distribution phase. Workbook provided.

$21.00

XPM 1005

Soon To Retire

Getting close to retirement? Concerned you are forgetting something important to plan for? Come and learn the things you can do in preparation for retirement. We will discuss Social Security, health insurance, IRA distributions and techniques for early retirement.

$20.00

XPM 1006

Planning for Your Child with Special Needs

You will learn about available state benefit programs such as SSI & Medicaid, Special Needs Trusts, Guardianship and how to plan for your child with special needs. Walk away with the start of your own "Blue Print" to prepare for your child's ongoing care.

$18.00

XPM 1007

How to Choose a Financial Planner

Will your financial consultant be a true adviser or salesperson? Are they offering unbiased advice? Learn the facts about the financial planning industry and how to find qualified financial counsel.

$15.00

XPM 1010

Tax Free Investing Workshop

Would you settle for 75 cents on the dollar? Tax free investments are available that put your whole dollar to work. Imagine how much more you could save for the future with tax free investments.

$20.00

XPM 1011

Parenting Your Parents: Financial and Legal Strategies for Aging Parents

Session 1 - a financial advisor will offer you planning advice on financial distributions, proper asset allocation and preserving principle. We will touch on annuities, IRA's and long term care insurance. Session 2 - an Elder Law attorney will discuss asset titling, transfer and legal protection strategies. Material will be workable for multiple states and multiple family situations.

$21.00

XPM 1015

College Funding 101

Five questions to get answered before you apply to a college, how college savings affects scholarships, how to position students for scholarships from the college of choice, how colleges weight SAT scores, how to increase opportunities to receive merit aid.

$20.00

XPM 1016

Annuities 101

Annuities have become increasingly popular investment vehicles for income during retirement. They also have been the subject of lots of controversy, become informed, learn what questions to ask your advisor and what red flags to look for.

$22.00

XPM 1020

Common Stock Analysis, I

Learn the basics of stock analysis. This course will review the many variables that should be considered in making stock selections. You should be a beginning investor with a basic knowledge of stock market terminology.

$25.00

XPM 1023

Stock Trading - Information to Formation

Learn how professionals trade the Cup with Handle Family of Trades to find entries and exits. Use options to trade ETF's. Control overtrading using money management techniques. Class price includes 200 page manual. Class limited to 15 students.

$77.00

XPM 1026

Rollovers 101

This course will explain everything you need to consider when rolling over your retirement plan. We'll also cover how to avoid the 20 percent withholding tax. Nearly 20 years of instructor experience will make it easy to understand and apply.

$16.00

XPM 1030

Common Stock Analysis, Part II

This course will teach you how to use fundamental and technical analysis to evaluate stocks as well as how to set sell objectives and manage a stock portfolio. Option strategies to reduce risk and enhance returns will be discussed.

$35.00

XPM 1032

How to Raise a Money Smart Child

Giving your children or grandchildren a primer on money management skills can have a positive impact their entire lives. Invest your time today to benefit your family's future. During this class you will learn how to start teaching your child or grandchild about financial goal-setting and self-discipline and the basics of making wise money choices.

XPM 1047

Long Term Care: Get the Facts!

Have you considered long term care options? Does the lingo confuse you? Attend this class and get answers regarding this very important life decision. Review the common myths, utilize assessment tools, quizzes and checklists to aid you in making an informed decision.

$17.00

XPM 1052

How to Raise a Money Smart Child

This is a primer on money management skills for your child. You will learn how to start teaching your child or grandchild about financial goal setting and self discipline and the basics of making wise money choices.

$18.00

XPM 1076

"ABCs" of Financial Planning and Investing

Topics include: starting an investment plan. Cut fees and expenses make IRA's and 401-K's work better. Learn what type of insurance to use if any? Strategies for retirement and college funding plus the best kept "secret" investing - index funds.

$15.00

XPM 1110

Understanding Mutual Funds

Do you have mutual funds but have an uneasy feeling exactly what they are? This class will review what a mutual fund is, how it functions, how to find good quality funds and why many investors choose them for IRA's.

$15.00

XPM 1115

Debt-Free Living - Invest in Your Debt

Learn how to eliminate all of your debts, even your mortgage. Bring to class a calculator and a list of your current debts with minimum monthly payments (principal and interest only on mortgages). Fee includes a workbook. An optional textbook and software will be available from the instructor.

$20.00

XPM 1116

Spend Smart

Discover proven ways to save on insurance, groceries, automobiles, utilities, interest and more. You will also develop your own personalized plan. Bring a calculator to class. Fee includes materials, an optional textbook available from instructor.

$20.00

XPM 1119

A Guide to Navigating Retirement

Now that you are retired, how should you create an income stream from your investments. This class helps develop that plan for a successful retirement. A workbook can be purchased from the instructor.

$21.00

XPM 1121

Creating Financial Freedom for Women

Financial freedom starts with YOU! Learn 10 key elements to create the life you seek and the financial independence you want.

$21.00

XPM 1185

Common 401K Mistakes

Don't make costly mistakes in your 401(k) plan that can result in losing thousands of dollars! You will learn various aspects of a 401(k) plan that many people are not familiar with plus we will discuss mistakes many participants make and how to avoid them.

$15.00

XPM 5000

Introduction to Stock Options

This course will teach you how to protect your portfolio and profit in a down market, an up market, or even a flat market. Learn to leverage your investment dollars for potential profits that surpass those possible with stocks.

$85.00

XPM 5001

Stocks, Bonds, and Investing: Oh, My!

This class will walk you through the fundamentals of investing. The course will teach you about the stock market, 401K plans and retirement, but it will also address personal financial issues that are often ignored.

$85.00

XPM 5002

Performing Payroll in QuickBooks 2007

Learn how to use QuickBooks software to process payroll quickly and easily. You'll discover all the steps you need to properly set up your payroll system, troubleshoot common problems, and avoid mistakes. NOTE: See course description for computer requirements.

$85.00

XPM 5005

Personal Finance

Learn to create and use a budget, borrow and invest wisely, understand and control your credit rating, make intelligent decisions about insurance, develop a retirement savings plan, and be better prepared to plan for taxes.

$85.00

XPM 5006

Where Does All My Money Go?

Find out where your money goes. Make your own choices about where you want it to go. Start to tackle your debt. Learn how to fund your dreams and stop worrying about money.

$85.00

XPM 5007

Building Wealth

Most people don't achieve true wealth through luck or an accident of fate. Being organized, disciplined and having a firm knowledge of how to proceed is the way to building your wealth. You will succeed with these skills.

$85.00

XPM 5008

Debt Elimination Techniques that Work

You will learn s specific workable strategy that will get you out of all debt including your mortgage. You will be pointed down a new path concerning spending, saving and handling money that will keep you out of debt forever.

$85.00

XPM 5009

Analysis and Valuation of Stocks

This course is designed to show you how to research and value stocks. Topics covered in this course include reading financial statements, calculating financial ratios, industrial comparisons, and pricing techniques.

$85.00

XPM 5010

Start and Operate Your Own Home-Based Business

Home-based businesses are the hottest business trend of the decade. Learn how to be your own boss and eliminate the stress of having a job. The benefits of working from home are endless.

$85.00

XPM 5011

Real Estate Investing

You will explore how to find, finances and negotiate a deal, how to invest in lease options, foreclosures, quick flips, rehabs and mobile homes.

$85.00

Music, Gemology (XKA)

XKA 1026

Beginning Piano Class for Adults

It is never too late to become a piano player. Join JCCC music professor, Victor Olvera, for a solid introduction into the world of piano playing. This class is intended to provide an introduction to the art of keyboard playing basic skills such as reading music, basic notation, keyboard techniques and basic piano repertoire will be covered. Text available in JCCC Bookstore.

$85.00

XKA 1027

Return to the Keyboard Adult Piano Class

This course is intended as a review and tune-up for adults with prior piano keyboard experience. Keyboard skills, technique and repertoire will be tailored to the individual student's skill level. Following an informal assessment you'll explore additional techniques and improvisational methods. Text available in the JCCC Bookstore.

$85.00

XKA 1031

Voice, Beginning

A singing/voice class for adults who have had little, if any, music lessons. Explore your music/voice potential in a very informal, relaxed setting. Discover your gifts. Very basic knowledge of music useful, not mandatory. Approximate cost of music is $25.

$59.00

XKA 1032

Voice, Intermediate

A singing/voice class for adults who have had minimal/moderate music lessons. It will further explore their music/voice potential in a very informal, relaxed setting. Improve your technique and capabilities. Approximate cost of music is $25.

$59.00

XKA 1060

Johnson County Chorus

If you enjoy singing in a mixed chorus, this is the group for you. The chorus sings a wide variety of choral literature, from master works to popular. You may interview with the director, Anita Cyrier, on September 9, between 7-9 p.m. Enrollment fees include most music. Performances require concert dress: men will wear tuxedos; women will purchase concert dress. Full rehearsal begins September 16 from 7:30-9:30 p.m. Inquire about the select ensemble which rehearses from 6:30-7:30 p.m. Note: To participate in the JC Chorus activities, you must be enrolled before the second class session.

$75.00

XKA 1131

Jazz Camp

Jazz Camp is designed for middle school to adult students who want to sharpen their jazz skills. Students need to have command of all twelve major scales before enrolling.

$135.00

Personal Development (XKD)

XKD 1062

Bulletproof Self-esteem

Michael Jordan and Oprah generate bulletproof confidence from primitive feeling brain centers. This new feeling based program helps you uncover these instinctive primordial I-can-do-anything feelings. You'll understand the reasons for repression of instinctive confidence and will learn techniques to uncover and feel comfortable with these.

$14.00

XKD 1066

Connections

This weekly social skills course is designed for young adults with mild-moderate special needs. The weekly classes alternate between in class instructional sessions or social outings. The weekly instructional sessions emphasize social skills practice, social interaction, and how to plan, organize and access community activities. Various topics related to self- awareness, developing relationships and pursuing a social life are discussed. Role-playing, open forums, speakers, and small group interaction keep students engaged. In addition, the students attend a group-planned social outing in the community called "Community Connections," twice a month. For "Connections" application form, call 913-469-3837. The course is limited to 28 students with special needs. Note: At the first class session, a special activities fee of $50 will be due.

$175.00

XKD 1080

What's Happening in Greater Kansas City for Singles?

This class is for singles who want to know about singles groups, events and

activities taking place in Kansas City. The course is presented by Don Davidson, publisher Guide to Singles Groups in the Kansas City Area. Enrollees will receive a copy of the directory. The fee includes the cost of the directory and other materials.

$13.00
XKD 1082

101 Fun and Clever Ways to Get Noticed

The first step in starting a relationship with someone of the opposite sex is getting noticed. This workshop will discuss fun and clever ways to do that. The instructor is a singles leader and author. Come and have fun meeting others and contributing your own clever ways of getting noticed. The fee includes handout materials.

$13.00
XKD 1113

Dream Interpretation

Dreams can be spellbinding, mystical and frightening. Learn the essential language that your inner self communicates to you every night in the form of a dream. Subjects include: remembering dreams, two rules of dreams, dream journaling, divisions of the mind, kinds and types of dreams. Come ready to explore your inner mind!

$12.00
XKD 1135

5 Love Languages of Marriage

Using the book with the same title by Gary Chapman, discover the 5 love languages and where you and your spouse fit into them. An evening of great discovery that can change and strengthen your marriage. Come alone or with your spouse.

$12.00
XKD 1143

Top 10 Ways to Keep Your Marriage Going in the Right Direction

Is your marriage/relationship feeling stagnant? The things that made it feel so "right" in the beginning might now be buried in daily living, annoying habits or busy schedules. This class will take a look at simple things that make a huge difference in opening communication, enhance passion, and put a "fresh" feel back into the relationship. Participants can be married or unmarried, and are looking to renew their relationship energy in a fun, unintimidating setting.

$12.00
XKD 1181

Improve Your Communication Skills

Listening, attention and concentration will help you in being connected with others. Join this interactive class where you will do exercises to develop four communication skills.

$12.00
XKD 5001

Keys to Effective Communication

If you find yourself at a loss for words or lack confidence in your communication abilities, you'll appreciate this course. With the help of a patient instructor and a supportive community of your fellow students, you'll work step-by-step through the process of becoming a great conversationalist. You'll learn to use communication

to build rapport and create environments of trust, warmth and respect.

$85.00

XKD 5002

Goodbye to Shy

Become more confident in social, professional and romantic situations. This engaging course will help you learn how to reduce anxiety, build self-esteem, strike up conversations with others, win friends and act confidently in romantic relationships.

$85.00

Photography (XKP)

XKP 1020

Creative Photography

If you're looking for inspiration, come to this course. There will be photo assignments and critiques, along with discussions on a variety of topics. Registration limited to intermediate and advanced amateurs. Class meets every other week.

$92.00

XKP 1060

Basic Scenic and Nature Photography

This class is designed to give amateur photographers some helpful tips for improving scenic and nature photography. Topics include exposure, depth of field, simple close-up techniques and helpful equipment. Wildlife photography also will be discussed.

$30.00

XKP 1064

Going Digital

Learn about the world of digital photography. Topics will include: digital vs. film, digital workflow, white balance, different kinds of digital cameras, composition and using various shooting modes.

$25.00

XKP 1066

Advanced Scenic and Nature Photography

Advanced concepts in composition, construction of the landscape photograph, and mastering a series of challenging photo situations will be covered in this course. The class will include both film and digital capture approaches to scenic and nature photography. Basic photographic knowledge or completion of Basic Scenic and Nature Photography course is required.

$29.00

XKP 1070

Photography Appreciation

Designed for amateur and intermediate photographers. You meet each week with assignments in different shooting styles and subjects (frame within a frame, leading the viewer, off the frame, repeating patterns, macro and painting with light). Bring a 35 mm SLR (color or black and white film) or digital SLR, and have a basic understanding of camera function and design principles.

$59.00

XKP 1071

Photography Appreciation: Color vs Black and White

Designed to give amateur and intermediate photographers a sampling of photography genres and how those photos change when printed in color versus black and white. Students meet each week with assignments (street photography, portraits, landscape, abstract). Bring a 35 mm SLR (color or black & white film) or digital SLR. You must have an understanding of basic camera functions.

$59.00

XKP 5000

Discover Digital Photography

Join us and explore the world of digital photography. This course provides an introduction to the fascinating technology that is catapulting the photographic world into the 21st century. We'll discuss the basics of digital photography, equipment, software, the digital darkroom, printing, Internet and e-mail use, along with commercial and personal applications. You'll learn what you need, what you can do, and what you can expect to invest.

$85.00

XKP 5001

Photographing People with Your Digital Camera

Photographing people can be fun, exciting - and complicated! This course will make taking beautiful pictures of adults, children, and babies simple. After a review of the basics, you'll discover the best way to shoot faces, repair common problems, and take professional portrait and formal group shots.

$85.00

XKP 5005

Secrets of Better Photography

Designed for both film and digital photographers, this course is filled with tips and tricks to help you take better photographs. You'll learn the basic technology that all cameras use, and you'll receive helpful information on exposure and lighting.

$85.00

XKP 5010

Photoshop CS2 for the Digital Photographer

Unleash the full potential of Phtotshop CS2 to edit and enhance your digital photographs. Adobe Photoshop CS2 is a high-end software solution that provides support and specialized editing tools for digital photographers and graphic artists.

$85.00

XKP 5012

Photoshop Elements 4.0 for the Digital Photographer

Bring out the best in your images! Adobe's Photoshop Elements 4.0 provides the tools for quick fixes and detailed enhancement. Discover the features of this award-winning package specifically designed for photo enthusiasts. This class will take you from novice to accomplished user.

$85.00

XKP 5013

Photoshop Elements 4.0 for the Digital Photographer II

Adobe's Photoshop Elements 4.0 for Windows is full of outstanding features for advanced editing. Once you've learned the basics, you're ready to see how the more advanced tools work together to allow you to perform detailed editing, build collages, restore old photos, and more.

$85.00

XKP 5014

Photoshop Elements 5.0 for the Digital Photographer

Bring out the best in your images! Adobe's Photoshop Elements 5.0 provides the tools you need for quick fixes and detailed enhancement. Take control as you discover the features of this award-winning package specifically designed for photo enthusiasts.

$85.00

XKP 5015

Photoshop CS3 for the Digital Photographer

Learn how to use Adobe's Photoshop CS3 to edit and enhance your photographic images.

$85.00

XKP 5016

Creating Web Graphics with Photoshop CS3

Learn how to use Photoshop to create graphics for the web. Designed for those with a good working knowledge of the basic tools in Photoshop and to be able to make selections and use layers and layer masks.

$85.00

XKP 5017

Photoshop Elements 5.0 for the Digital Photographer II

If you already know the basics of Photoshop Elements 5.0 for Windows, it's time to learn the advance features!

$85.00

XKP 5019

Travel Photography for the Digital Photographer

Discover the world through a photographer's eye. Learn the tricks and techniques digital photographers need to capture scenes from around the world and bring them home. We'll share various examples from destinations across the globe and expand your knowledge.

$85.00

Practical Know-how (XPR)

XPR 1005

Furnace Tune-up and Maintenance

Would you like to tune and maintain your own furnace, but lack the know-how? Then come to this class, where you'll acquire both the skill and the confidence to do it yourself! You'll also learn how humidifiers and thermocouples operate, how to install them, and how to oil and clean blower motors. Digital thermostats and safety controls will also be covered. BG(B&G $21)

$25.00

XPR 1006

How to Save $$ Buying a Home

This class will inform you about the 13 steps you need to know to negotiate the lowest possible price on the next home you buy. Discover what the lenders and realtors don't usually discuss, and learn how to avoid those costly mistakes.

$12.00

XPR 1007

Home Inspections: A Buyer's Best Protection

All homes have problems of some sort. The critical question is: how serious are those problems? You'll learn common "red flags" in a house's structural and mechanical systems and components, many of which are highly visible to the average person if you simply know what to look for and where to look. You'll also learn how to get further help or negotiate repairs with the seller, if a defect is significant.

$12.00

XPR 1008

Mold and Moisture in the Home

Homeowners have been exposed to unwanted moisture intrusion and mold from many sources for years. In the past homeowners simply repaired the leak, washed off the mold and went on with their life. New types of mold have proved to pose a serious health and financial hazard to many people. This seminar will focus on what a homeowner needs to know about mold to protect themselves and their family from this environmental and legal hazard.

$12.00

XPR 1009

Homebuilding 101: Dealing With New Construction Defects

With the current lowered interest rates and increased building activity, there is a serious shortage of competent tradesmen to build new homes. Come learn what to look for when buying or building a new home and how to correct the most common defects.

$12.00

XPR 1010

Homes That Perform

Translate building science principles, energy efficient practices and products into successful easy to understand strategies to improve the performance of the participant's home. Performance is defined as the level to which a home is comfortable, healthy, safe and economical to operate. If possible bring last 12 months utility bills, paper and calculator.

$12.00

XPR 1015

Basic Interior Design

Learn the basics of good interior design and how it translates into practical uses within the home. Topics include paint selection, flooring, window blinds & drapery, furniture purchasing and placement, room arrangement and accessorizing. Included will be the importance of color, structure, and design flow.

$39.00

XPR 1016

Interior Design Basics

Discover the interior designer within you! Learn the principles and elements of design and how to improve the overall function, quality and esthetics of spaces. Supplies discussed at first class session.

$45.00

XPR 1020

Home Plumbing

For do-it-yourselfers, this is a basic course on repairs, maintenance, installation repairs, installation of home plumbing systems, garbage disposals, commodes, broken pipes and hot water tanks. The recommended text is available at the JCCC Bookstore.

$40.00

XPR 1022

Patents, Trademarks and Copyrights

This class will give you a basic understanding of what is patentable, what can be trademarked, and when to obtain a copyright. A patent attorney will instruct the class.

$6.00

XPR 1030

Home Wiring, Electrical Repairs and Lighting Solutions

Hands-on sessions for wire stripping, repairs, installing replacement switches and receptacles. In-depth discussions for lighting upgrades in kitchens, bathrooms and outdoor security lights. Learn the basics for planning basement and kitchen remodels, i.e; new circuit rough-in wiring techniques, box mounting, can light placement and dimmers. Many handouts and devices to examine. Illustrated text available at the JCCC bookstore.

$45.00

XPR 1045

Residential Air Conditioning Maintenence

Save money and keep your home air conditioner in tip-top condition. Through lecture, handouts, and hands-on practice in the college HVAC lab you'll learn how to dismantle, clean, and reinstall the condenser, lubricate the motor, test and troubleshoot the operating system, and check air flow in the duct system. Finally, the instructor will provide you with a check list of safety precautions.

$30.00

XPR 1046

Residential Heating System Maintenance

Save money and keep your home's residential heating in prime working condition. Learn how your furnace operates, learn how to clean your furnace, remove basic components, and make proper adjustments. Instructor will familiarize you with cleaning and replacing pilot, checking and adjusting main burner and blower motor, belt tension, and checking the clock meter and flue.

$30.00

XPR 1062

How to Buy a Car (and Feel Good About It!)

Learn how the car business works, with an emphasis on buying techniques to save you time and money. This class explores all aspects of the business and sales process; how a dealership works, negotiating the deal, handling your trade-in, car pricing, financing, insurance, leasing, rebates and after-market sales.

If you're shopping for a car, or anticipating doing so, come hear independent auto broker Bill Lucas 'tell it like it is'!

$8.00

XPR 1106

Basic Self-Defense

You will learn the most simple and basic self-defense techniques and moves that are easy to learn: body positioning, blocking, hand strikes, kneeing and kicking. By practicing these moves in repetition during class, you will develop better confidence and awareness while learning self-proctection techniques.

$45.00

XPR 1115

55 Alive Mature Driving

This eight-hour classroom course will refine your existing driving skills and help you develop safe, defensive driving techniques. Course assistance is provided by AARP.

$10.00

XPR 1120

Defensive Driving

This course was developed to create better driving techniques through systematic, standardized training. The course consists of classroom training in driving skills that help prevent traffic accidents. The films/ videos used have been filmed throughout the country. New driving issues are addressed, including airbags, anti-lock brake systems, safety belts and more. Course assistance is provided by the Safety and Health Council of Kansas and fulfills the requirements for insurance discounts for the state of Kansas. Must have a valid learner's permit or driver's license to take the class.

$35.00

Professional Education (XNX)

XNX 6003

Payroll Fundamentals

This course teaches the fundamental payroll calculations and applications to provide you with the basic knowledge and skills required to maintain payroll compliance and prevent costly penalties. This course is ideal for new payroll professionals, those who support the payroll industry, and those who are preparing for FPC certification. You will receive a comprehensive textbook and access to interactive online games and applications that reinforce topics covered in the classroom.

$599.00

XNX 6004

Payroll Mastery

This comprehensive course provides you with a solid understanding of advanced payroll topics necessary for payroll managers and supervisors. This course is ideal for experienced payroll professionals seeking compliance training, professional development, or CPP certification preparation. You will receive a comprehensive textbook and access to interactive online games and applications that reinforce topics covered in the classroom. Payroll Fundamentals is a recommended prerequisite.

$699.00

XNX 9029

SHRM Learning System - Human Resource Certification

This course will prepare you for the Professional in Human Resources (PHR) or Senior Professional in Human Resources (SPHR) certification exams. Course material includes content from the Human Resource Certification Institute (HRCI) regarding management practices, general employment practices, staffing, human resource development, compensation and benefits, employee and labor relations, health, safety and security. The textbooks and a CD ROM are included.

$899.00

XNX 9030

SHRM Essentials of HR Management Certificate Program

This course will provide you with an overview of the human resource function and covers real-life HR issues and today's most vital and timely topics, including employment law, recruiting and selecting qualified employees, compensation and benefits, orientation and training, and the employee performance process. If you are new to human resources or simply want to strengthen your employee management skills, this course is for you. Knowledge of the essentials can make you a better manager, protect your company from needless litigation, and help advance your career. This program is designed for junior-level human resources practitioners, others involved with hiring or managing employees also benefit from the course.

$349.00

Public Events (XKE)

XKE 1012

Natural History of Kansas

Natural History of Kansas describes physical and biological processes that have led to the present Kansas landscape. Physical science topics include geology, climate patterns and soil formation. Biological science topics include ecology and a survey of the plants and animals of Kansas. The course will consider how the physical and biological environment relates to past and present human resource uses. Two Saturday field trips are included in this course. Enrollment is limited.

$189.00

XKE 1014

Modern Russian History

Imagine what your life would be like if the U.S. government declared democracy and capitalism failed experiments and the country dissolved. Imagine the U.S. lost its super-power status, was abandoned by its allies and defaulted on its public debt while businessmen from our former ideological enemy lived in luxury in our country lecturing us on how to rebuild the economy. Now imagine that your grandparents lived through similar social, political, and economic chaos eighty years earlier. However, their suffering was compounded by the horror of a world war, a revolution, civil war and famine. Now you have some idea of the tragedy of Russian history. Join professor Gaar and classmates for a study of the endurance and the endeavors of the Russian people.

$174.00

XKE 1015

Model Railroading-Building the Scene

This class will focus on building scenes for model railroads, military dioramas and/or architectural dioramas. This class will include the following topics and a tour of the instructors home model railroad layout which has been published numerous times in national model railroad magazines.

$24.00

XKE 1017

Drawing
Description is coming.

$174.00

XKE 1018

Intro to World Humanities
This course will acquaint students with the arts and ideas of the world's major civilizations, from antiquity the period of world exploration during the Renaissance. The approach will be interdisciplinary, covering the artistic values embodied in painting, sculpture, architecture, literature, theatre, music, dance, photography and film as they have emerged out of their historical contexts. In addition to providing the fundamental principles, generalizations and theories used in the study of the humanities, the course aims to enhance students understanding of the contemporary world.

$174.00

XKE 1021

Concepts of Floral Design
This is an introductory course for students to learn the design basics of flower arranging. The course will help students develop an eye for color combinations, flow of lines, balance, geometric shapes and texture uses in flower arranging. The student will become familiar with materials used, mechanics of design, customer perspectives and the post harvest care of floral materials. All class materials are included in class fee. Enrollment is limited.

$292.00

XKE 1022

Introduction to Humanities
This interdisciplinary study begins with a look at artistic and technical elements of several art forms, including painting, sculpture, architecture, music, theater, film, dance and literature. Major themes expressed in the works and their reflection of the values of their culture are also examined.

$192.00

XKE 1023

Introduction to Russian Culture
This course is a survey of the cultural history of Russia from the ninth century to the present. The approach is interdisciplinary, examining representative examples of Russian art, architecture, music, theater, dance, literature and philosophy in their historical context. In addition to developing the students' appreciation of Russia's contribution to world culture, the course aims to enhance students' understanding of the contemporary world. Enrollment is limited.

$189.00

XKE 1024

Art 130
This is an introductory course with an emphasis on the development of fundamental drawing skills, increased power of observation and an awareness of the personally expressive and compositional aspects of drawing.

$174.00

XKE 1026

World History I: Traditional World

This course provides students an introduction to the history of the major world civilizations up to approximately 1500. Upon successful completion of the course, students will be able to identify the major political, social, economic and technical developments in the histories of Egypt, Mesopotamia, other Near Eastern civilizations, Rome, Greece, India, China, sub-Saharan Africa, pre-Columbian America and medieval Europe. Students will be able to define the concept of a traditional, as opposed to a modern society. They will be able to compare these societies with each other and with the modern society of the contemporary United States.

$192.00

XKE 1027

World History II: Modern World

This course provides students an introduction to the history of the world since approximately 1500. Upon successful completion, students will be able to describe and analyze the development of modernism, which occurred first in the West, including the scientific revolution, secularism, industrialism and the rise of new political ideologies. They will be able to trace the expansion of modernization in both the Western and non-Western worlds and the response to modernism in non-Western countries.

$186.00

XKE 1028

Introduction to Bioethics

This course is an introductory course in ethics with an emphasis on the ethical content raised by the discipline of biology. The student will examine the major ethical theories, including: deontology, act utilitarianism, rule utilitarianism, along with select others. Study of the theories will enable the analysis of case studies involving such issues as: human populations problems; reproductive technologies; genetic engineering of humans and other organisms; stem cells and their use; beginning/ending of life; the human genome project; environmental impact of humans; cloning; medical and non-medical genetic interventions; and biological ethics. Enrollment is limited.

$189.00

Real Estate and Appraisal (XNR)

XNR 1000

Principles of Real Estate: Pre-license Instruction and Exam Review

The course prepares you to become a licensed real estate salesperson in the state of Kansas and is the first in a series of steps required by the KS Real Estate Commission to obtain your license. To enroll you must have a high school diploma or GED. Upon completion of this course you must pass both parts of a licensing examination given by PEARSON VUE.

$229.00

XNR 1010

Kansas Practice Course

This is the second course required to become a licensed real estate salesperson in the state of Kansas. Upon completion of this course you must submit all of your application paperwork and fees to the Kansas Real Estate Commission.

$199.00

XNR 2030

Professional Real Estate Management - 9 CEUs

You will learn the basic principles of real estate management. This includes the management plan, owner relations, record keeping, marketing, leasing, tenant administration, maintenance, staffing and employee relations, rental housing, office buildings, shopping centers and retail properties. This course has been approved for 9 elective continuing education hours through the KS Real Estate Commission.

$99.00

XNR 2120

Command Spanish for Agents - 9 CEUs

Come be immersed in a comprehensive language program that will provide you with immediate access to functional language skills to help you better assist your Spanish-speaking customers. Upon completion you will be able to use Spanish to greet property buyers, interview clients to determine their needs, discuss loans and contracts, provide property descriptions, discuss closings, etc. No prior knowledge of Spanish is necessary. You will receive a manual and two CDs for your reference.

$129.00

XNR 3001

Supporting Capitalization Rates

You use capitalization rates in nearly every commercial appraisal, yet do you still wrestle with developing a cap rate and then encounter criticism? If you need to improve your ability to select and defend cap rates, this seminar is for you. This course focuses on practical ways to incorporate judgment and market experience into the rate selection process. You will learn to apply what you have learned to real-world situations. Working with case studies, you will develop well-supported, market-extracted capitalization rates reflecting specific economic and property characteristics. You will learn to identify strengths, weaknesses, and data requirements of various methods to help you select the most appropriate method for any given appraisal problem.

$150.00

XNR 5000

Managing Risk in Today's Market - 9 CEUs

Recent surveys have shown that 70% of lawsuits against real estate agents are about alleged misrepresentation of the property condition. Agency changes are often a by-product of these lawsuits. This course covers specific areas of risk reduction that will that will help you protect yourself.

$99.00

XNR 5010

Antitrust and Real Estate - 3 CEUs

As a real estate professional, you must have a basic knowledge of antitrust laws. By completing this course you will gain an awareness and understanding of the types of conduct prohibited by antitrust laws, and learn the keys to avoiding potential problems and costly litigation.

$59.00

XNR 5015

Understanding Home Inspections - 4 CEUs

This informative and interesting course prepares you to deal with home inspections and inspectors. You will learn how to spot "red flags" when listing property. The course manual is an excellent reference source.

$59.00

XNR 5020

HUD Repossession Transactions - 4 CEUs

HUD-owned properties provide a source of affordable housing for many families and provide an additional source of business to real estate agents. This course will show you how to handle HUD repossession transactions and how to earn a generous commission for your efforts.

$59.00

XNR 5036

Required Salesperson & Broker Core - 4 CEUs

In this course you will exam the law, risk management and broker relationship guidelines for the seller agency, buyer agency and transaction broker. You will receive a manual so complete it has become a basic reference source for salespersons and brokers throughout the state.

$59.00

XNR 5037

Broker Core: Management for Today's Brokers - 4 CEUs

This course will show you the essential aspects of real estate brokerage. You will focus on policy and procedures and the necessary tools you need to comply with both federal and state laws.

$59.00

XNR 5038

How To Be a Good Transaction Broker - 4 CEUs

In this course you will cover provisions governing the practice of transaction brokerages. This course highlights field applications by focusing on concepts and techniques that will enable you to legally and effectively perform your duties. You will learn the necessity of treating both parties with honesty and impartiality.

$59.00

XNR 5039

HUD 203(k) - 4 CEUs

Successfully completing this course will give you the knowledge necessary to offer this viable financing alternative to sellers and buyers. The course is designed to support FHA's 203(k) program objective, which is the restoration and preservation of the nation's existing housing stock.

$59.00

XNR 5215

National Uniform Standards of Professional Appraisal Practice (USPAP) Update

This one-day update course, copyrighted by The Appraisal Foundation, focuses on recent changes to USPAP requirements for ethical behavior and competent performance by appraisers. The course, which clarifies several commonly misunderstood aspects of USPAP, will aid appraisers in all areas of appraisal practice seeking updated competency in USPAP, including those subject to state licensing or certification and continuing education requirements imposed by professional organization, client groups, or employers.

$165.00

XNR 5270

Appraisal Review: General

The art of appraisal review requires a skill set that is distinctly different from that of

a field appraiser. Field appraisers will gain an invaluable inside view of their clients? expectations regarding content and quality. Designed especially for appraisers who also review appraisals, this course will teach you ways to perform review assignments more efficiently and effectively. While exploring the techniques and methodologies of professional reviewers, you will identify the features of the ideal appraisal report, spot the most common reporting deficiencies and avoid reporting deficiencies. Because of its importance to the review process, compliance with USPAP Standard 3 will be thoroughly covered.

$175.00

XNR 5272

Reviewing Residential Appraisals

Recent guidance from federal regulators and the increase of real estate fraud has placed renewed emphasis on the importance of the appraisal review process. This seminar is designed to invoke discussion about the correct use, pitfalls, and optimal procedures used in the review of residential appraisal reports. Most residential review assignments are done for lenders who are complying with quality control requirements, so in addition to USPAP Standard 3, lender quality control programs including Fannie Mae and FHA forms are included. Key information for residential appraisers who review reports or would like to learn about this type of work will be presented including tips on where to find and confirm data presented in reports, a better understanding of the needs of clients who order appraisal reviews, and instructions on how to complete the various appraisal review forms.

$175.00

XNR 5275

Analyzing Distressed Real Estate

This course is designed to benefit real estate appraisers and brokers in their review and analysis of distressed real estate. Basic real estate issues will be discussed along with detailed considerations in an attempt to satisfy both the seasoned and entry-level real estate analyst. All real estate analysts can benefit from the enhanced awareness that appropriately analyzing distressed real estate can have on preparing supportable estimates of value on these type properties.

$100.00

XNR 5280

Understanding Discounted Cash Flow

USPAP Statement Number 2 on discounted cash flow analysis mandates that appraisers check the results of DCF analysis for errors and reasonableness. In this seminar, you will learn a variety of methods and will be exposed to situations designed specifically for reviewing a discounted cash flow analysis for reasonableness. Topics will also include factors that influence DCF results, practical tools and methods used to test cash flow models and performing DEC valuation analysis.

$100.00

XNR 5295

Subdivision Valuation: A Comprehensive Guide to Valuing Improved Subdivisions

Valuing subdivisions offer appraisers unique challenges. This new seminar provides a complete look at subdivision valuation methodology as it relates to valuing improved subdivisions. Appraisers who provide opinions of value for proposed subdivisions or a group of existing lots of units will find this seminar a valuable source of reference and ideas. You will come away with techniques appraisers need to value a group of lots or units that must be marketed over a period of time. Comprehensive examples are provided to explain how line item profit and discount rate selection are handled in conjunction with discounted cash flow analysis. Ample time is given to typical problems encountered by appraisers in specific valuation scenarios.

$200.00

XNR 5300

Case Studies in Complex Residential Valuation

This seminar provides numerous examples and a case study to help you learn how to successfully solve complex residential valuation problems. You will recognize the four factors that create a complex assignment, and learn how to research the ?complex? assignment, locate sources, and creatively apply traditional valuation techniques. In each case study, you will examine the factors that make the particular property complex. Then, you will explore creative applications of traditional valuation techniques to show how they apply in complex situations. You will also learn when to bring in other professionals to achieve a credible valuation.

$200.00

XNR 6000

Home Inspection Training

This course prepares you to become a home inspector by training you to pass the National Home Inspector's exam and the American Society of Home Inspector's exam. Topics covered include the history of the inspection industry; an overview of plumbing, electrical, air and heating systems; structure quality (including walls, windows, doors and frames); foundations and roofs; and how to write reports. Classroom instruction will feature hands-on displays of electrical panels, furnaces, plumbing fixtures, roofing materials and more. You will accompany the instructor on an actual home inspection. Books and study materials may be purchased through Midwest Inspectors Institute.

$2,100.00

XNR 6002

Home Inspection Training - Mechanical Components

The state of Kansas has passed legislation that will require individuals that want to become home inspectors to have 80 hours of education. This course meets the first half of that requirement. This course prepares you to become a home inspector by training you to pass the National Home Inspector?s exam and the American Society of Home Inspector?s exam. Topics covered include the history of the inspection industry; an overview of plumbing, electrical, air and heating systems; and how to write reports. Classroom instruction will feature hands-on displays of electrical panels, furnaces, plumbing fixtures, and more. You will accompany the instructor on an actual home inspection. Books and study materials may be purchased through Midwest Inspectors Institute. You must also take the Mechanical Component course to meet KS requirements for training.

$1,350.00

XNR 6003

Home Inspection Training - Structural Components

The state of Kansas has passed legislation that will require individuals that want to become home inspectors to have 80 hours of education. This course meets the second half of that requirement. This course prepares you to become a home inspector by training you to pass the National Home Inspector?s exam and the American Society of Home Inspector?s exam. Topics covered include the history of the inspection industry; structure quality (including walls, windows, doors and frames); foundations and roofs; and how to write reports. Classroom instruction will feature hands-on displays of frames, windows, roofing materials, and more. You will accompany the instructor on an actual home inspection. Books and study materials may be purchased through Midwest Inspectors Institute. You must also take the Structural Component course to meet KS requirements for training.

$1,350.00

Recording Engineer (XRE)

XRE 1001

Chamber Recording Ensemble I

This is an entry level course for the recording engineering student, emphasizing guided practice and actual recording session experience in the recording studio.

$640.00

XRE 1002

Advanced Recording Engineering I

Building on the practical skills gained in Intro to the Recording Studio and Recording Studio Skills II, this course begins advanced study of the essential equipment, recording techniques, and theoretical principles use in the modern professional recording studio. Emphasis is placed on the advanced study of sound and its production, as well as the capture, distribution, preservation, manipulation, and enhancement of sound through the use of advanced, modern studio tools. Students will additionally demonstrate essential knowledge of the basic electronics and audio theory necessary for intuitive and creative operation of Pro Tools TDM and other professional DAW tools of the modern recording studio.

$1,600.00

XRE 1003

Recording Studio Skills

This course is an in-depth study of the modern multi-track recording studio, and a continuation of Intro to the Recording Studio. Emphasis si placed on developing increased competencies in a variety of recording studio skills. Students will demonstrate increased competencies in using the patch bay and tracing signal flow, properly selecting and using microphones, using the audio console in a utilitarian and creative manner, reading electronic schematic diagrams, using soldering skills to fabricate circuits, using multiple sets of audio monitors and headphones to analyze audio and mix audio, and record and mix audio sessions using industry-standard Digital Audio Workstations (DAW). 3 lecture, 2 hrs. lab/wk

$1,280.00

XRE 1004

Music Theory for Recording Engineers

This course is for the recording engineering student with little experience in the practical application of music theory principles in the daily operation of a professional recording studio. Students will learn the fundamentals of basic, modern music theory as it relates to their daily activities in a professional studio environment. Topics to be covered will include scales, note values, chords, rhythm, musical form, time signatures, key signatures, score reading, intonation and the application of musical nomenclature in the use of computer sequencers and Digital Audio Workstation tracking, editing, and mixing sessions.

$960.00

XRE 1005

Chamber Recording Ensemble II

This is a mid-level course for the recording engineering student with little experience in the practical application of the art of audio engineering. Through continued practice and new additional recording session experience in the recording studio, the student will expand on the basic fundamentals of recording and running a recording session in a professional studio environment. Topics to be covered will include stylistically dependent instrument and vocal setups, microphone choice and placement, tracking a recording session, mixing and mastering, session protocol, and communication and client relations skills.

$640.00

XRE 1006

Chamber Recording Ensemble III

This is a mid-level course for the recording engineering student with little experience in the practical application of the art of audio engineering. Through continued practice and new additional recording session experience in the recording studio, the student will expand on the basic fundamentals of recording and running a recording session in a professional studio environment. Topics to be covered will include stylistically dependent instrument and vocal setups, microphone choice and placement, standard and alternative methods of tracking a recording session, plug-in vs. hardware options in mixing and mastering, session protocol, and communication and client relations skills.

$640.00

XRE 1007

Chamber Recording Ensemble IV

This is an advanced-level course for the recording engineering student with experience gained in Chamber Recording I, II, III in the practical application of the art of audio engineering. Through continued practice and new additional recording session experience in the recording studio, the student will expand on the skills learned by recording and running various styles of recording sessions in a professional studio environment and/or remote locations, with instructor permission. Topics to be covered will include stylistically dependent instrument and vocal setups, microphone choices and placements, standard and alternative methods of tracking a recording session, mixing, mastering for different mediums, session protocol and communication and client relation skills.

$640.00

XRE 1008

Introduction to the Recording Studio

This course is an introductory study of the modern multi-track recording studio. Emphasis is placed on understanding the audio signal path, use of the patch bay, recorder remote control operations, basics of microphone technique and simple soldering and realization of schematic diagrams. Students will demonstrate an understanding of the skills necessary to conduct a simple recording session from set up to final mix.

$1,280.00

XRE 1009

Advanced Recording Engineering II

This course continues the advanced study of the modern professional recording studio as introduced in Advanced Recording Engineering I. Emphasis is placed on in-depth study and use of professional analog and digital recording techniques and equipment. Students will demonstrate essential knowledge of the basic electronics and audio theory necessary for intuitive and creative operation of DAWs and other essential professional tools used in the industry. Students will also gain basic competencies in the creative use of audio with video, and will demonstrate common procedures for studio related maintenance, calibration, alignment and basic repairs.

$1,600.00

XRE 1010

The Studio Business

This course is for the recording engineering student with little or no experience in the business concepts and daily operation of a professional recording studio. Students will learn the basic fundamentals of business as it relates to the professional studio environment. Topics to be covered will include joining a studio?s staff or building a new studio, success through diversification, management, communication and client relations, financial concerns, copyright issues and studio pricing/collection.

$960.00

XRE 1011

Recording Engineer Portfolio

This is the final course for the recording engineering student and serves as a juried exit path to the Audio Recording Engineering Certificate Program. Students will work independently of and with an instructor and record a final project to realize and exhibit the extent of their engineering knowledge and skill. After completion of the recording project and assisting on at least four other recording sessions, the student will assemble a professional caliber portfolio CD of their best work for jury review. This is a pass/fail course and will be the determining factor in a student?s ability to receive certification. The student must repeat this course until the student?s work is judged to be of employable, professional caliber.

$640.00

XRE 1012

Remote Location Recording

This is a course for the recording engineering student with little experience in the practical application of the art of remote multitrack audio recording and is available to recording students after completion of Intro to the Recording Studio. Through new remote recording session experience outside of the traditional recording studio, the student will learn the basic fundamentals of running remote multitrack recording sessions in indoor and outdoor venues removed from a professional studio environment. Techniques to be covered will include stylistically dependent instrument and vocal setups, microphone choice and placement, tracking a remote recording session, dealing with weather and other remote location concerns, mixing while multitrack recording, session protocol, and communication and client relations skills.

$640.00

XRE 1013

Audio For Video and Film

Building on the practical skills gained in Intro To The Recording Studio and Recording Studio Skills, this course begins study of the essential equipment, recording techniques, and theoretical principles used in audio sessions for video and film formats. Emphasis is placed on the study of recording studio sound and its production, capture, distribution, synchronization, preservation, manipulation, and enhancement for the audio requirements of radio, video, and film production. Students will also study and utilize the specialized audio and computer equipment and software used in the production and synchronization of audio for video and film productions.

$960.00

XRE 1014

Sound Reinforcement Engineering

This is a course for the recording engineering student with little or no experience in the practical application of the art of sound reinforcement, and is available to audio students after completion of Intro to the Recording Studio. Through classroom instruction and practical experience utilizing lab time within and outside of the studio complex, the student will learn the basic fundamentals of running remote live sound reinforcement equipment through live sessions in indoor and outdoor venues. Techniques to be covered will include stylistically dependent instrument and vocal setups, P.A. microphone choice and placement, P.A. speaker construction and power-matching of sound reinforcement equipment, dealing with weather and other remote location concerns, multiple monitor mixes, feedback suppression techniques, session protocol, and communication and client relations skills.

$640.00

XRE 1015

MIDI in the Recording Studio

MIDI in the Recording Studio is designed to prepare the new recording student for all things utilizing MIDI (Musical Instrument Digital Interface) in the recording studio environment. This class should be taken in the recording student?s first semester. Students will learn and demonstrate basic music compositional techniques, MIDI hardware commands and sequencer programing, MIDI interfacing in the professional recording studio environment, MIDI as a control language in the studio, and MIDI hardware and software syncronizing to audio hardware and software. Also, the student will demonstrate the ability to use McIntosh computers and various music software programs to better serve musicians who need help in operating MIDI equipment and programs in a professional audio environment.

$640.00

XRE 1016

Music Styles & Recording Analysis I

This course is one of two courses designed to enhance recording-student music listening and relate music styles to proper studio engineering technique. The two courses do not have to be taken in any specific order, but should be started at the beginning of a recording student?s program of study. In this course, students will learn to identify changes in the elements of music through the different stylistic periods of Classical, Rock, Pop, and Rap/Hip-Hop/Electronic music. Through lecture, audio recordings, and video presentations, historical-to-present information will be presented to broaden the student's cultural and music appreciation as well as his understanding of the ever-evolving methods of recording engineering related to the music style being studied. Students will analyse recordings and attend live concerts to better understand the various styles and the group instrumentations used in the musics covered in the class.

$640.00

XRE 1017

Music Styles & Analysis II

This course is one of two courses designed to enhance recording-student music listening and relate music styles to proper studio engineering technique. The two courses do not have to be taken in any specific order, but should be started at the beginning of a recording student?s program of study. In this course, students will learn to identify changes in the elements of music through the different stylistic periods of Jazz, Country, Folk, and various ethnic musics from around the world. Through lecture, audio recordings, and video presentations, historical-to-present information will be presented to broaden the student's cultural and music appreciation as well as his understanding of the ever-evolving methods of recording engineering related to the music style being studied. Students will analyse recordings and attend live concerts to better understand the various styles and the group instrumentations used in the musics covered in the class.

$640.00

XRE 1018

Music Fundamentals & the Keyboard I

This course provides a basic knowledge of music and the basic, essential techniques required to play a keyboard instrument. This course is the first of two in series. Recording students should take this course their first semester in the program. Students will learn essential musical terminology, including musical notation and symbols, major and minor key signatures, and the harmonization of melodies using tonic and dominant triads. Specific keyboard-related terminology will include finger exercises, basic keyboard repertoire using major and minor five-finger patterns, major and minor scales, major and minor triads in root position, ensemble playing of two to four parts, and the formation of good practice habits. Music Fundamentals & the Keyboard II should follow the successful completion of this course.

$640.00

XRE 1019

Music Fundamentals & the Keyboard II

This is the second of two beginning-level courses, and builds on the information and keyboard techniques learned in Music Fundamentals & the Keyboard I. Students will learn and review musical terminology, musical notation and symbols, and specific keyboard-related terminology. Topics covered will include major, minor, and church-mode keys; exercises and repertoire using major, minor, diminished and augmented triads in root position and inversions; chord progressions in various styles; ensemble playing; and use of the damper pedal.

$640.00

XRE 1020

Producing Music in the Studio

A description is not available for this course.

$1,280.00

XRE 1021

Audio Mastering:The Final Step

A description is not available for this course.

$960.00

Sign Language (XVS)

XVS 1000

ABC, 123 & Finger Spelling

This very basic sign language course, which teaches participants the manual alphabet, number signs and finger spelling, provides an excellent preparation for Sign Language I. In addition, it provides information and details about the deaf culture.

$15.00

XVS 1100

Sign Language I

This basic course in sign language will acquaint you with the manual alphabet and the most commonly used signs, leading toward the development of conversational skills.   Please check the JCCC bookstore for the textbook for this class.

$89.00

XVS 1200

Sign Language II

This course will offer continued development in the language of signs with emphasis on building vocabulary and developing expressive and receptive signing skills.   Please check the JCCC bookstore for the textbook for this class.

$89.00

XVS 1300

Sign Language III

Continue the development of vocabulary building with emphasis on comprehension and expressive signing skills.   Please check the JCCC bookstore for the textbook for this class.

$89.00

XVS 1400

Sign Language IV

This course is for you if you're interested in reviewing your sign language skills. Through practice, dialogue, ASL theory, finger spelling research and activities, participants will review Sign Language I, II and III and enhance their conversational signing skills. Bring the text, "Learning American Sign Language", from your previous classes. Prerequisite: Sign Language III or equivalent.

$89.00

Small Business (XBE)

XBE 0101

Business Communications Using e-mail

Become an e-mail expert! Learn the basic parts of an e-mail and how to use them correctly. Learn the ins and outs of effective e-mail communication. Learn how to avoid common mistakes often made by newcomers to the information super-highway. Learn how to attach applications and documents to your e-mail messages. Learn how to put emphasis and intonation that we take for granted when talking on the telephone into your e-mail messages. Learn about privacy and what encryption techniques are available for use with e-mail. Learn how to find and guess e-mail addresses, and make yourself easy to find on the Internet. Learn about web-based e-mail services including how and when they are useful to

$50.00

XBE 0212

How to Start and Manage a Home-Based Business

Thinking about starting your own business out of your home to save on start-up and overhead costs? Learn the marketing and management skills necessary to succeed and identify resources to assist you as you begin your business. You will learn how to address issues such as licenses, regulations, legal structure, taxes and insurance; how to set up a record-keeping system; and how to develop a business plan.

$40.00

XBE 0214

Success Right from the Start

Thinking about starting your own business? This seminar provides an overview of useful business information covering government requirements, forms of business organization, record keeping and financial planning. You will learn how to objectively evaluate your business concept, products and services; define and analyze the market potential for your business; and begin work on a business plan for managing your business and obtaining financing. A banker and an attorney who specialize in working with small businesses also participate in this seminar as guest speakers.

$30.00

XBE 0225

Introduction to QuickBooks Pro/Premier

Learn how to set up your business in this popular computerized accounting program-the right way. In this beginning-level seminar, you will learn how to create your own chart of accounts; set up customers, vendors, and employees; generate invoices and receive payments; pay bills and write checks; track credit card purchases and balances; reconcile bank accounts; track and pay sales taxes; and produce customized financial statements and reports that will help you manage your business.

$189.00

XBE 0226

Successful Selling for Entrepreneurs: Helping Customers Buy

Develop your skills in the three phases of the "helping customers buy" process: preparation, making a customer call, and follow-up. This is more than a sales technique; you will learn how to develop long-term customer relationships and increase your profitability. This seminar was developed by the Ewing Marion Kauffman Foundation. Lunch is provided.

$99.00

XBE 0248

Small Business Resource Conference

The conference will present private and government resources available to small business owners. Lunch will be provided. This conference is sponsored by the Small Business Development Center and the Kansas Women's Business Center and hosted by Congressman Dennis Moore.

$15.00

XBE 0250

Opportunity Analysis

This workshop is designed to overcome the barrier that keeps many individuals from starting a business- the lack of a workable idea. Using a three-step approach for identifying and evaluating business ideas, participants will learn to identify a business opportunity that fits their own unique needs and goals. This 8 or 16 week course is offered in conjunction with the credit Entrepreneurship Program.Textbook available at JCCC Bookstore.

$298.00

XBE 0252

FastTrac Business Plan

In this course you will learn to assess the strengths and weaknesses of a business concept and write a sound business plan. You will collect, analyze and organize market research data into a marketing plan; and prepare the financial projections for your business concept. This 16 week course is offered in conjunction with the credit Entrepreneurship Program. Textbook available at JCCC bookstore.

$447.00

XBE 0253

Write Your Own Press Release

Getting the word out about your business is easy and inexpensive. In this class you will learn the basic mechanics of distributing your press release. Participants will walk away with one press release they can immediately distribute to local publications to publicize their business.

$30.00

XBE 0255

Creating an Effective Brochure

Learn how to make your sales more effective with a well-written marketing brochure. This course will cover how to write and organize the brochure for your target audience. You will leave the session with an 8 1/2 by 11 tri-fold marketing brochure for your business.

$30.00

XBE 0256

HyperGrow! Your Business

Want your business, revenues and profits to grow? Most businesses do. In fact, it has been said a business is either growing or shrinking.   Join us for this session on how to profitably increase customer revenues. Study the nine natural laws of growth that every business must address to ensure forward progress. See how strategic marketing principles combine with other business functions to form a comprehensive business development system. It's like MiracleGro (tm) for your business!

$59.00

XBE 0257

Meet the Tax Man: Your Tax Responsibility to the State of Kansas

This presentation by the Kansas Department of Revenue focuses on withholding and sales tax, record keeping, filing requirements and preparing forms.

$15.00

XBE 0258

Financial Management for Small Business

You will learn to identify and evaluate the various sources available for funding a small business, how to determine borrowing needs and how to work with financial statements. Additionally, you will learn about capital and cash management, how to establish credit policies and prepare sales forecasts. Some accounting knowledge is recommended. This eight week course is offered in conjunction with the credit Entrepreneurship Program.Textbook available at JCCC bookstore.

$298.00

XBE 0259

Legal Issues for Small Business

You will learn about forms of business ownership, contracts, business owner's liability, agency, bankruptcies, business crimes, intellectual property, labor and employment laws and the regulation of business, civil court procedures and alternate dispute resolution.This eight week course is offered in conjunction with the credit Entrepreneurship Program.The textbook is available at the JCCC bookstore.

$298.00

XBE 0260

Sales and Use Tax Information for Construction Contractors

This presentation by the Kansas Department of Revenue focuses on estimated taxes, preparing forms, filing requirements, record keeping and withholding and sales taxes.

$15.00

XBE 0262

Strategic Business Planning for Profitable Growth

Too often entrepreneurs get caught up in their own company's daily operations and do not take time to plan for the future, spending more time working IN the business than ON the business. Through this interactive and enlightening workshop, entrepreneurs develop a strategic direction for the future. First entrepreneurs create a three-year vision for their companies. Then by analyzing their current position, entrepreneurs create strategic action plans. Tools and resources are available to help entrepreneurs take the necessary steps toward achieving their visions.

$79.00

XBE 0263

FastTrac 9/11

FastTrac program for laid- off workers.

$50.00

XBE 0264

Marketing and Selling Your Products and/or Services to Governmental Entities

U.S. government agencies represent the world's largest market and contract to purchase a variety of products and services. Learn about and how to target local, state, and federal government contracting opportunities. Learn where to find these offices through the services of a procurement assistance center. Find out where to locate information about government contracting on the Internet, and find resources that can assist you throughout the contracting process.

$25.00

XBE 0265

Entrepreneurial Management: FastTrac Planning for Growth Proven Strategies to Maximize Performance

Entrepreneurs who build successful businesses know life-long learning, building on their knowledge, and examining their strategies lead to greater success. This four week, fast-paced series is designed to expand the knowledge and skills of small business owners by focusing on strategic business functions with the goal of maximizing performance.   Location: Kauffman Foundation, 4801 Rockhill Road, Kansas City, MO. Contact the Small Business Development Center at 913-469-3878 for registration information.

$600.00

XBE 0266

Introduction to Entrepreneurship

You will learn the role of entrepreneurial businesses in the United States and the impact on our national and global economy. You will analyze the skills, commitment, challenges and rewards necessary to successfully operate an entrepreneurial venture, as well as entrance strategies to accomplish such a choice. This eight week course is offered in conjunction with the credit Entrepreneurship Program. Textbook available at the JCCC bookstore.

$298.00

XBE 0267

Entrepreneurial Marketing

In this class you will gain insights essential for marketing your entrepreneurial venture utilizing innovative and financially responsible marketing strategies. You will analyze marketing philosophies and prepare a marketing plan to launch your business venture and to implement during the first two years of business operation.This eight week course is offered in conjunction with the credit Entrepreneurship Program. Textbook available at the JCCC bookstore.

$298.00

XBE 0268

Franchising

Participants will learn how to research the franchising methods of doing business from the perspective of both the franchisor and the franchisee. You will learn how to analyze independent management efforts necessary for a successful franchise business venture as well as understand the interdependent contractual obligations.This 16 week course is offered in conjunction with the credit Entrepreneurship Program. Textbook availabe at the JCCC bookstore.

$447.00

XBE 0269

Small Business "Check Up"

Tailored for those in business for two years or more and with 50 or fewer employees this workshop shows you how to track the ongoing health of your business and how to pay attention to the "right symptoms." An accountant, attorney and financial planner share the checklists and questions they annually review with business owners and point out the catchphrases and warning flags they watch for. Continental breakfast included.

$0.00

XBE 0270

Creating and Protecting Your Business Image

Whether it is printing a logo, packaging your product or designing a web presence, careful planning helps you control the quality, schedule and cost of doing business. This class is an overview of graphic design/advertising, marketing, and the printing industry. An attorney provdies information on trademarks and copyrights.

$30.00

XBE 0271

QuickBooks Pro/Premier for Contractors

This intro course is tailored to the specialized needs of contractors. Learn how to set up job costing, vendors and sub-contractors; generate estimates and invoices; progress billing; retainage; track credit card purchases and balances; reconcile bank accounts; track and pay sales taxes; and produce customized financial statements and job-profitability reports that will help you manage your business.

$189.00

XBE 0272

Demonstation Contractors QB

Attend a free showcase of a new workshop on this popular accounting program - tailored to the specialized needs of contractors. This demo will feature estimating, progress billing, tracking retainage, job costing, tracking credit card purchases, tracking and paying sales tax, and more. This one hour showcase will make you eager to attend our full-day workshop on January 26, 2006 from 9 a.m. to 4 p.m. reference CRN 20803.

$0.00

XBE 0273

Intermediate QuickBooks Pro/Premier Workshop

Designed for persons with a working knowledge of QuickBooks Pro/Premier, this workshop covers the more advanced features of the program, including customizing invoices, setting up budgets, tracking billable time and expenses, utilizing form letters, memorizing financial statement groups, and defining custom fields. Class size is limited to provide for individualized instruction. Bring your own QB data files and questions. Facilitated by a CPA, who is also a Certified QuickBooks Pro adviser.

$79.00

XBE 0274

Family Business

By exploring a diverse set of family firms, examining the interrelationships among the owners, and studying management practices you will become familiar with methods that ensure success while recognizing the advantages and challenges facing family enterprises. Emphasis is placed on positioning the family enterprise for sustained growth and continuity through generations. This 16 week course is

offered in conjunction with the credit Entrepreneurship Program. Textbook availalble at the JCCC bookstore.

$447.00

XBE 0275

Funding Acquisitions

Participants will learn the impact of funding sources for entrepreneurial ventures. This course will focus on venture capital from the business concept phase to an exit strategy, including protecting intellectual capital, identifying funding sources, writing funding agreements, and managing an Initial Public Offering or merger and acquisition. Participants also will develop and present a funding proposal. This eight week course is offered in conjunction with the credit Entrepreneurship Program. Textbook available at the JCCC bookstore.

$298.00

XBE 0276

Strategic Business Planning

Is your business growing profitably? Do you take time to strategically plan how to grow your business? Successful leaders work on their business instead of just in it. By attending this comprehensive seminar you will be led through an innovative strategic business planning process, and leave with a one page blueprint to grow your business and maximize profitability. Led by an experienced facilitator and entrepreneur. Lunch is included.

$79.00

XBE 0277

Mindset Series: Three business and life planning sessions for experienced business owners

This first time offered series of three workshops is designed for experienced business owners seeking to strategically grow their businesses as part of their plan for a successful life. Bring balance to your life by understanding and planning for a successful relationship between your life?s dreams and ambitions and the needs and requirements of your business. These workshops also will help you better understand a major resource in your business and life ? you and the people who make up your team. See following descriptions for the individual workshops, Strategic Planning, Team Building, and Strategic Life Planning. Receive a discount of $75 ($25 per workshop) if you register in advance for all three workshops (Mindset Series Parts 1, 2, & 3 described below). Fee includes workbooks.

$650.00

XBE 0278

Mindset Series Part 2 -Strategic Planning

Participants will learn more about their entrepreneurial mindset as it relates to planning. The process incorporates the human element into the plan and participants will plot a strategic course for their business by attending this innovative and results oriented workshop. Upon completion of this strategic planning process, participants will have a one-page blueprint to follow to take their businesses to new levels of success. Fee includes workbook.

$325.00

XBE 0279

Mindset Series Part 3-Team Profile

Participants will look at their own mindset to understand what might be holding them back from reaching their full potential and achieving their goals. Insights into the mindsets needed to run a successful business will be identified. Team building will take on new meaning as the knowledge learned in this workshop is put into action. Fee includes workbook.

$75.00

XBE 0280

Mindset Series Part I-Strategic Life Planning

Participants will choose the life they desire, plan that life, and develop action plans to live that life. Without a plan, we are destined to live a life of default, responding to life as it happens. This workshop will help participants emerge from the maze of life and discover where they want to go and how the pieces of life can be fit together to reach their goals and dreams. Fee includes workbook.

$325.00

XBE 0281

Introduction to QuickBooks Point of Sale

For retailers using the QB POS system, this course will cover: setting up a new company, department classifications and vendor lists, entering new merchandise, sales receipts, merchandise returns, layaways, using the print designer, purchase orders, receiving vouchers, and running reports. There will also be discussion of integrating the POS software with QuickBooks Pro/Premier software. This course does not cover the basics of using QB Pro/Premier.

$89.00

XBE 0282

Introduction to QuickBooks Payroll

Learn how to set up payroll items, enter employee information, create a payroll schedule, create paychecks, track and pay payroll tax liabilities, and print payroll tax returns and annual W-2s. Participants should be somewhat familiar with QuickBooks Pro/Premier as this course does not cover any other areas of QuickBooks Pro/Premier. Participants should be familiar with payroll laws and filing due dates applicable to their business for federal and state withholdings and unemployment.

$79.00

XBE 0283

IRS Small Business Tax Workshop

Learn the basics of complying with IRS regulations, including business use of the home, self-employment tax, employee versus independent contractor, payroll taxes, and electronic filing (EFTPS). Also learn record keeping requirements for business expenses, including vehicle use. Presented by an experienced CPA tax accountant.

$25.00

XBE 0284

Financing Options for Your Business

This workshop helps entrepreneurs understand the variety of funding sources that are available for their business and where to find them. Topics covered include determining your financing strategy, equity vs debt financing, types of business loans, financing sources, lease financing, the Small Business Innovation Research (SBIR) program, and more. The workshop also covers the advantages and disadvantages of equity versus debt, which financing options are typically available to early stage businesses and issues to consider in selecting a financing option.

$50.00

XBE 0285

Business Valuation

Valuation involves estimating the worth of a company. It?s at the core of determining how much ownership an investor is entitled to for funding a venture.

It?s also critical for family businesses for the purpose of succession and estate planning. This workshop covers valuation methods, why business valuation is important, factors that affect valuation and valuation by life stage. The workshop will also provide entrepreneurs assistance in preparing an actual valuation for their business.

$50.00

XBE 0286

The Process of Raising Capital

This workshop helps entrepreneurs understand the process of raising capital. Topics covered include traits necessary for success; Angel Investors - who are they, what they look for in an investment and how to find and deal with them; Angel Capital vs Venture Capital; securities laws; Regulation D offerings; private placement memorandums, and documentation. Additionally, the workshop covers potential deal-breaker issues, negotiation and post-closing considerations.

$50.00

XBE 0287

Bootstrapping Your business Workshop

Bootstrapping - the art of starting a company with little or no money - represents one of the surest routes to success for many entrepreneurs. In fact, there have been many great American businesses launched with less than $20,000. So how does one go about bootstrapping? Does it mean you need to build your desk out of doors and sawhorses? Or, is it something more? This Workshop will provide you with many proven bootstrapping techniques that will allow you to build on your "street smarts" while stretching your dollars. Also, the second half of the workshop includes a panel of successful local entrepreneurs who share their strategies for bootstrapping success.

$50.00

XBE 0288

Family Business I: Family Business as a System

For family businesses, the crossover between family and business creates challenges for all involved. Developing structures and policies can help family businesses meet these challenges by defining family members roles. In this dynamic, interactive workshop facilitated by a family business counselor and mediator, you will discover ways to professionalize the family business by developing policies for compensation, employment, advisory boards, and systems for communication and conflict resolution.

$59.00

XBE 0289

Family Business Sucession and Estate Planning

Developing a succession and estate plan well in advance allows family business owners to effectively transition their business to the next generation. Key components of succession and estate planning include determining the value of the business, minimizing taxes, and structuring the transition/buyout to meet the financial needs of the current CEO and the business. Learn from an experienced family business attorney and insurance specialist how to avoid business killers during a time of transition.

$59.00

XBE 0290

Family Business Strategic Planning

Developing a strategic plan for your family business engages both management and family in the process of thinking about the future. Small and mid-size family businesses need strategic planning because of the mixed roles of family business members.   Learn a simplified process to identify both family and business goals

and then, develop a step by step plan to satisfy both. Facilitated by experienced family business consultants.

$79.00

XBE 0291

The Keys to Family Business Success

Drew Mendoza, nationally known family business advisor and founding director of the Loyola University Chicago Family Business Center, will present the keys to Family Business Success with an emphasis on the three fundamental actions taken by the country's most successful family firms, regardless of size. Participants will learn the steps recommended to assure prosperity for both the family and the business. Attendees will also receive a trial subscription to the monthly newsletter, The Family Business Advisor published by The Family Business Consulting Group, Marietta, Georgia. Pre-registration for this free seminar is required.

$0.00

XBE 0292

The 7 Habits for Managers: A Frankin Covey Seminar

FranklinCovey?s The 7 Habits for Managers workshop is an intensive application-oriented learning experience that focuses on the fundamentals of great leadership. This two-day workshop gives new and experienced managers a set of tools that will help them meet all of today?s management challenges, including: Conflict Resolution, Prioritization, Performance Management, Accountability and Trust, Execution, Collaboration, Team and Employee Development. This workshop is open to individuals from organizations with less than 300 employees. Lunch is provided.

$395.00

XBE 0293

Business Book Club

Feed your growth and creativity by connecting with the big ideas driving business today. The Kansas Small Business Development Center, the Johnson County Library and the Ewing Kauffman Foundation bring you the Business Book Club. The library will provide background materials and discussion guides on-line to help you get the most out of your reading. The Business Book Club will meet on the third Monday of each month to discuss the business book selection and network over the lunch hour. Contact the Kansas Small Business Development Center for information regarding the book selection. 913-469-3878

$0.00

XBE 0294

Clean Up Your Credit!

Understand and learn how to build your credit scores and maintain them. Discover how lenders can list and report information and keep your credit scores low. Learn how to take control of your future and prevent this from happening.

$25.00

XBE 0295

Maximizing the Internet to Expand Your Business

Are you using the Internet to promote your business or sell a product? Should you be? Do you have a website and/or are you considering expanding or redoing it? The internet is no longer just a useful tool for commerce; it's become an essential part of doing business. Gain an understanding of the strategy of expanding your business on the internet, including technology components and critical resource roles, and decide if expanding online is the best business decision for you. Session includes discussion of legal issues of internet marketing and electronic contracts.

$25.00

XBE 0296

The Road to Success..Creating a Marketing Plan

Are you getting the marketing results you desire? Are there marketing strategies you want to implement but haven?t yet? The road map to increasing your business visibilitytm will begin with the development of a creative, targeted marketing plan that will include tactics, strategies and while staying within your budget.

$40.00

XBE 0297

Understanding Your Financial Statements

Learn to read and interpret basic financial reports, explore three fundamental ways to increase profitability, and identify key financial indicators. Gain a better understanding of how to use financial reports to operate a more profitable business.

$30.00

XBE 0298

Preventing Revenue Leakage in Your Business

This practical and interactive operations overview will provide managers and business owners with strategies to maximize the prevention of revenue leakage. It will highlight practical approaches for designing new processes or repairing weak processes that might be contributing to revenue loss. It will also discuss ways to identify and eliminate the fraud risks that exist in every business. Participants can take the ?Fraud Check Up? to assess the fraud risk in their own business.

$25.00

XBE 0300

CEO Roundtable

It?s lonely at the top! For small business owners who want to learn from other small business owners. Led by an experienced facilitator and entrepreneur, this leadership series is for owners who are ready for a growth transition and want to begin working ?on? their business rather than ?in? their business. Companies must be at least 5 years old. There is an application process for membership in this group. Call 913-469-3878 or go to www.jccc.edu/ksbdc for additional information or to obtain an application.

$150.00

XBE 0301

FOCUS: Productivity and Time Management for Small Business Owners and Employees

This FranklinCovey workshop teaches you to clarify, focus on, and execute your highest priorities. Learn to spend time on tasks that really matter; define goals and break them down into key tasks; reduce stress; and master information management. This workshop includes: a FranklinCovey Planning System, technological best practices to manage information, a goal-setting process, and a FranklinCovey resource CD-ROM with interactive planning tools. The materials are designed to integrate with PDAs and other productivity tools such as Outlook software.

$199.00

XBE 0302

Best Practice Checklists for Successful Family Businesses
Description to follow.

$50.00

XBE 242

Tax Workshop for Small Business Owners

Presented by the IRS Taxpayer Education Office, this workshop is designed for small business owners or anyone thinking of opening a small business. Topics include record keeping, business use of the home, depreciation and federal tax requirements for small businesses.

$15.00

XBE 243

Comprehensive Business and Employment Tax Workshop

Presented by the IRS Taxpayer Education Office, this workshop provides comprehensive tax information for small business bookkeepers and employers.

$25.00

Special Interests (XPT)

XPT 1005

Beekeeping II

This course offer an in depth review of current Beekeeping practices. You will study beekeeping in the classroom and explore a beehive in the field. The course will give you hands on experience working a beehive.

$15.00

XPT 1017

Icons of 20th Century Architecture

Why do some buildings and certain spaces ignite our imagination and make our spirits soar? Which buildings are examples of the best that architects have created over the past 100 years? This course will examine, through lecture and discussion, the most innovative-and often challenging-architectural wonders of the past century.

$19.00

XPT 1019

Contemporary Women Artists

Explore the astonishing careers of women artists from World War II to the present time. Who are they? What did they accomplish? Why do we honor them today?

$19.00

XPT 1026

Art History and Interpretation

Use skills learned in this class to find out why you like a piece of art, or why you don't. The instructor will introduce the principles and elements of design to break down and interpret the techniques of the great masters from the Italian Renaissance through the Modern Eras.

$29.00

XPT 1047

How to Plan for an African Safari

Is it your dream to go on an African Wildlife Safari? Are you intimidated by all the "unknowns"? This course offers practical information to help plan a safe and rewarding safari, and includes a slide show of African wildlife photos.

$15.00

XPT 1051

But is it Art? An Introductory Course to Contemporary Art

We will examine the aesthetics of contemporary art and learn about the history of avant-garde movements. Students will learn criteria for judging art and develop a personal set of standards. They will have the opportunity to view and discuss art recently exhibited.

$15.00

XPT 1067

Tree Keepers: Volunteer Training for a Healthly Community Forest

A community forester and area professionals will teach this class where you will learn proper tree planting, pruning, identification, selection, placement and maintenance of trees. Participants will learn about volunteering opportunities to work with the KC metro area public trees. Two class sessions will be spent in an outside lab environment - Aug. 2nd and Aug. 16th, times to be announced at the first session.

$14.00

XPT 1104

Beekeeping I

This is an introductory course into beekeeping. We will review the importance of honeybees in our everyday life. Participants will learn about the life cycle of the honeybee, their history and become familiar with today's beekeeping techniques.

$15.00

XPT 1230

History of Coffee

Learn about the history of coffee; its origins, myths, mysteries and facts. Learn how to purchase, store and brew coffee as well as how to make all of your favorite drinks.

$18.00

XPT 1231

Coffee Cupping: Tasting Coffees from Different Countries and Origin

What is coffee "cupping"? You'll learn from an expert cupper all you need to know to begin your own journey. We'll cover the process and learn to identify key attributes, characteristics and terms. Held in a professional cupping room, this is a "do not miss" for any coffee/espresso aficionado.

$22.00

XPT 1240

Lunch and Learn: Islam and World Religions

How do Muslims view themselves vis-a-vis Christians and Jews? What is their common heritage and what was the role of the Prophet Muhammad in Islam? This course will look at the differences and similarities between these three great monotheistic faiths.

$20.00

XPT 1245

Lunch and Learn: Arab-Israeli Conflict

This is an opportunity for Westerners to view this enduring conflict from a different perspective, that of the Arabs and Palestines.

$20.00

XPT 1250

Arabic History in a Nutshell

This two week course will cover the development of the Middle East during the Ummayad and Abassid Dynasties, the period of Ottoman Rule, post-World War I Madate Period, to the modern states of today.

$20.00

XPT 1252

Russian History in a Nutshell

This is a quick two-week survey of Russian history, covering the rise of Russia as a nation and its emergence as a world power during the Tsarist Period and the rise and fall of the Soviet Union.

$20.00

XPT 1255

Cruising Hassle Free

Whether it's your first cruise or your fifth, the time you spend aboard ship should be pure enjoyment with only pleasant surprises. Learn what cruising is all about; know before you go; and plan for fun on your floating vacation.

$14.00

XPT 1256

Las Pintas Project

A description is not available for this course.

$0.00

XPT 5000

Everyday Math

Ever find math baffling? This course can help you gain confidence in your basic math skills so you can start using math to your advantage. Each of your lessons will be filled with practical exercises and information that you can put to immediate use.

$82.00

XPT 5002

Get Paid to Travel

Do you love to travel and enjoy working with individuals? If so, then tour directing may be the career for you! Learn everything you need to start your new and exciting career as a professional tour director.

$85.00

XPT 5003

Wow, What a Great Event!

Looking for a fun new career coordinating special events? Learn proven techniques from a master event planner. Find out what the experts and master planners already know so that you can avoid embarrassing and costly planning errors or production mistakes.

$85.00

XPT 5005

Starting a Consulting Practice

Find out how you can earn income by sharing your training or knowledge with others. This course is designed to help those who wish to set up a consulting practice. Topics will include skills assessments, pricing policies, contracting, and marketing.

$85.00

XPT 5010

Wedding Planner Career Certficate Program

(170 Contract hours) Train to become a wedding planner through this career certificate program, which prepares you to obtain employment with an established bridal consultant or to start your own wedding planning business.

$698.00

XPT 5013

Create Your Own Nonprofit

Do you dream of starting and running your very own nonprofit? This unique course carefully details the many aspects of taking a nonprofit start-up to reality. This class is filled with savvy advice and plenty of grassroots organization.

$85.00

XPT 5014

Theme Park Engineering

Have you ever gone to a theme park and wondered "How did they do that?" This course will reveal all the secrets behind your favorite attractions.

$82.00

Sports Clinics-Youth (XLC)

XLC 1000

Baseball Clinic, Boys Ages 6-7

Take advantage of personal and group instruction to enhance your baseball skill level. This camp will focus on player development in all aspects of the game including (base running, hitting, outfield, infield, catching, and pitching). You will participate in actual baseball games which will highlight skills taught during daily instruction. Participants will learn from the JCCC Coaching staff and current players. Learn how to do it just like the PROS!

$80.00

XLC 1001

Baseball Clinic, Boys Ages 8-10

Take advantage of personal and group instruction to enhance your baseball skill level. This camp will focus on player development in all aspects of the game including (base running, hitting, outfield, infield, catching, and pitching). You will participate in actual baseball games which will highlight skills taught during daily instruction. Participants will learn from the JCCC Coaching staff and current players. Learn how to do it just like the PROS! Lunch is provided for 8-14 year olds full day clinic only.

$150.00

XLC 1002

Baseball, Boys 11-14

Take advantage of personal and group instruction to enhance your baseball skill

level. This camp will focus on player development in all aspects of the game including (base running, hitting, outfield, infield, catching, and pitching). You will participate in actual baseball games which will highlight skills taught during daily instruction. Participants will learn from the JCCC Coaching staff and current players. Learn how to do it just like the PROS! Lunch is provided for 8-14 year olds full day clinic only.

$150.00

XLC 1003

Baseball, Boys Youth Day Ages 5-14

Come join the JCCC Baseball team for Youth Baseball Day at JCCC. The JCCC Baseball team and Coaching staff will offering a free clinic for all boys from Johnson County ages 5-14. Come meet the players and the Coaches who will be directing this summer baseball clinics, while they teach the proper baseball techniques. You are encouraged to wear your uniforms. Stick around after the clinic for a baseball game and cheer on the Cavaliers to Victory! Pre-registration is required. FREE

$0.00

XLC 1004

Baseball, Boys Adv/All Star Ages 8-10

This is for baseball players that are at the All Star Level. Take advantage of personal and group instruction to enhance your baseball skill level. This camp will focus on player development in all aspects of the game including (base running, hitting, outfield, infield, catching, and pitching). You will participate in actual baseball games which will highlight skills taught during daily instruction. Participants will learn from the JCCC Coaching staff and current players. Learn how to do it just like the PROS! ! Lunch is provided.

$150.00

XLC 1005

Baseball, Boys Adv/All Star Ages 11-14

This is for baseball players that are at the All Star Level. Take advantage of personal and group instruction to enhance your baseball skill level. This camp will focus on player development in all aspects of the game including (base running, hitting, outfield, infield, catching, and pitching). You will participate in actual baseball games which will highlight skills taught during daily instruction. Participants will learn from the JCCC Coaching staff and current players. Learn how to do it just like the PROS! ! Lunch is provided for 8-14.

$150.00

XLC 1006

Basketball, Boys, Competitive Edge Grades 9-12

This clinic is open to individuals entering grades 9-12. The purpose of this clinic is to teach each player how to develop their basketball skills and include physical conditioning to each players highest level. JCCC Coach Mike Jeffers and his coaching staff will direct the clinic and nationally ranked current and former college players will work with each clinic participants. Expect to work hard. You will do the drills that college players use in preparing for the upcoming season. Each clinic participants will also be exposed to the JCCC plyometric conditioning program as well as the Javorek Complex I weight lifting routine. Lunch is included. (4 sessions) $150

$150.00

XLC 1007

Basketball, Boys Team Clinic, Grades 9-12

Freshman, Junior Varsity, Varsity, and nonscholastic team (AAU, Sate Games, etc.) This is a great opportunity for you and your teammates to get some more

game action. Come experience JCCC elite-level air-conditioned facilities. Each day the clinic will run promptly between 8:30am and 3:30pm. Each team is guaranteed 8 games throughout the week. The games will consist of two running clock halves, stopping only in the last minute. A game schedule along with meal times will be provided to each teams coach at the mandatory coaches meeting July 7 at 8:00am in GYM 125.

$125.00
XLC 1010

Baseball Pitching Clinic, Ages 12 - 18

Find your zone on the mound. Take this great opportunity to focus on improving your skills by working on all phases of pitching, including mental approaches, fielding and pickoffs. Proper pitching fundamentals inculding throwing grips will be taught through specific drills. Clinic enrollment is limited and be sure to bring your own catcher.

$145.00
XLC 1011

Baseball One Day Clinic, Boys Ages 8-10

This one day clinic is designed for the young player to learn the proper offensive and defensive fundamentals of baseball. The clinic includes fielding, throwing, hitting and base running instruction, along with some game situations. Boys should bring their own bats and gloves. Lunch is included.

$55.00
XLC 1015

Baseball Hitting League, Boys

JCCC Winter Indoor League is set up to help young baseball players improve their skills during the cold Kansas winters. Live pitching and hitting will help players see as game-like competition as possible to help them prepare for the upcoming season. Games will take place in a batting cage with a live catcher, hitter, and pitcher. Different areas of the cage will be designated for singles and homeruns. Games will be as game-like as possible except for base running and defense. What better way to improve your skills than to play a simulated game in an indoor cage against some of the best players in the KC Area! Pitchers can fine-tune their mechanics and improve their arm strength by throwing year round. Hitters can work on their techniques while developing a better eye seeing opposing live pitching. League will be made up of a high school Division, 7th and 8th Division, 5th and 6th Divisoin. Divisions will be based on grade level player is currently in. Teams MUST have a least 6 players and make payment before January 1st to guarantee a spot. League is filling up QUICKLY so register NOW.

$100.00
XLC 1016

Baseball, Hitting League, Boys 8-14

Teams of 6-7 will play a baseball game inside of a cage against another team of 6-7. Live pitching and live hitting will help all players prepare for the upcoming season.

$75.00
XLC 1027

Basketball Parent/Daughter Clinic, Ages 7 - 10

Here's your chance to participate in a sports clinic with your daughter! This interactive clinic provides a fun opportunity to learn fundamental skills and participate in the drills taught in a postivie and effective manner - together. This is a perfect time to reinforce your daughter's basketball skills. Note: Any family member (over the age of 18) who wants to serve as "parent" may participate. $70 per parent/daughter pair.

$35.00

XLC 1028

Basketball, Girls, Postition/Shooting Ages 12-18

Morning session will be the positions clinic, Guards will concentrate on ball handling, dribbling, passing, setting screens and coming off screens, reading screens and defense. Post players will work on post moves, hi and low post moves, reading screens and post defense. Afternoon sessions will focus on shooting. Improving shooting technique though drills and will focus on lay-ups, free-throws, jump shots and 3 pointers. Lunch is provided.

$150.00

XLC 1029

Basketball Shooting Boys and Girls 11-14

This clinic will cover the fundamental skills of the game (passing, dribbling, shooting and team concepts using demonstrations and competitive contests.)

$145.00

XLC 1030

Basketball, Boys, Ages 6-7

Demonstrations and playing in actual games will teach you the fundamental skills of the game (passing, dribbling, shooting) of the great game of basketball. Enjoy learing team concepts through participating in demonstrations and playing actual games. You will be placed on teams according to age.

$75.00

XLC 1031

Basketball, Boys 8-10

The nationally renowned JCCC Mens Basketball Coaching staff and current and former team members bring you this basketball clinic. This clinic will be organized by age groups and playing ability. Clinic participants may request to be placed on a team with friends. Enjoy learning the fundamental skills of the game (passing, dribbling, shooting, etc.) and team concepts through participating in demonstrations and playing in actual games. Lunch is included.

$150.00

XLC 1032

Basketball, Boys 11-13

The nationally renowned JCCC Mens Basketball Coaching staff and current and former team members bring you this basketball clinic. This clinic will be organized by age groups and playing ability. Clinic participants may request to be placed on a team with friends. Enjoy learning the fundamental skills of the game (passing, dribbling, shooting, etc.) and team concepts through participating in demonstrations and playing in actual games. Lunch is included.

$150.00

XLC 1033

Basketball, Girls High School Team Clinic, JV and Varsity

Basketball High School Team Clinic, Girls, JV and Varsity Any high school Varsity or Junior Varsity is invited to attend. Team clinic is designed to give high school teams the opportunity to compete as a team during the off-season. Each team will be guaranteed 8 games Friday and Saturday, with a double elimination tournament on Sunday. Teams should send their registrations in together with registration forms, and payments in one packet. If your team needs a coach, members of the Cavaliers Staff and Team are available to you. $100 includes meals.

$100.00

XLC 1034

Basketball Clinic, Girls, Ages 7 to 10

Each Sunday afternoon participants will be instructed on the strategies of play and execution of fundamentals. Ericka Bradford, JCCC assistant women's basketball coach, will direct this clinic.

$75.00

XLC 1035

Basketball Clinic, Girls, ages 6-7

Nothing but net! Are you ready for some serious hoops? Enjoy learning the fundamental skills of the game - passing, dribbling, shooting - and team concepts through participating in demonstrations and playing in actual games. You will be placed in teams according to your age.

$75.00

XLC 1036

Basketball, Girls 8-10

This clinic is brought to you by the JCCC Womens Basketball Coaching staff and team members. Each session will focus on basic fundamentals of shooting, offense, defense and team concepts. You will learn the game of basketball through the use of drills, contests and scrimmages. Individual skills will be developed and transitioned into the team concepts. Lunch will be provided.

$150.00

XLC 1037

Basketball, Girls 11-14

This clinic is brought to you by the JCCC Womens Basketball Coaching staff and team members. Each session will focus on basic fundamentals of shooting, offense, defense and team concepts. You will learn the game of basketball through the use of drills, contests and scrimmages. Individual skills will be developed and transitioned into the team concepts. Lunch will be provided.

$150.00

XLC 1038

Basketball, Girls Competitive Clinic Ages 13-18

This is a very intense and competitive clinic for ages 13 to 18 year olds. It is intended to give players the opportunity to advance their skills to a higher level. We will concentrate on enhancing fundamentals of ball handling, shooting, 1-on-1 skill, and full court into half court defenses. You will also be involved in scrimmage situations. Lunch is provided.

$150.00

XLC 1039

Basketball, Youth Boys 10-14

This youth basketball camp for boys 10-14 will focus on Defensive, Offensive and Shooting fundamentals. The participants will play controlled 5 on 5 games and instructed on team concepts.

$50.00

XLC 1040

Speed, Agility & Conditioning Clinic, Boys & Girls, Ages 12-18

Get a jump on your competitors. Learn strategies designed to help you develop

and improve first-step explosion, straight ahead speed, lateral quickness and speed necessary for quick decisions. Strength and conditioning drills which are essential for sports related injury prevention will be presented each session. Enrollment is limited to provide personal instruction.

$145.00
XLC 1041

Dance Team/Cheerleading Girls 5-7

Learn to improve flexibility, dance and cheer technique and showmanship ability, everything you need to be a successful performer! Stretching techniques will be taught to improve splits, kicks, and leaps; turns and universal dance steps will be taught and practiced as well as cheer jumps, arm positions, and chants. Finally, showmanship will be discussed as it relates to entertaining audiences. In addition, several short dance routines and cheers/chants will be taught. At the end of the week the girls will put on a show for family and friends who can be in attendance to show off their new moves!

$80.00
XLC 1042

Dance Team/Cheerleading Girls 8-10

Learn to improve flexibility, dance and cheer technique and showmanship ability, everything you need to be a successful performer! Stretching techniques will be taught to improve splits, kicks, and leaps; turns and universal dance steps will be taught and practiced as well as cheer jumps, arm positions, and chants. Finally, showmanship will be discussed as it relates to entertaining audiences. In addition, several short dance routines and cheers/chants will be taught. At the end of the week the girls will put on a show for family and friends who can be in attendance to show off their new moves!

$80.00
XLC 1043

Dance/Cheerleading Clinic Girls 11-14

The 11-14 age groups will focus on more challenging technique to prepare for the Junior High/High School dance and cheer teams. Girls should wear fitted dance pants, or capris, fitted tank top or t-shirts; cheer/dance sneakers or jazz shoes preferred, or regular sneakers. Hair should be pulled back into a ponytail or bun. Please bring a water bottle and light snack each day.

$80.00
XLC 1044

Golf, Boys and Girls, 8-16

Are you just getting started playing the game of golf or wanting to refine your skills? If so this beginning clinic is for you. You will be divided in groups according to age and skill level. Learn the fundamentals of putting, chipping, pitching, and driving through demonstrations, videos, practice, drills and course play. You will also learn the rules of the game, scoring and etiquette. Part of each day will be spent practicing and playing at a nearby golf course. (Participants will be transported in college vans driven by clinic staff.) Bring your own clubs (minimum of 7 and 9 iron, driver and putter) and golf balls (minimum 1 dozen). Junior clubs are highly recommended. All practice balls and green fees are included in the fee. Lunch is provided.

$230.00
XLC 1045

Golf, Boys and Girls 11-18 Advanced

Refine your golfing skills and techniques through this advanced level clinic. You will work on putting, chipping, pitching, and driving skills while following correct golf etiquette. You will learn to select the correct club for distance and accuracy to

match your own abilities. Most of each day will be spent practicing at a nearby golf course. You will be transferred in college vans driven by clinic staff to local golf courses. Bring your own clubs and a minimum of one dozen golf balls. All practice balls, green fees and lunches are included.

$230.00

XLC 1046

Golf Boys and Girls, 6-7, Half Day

Are you just getting started playing the game of golf? Learn the fundamentals of putting, chipping, pitching, and driving through demonstrations, videos, practice, drills and course play. You will also learn the rules of the game, scoring and etiquette. Part of each day will be spent practicing and playing at a nearby golf course. (Participants will be transported in college vans driven by clinic staff.) Bring your own clubs (minimum of 7 and 9 iron, driver and putter) and golf balls (minimum 1 dozen). Junior clubs are highly recommended. All practice balls and green fees are included in the fee.

$115.00

XLC 1047

Golf Tournament, One Day, Boys & Girls, Ages 7-18

Test your golfing skills and have fun competing with other golfers. Boys and girls will be divided according to age groups. Bring your own clubs and golf balls (minimum 1 dozen). Green fees and lunch are included in the fee. Meet and Pick up at Smileys Golf Course.

$70.00

XLC 1048

Putting/Short Game Clinic, Boys & Girls, Ages 12-18

Do you want to lower your golf score? Here's your opportunity to work on your short game. In this fun packed clinic, you will practice and learn all the short-game golf shots from putting to the dreaded half wedge. Instruction will also include when to use each shot to maximize your scoring abilities. This clinic can get you on your way to a lower golf score. Participants should meet at Smiley's Golf Course clubhouse.

$55.00

XLC 1049

Soccer, Boys and Girls, Ages 6-7

Here is your chance to learn and /or improve your skills in dribbling, shooting, passing, and trapping. The JCCC Coaching Staff will guide you through a variety of fast footwork drills, game tactics and explain the responsibilities of specific positions. Team unity will be stressed.   The clinic will include a review of both indoor and outdoor soccer instructional tapes. Wear your shin pads and cleats, balls provided. (Bring indoor shoes as well)

$80.00

XLC 1050

Soccer, Boys and Girls, Ages 8 to 17

Here is your chance to learn and /or improve your skills in dribbling, shooting, passing, and trapping. The JCCC Coaching Staff will guide you through a variety of fast footwork drills, game tactics and explain the responsibilities of specific positions. Team unity will be stressed.   This clinic will be organized by age groups.The clinic will include a review of both indoor and outdoor soccer instructional tapes. Wear your shin pads and cleats, balls provided. (Bring indoor shoes as well) Lunch is included in full day session.

$150.00

XLC 1051

Soccer Goalkeepers Clinic, Boys & Girls, Ages 9-12

Sock it to your competitors. You will strengthen your skills in catching, distribution, punting, punching, field positioning, low diving deflections and tipping away, positioning, handling breakaways, verbal control of the field, strategies for corner kicks, as well as free and penalty kicks. Practice various stretches and warm-up routines and learn the secret of doing everything correctly to avoid the most common mistakes made by goalkeepers. Bring your keeper gloves, cleats and indoor shoes. Enrollment is limited to provide superior instruction.

$145.00

XLC 1052

Soccer, Advanced Boys (Ages 12-16)

Participants will learn the progressions of juggling, shooting, passing, trapping and a variety of fast footwork drills, as well as game tactics and the responsibilities of specific positions. They will also learn pattern play, channel game, attacking and defending. Exercise will also include 1 on 1, 2 on 1, 2 on 2, 3 on 2, 3 on 3, 4 on 4. Team unity will be stressed. Lunch is included.

$140.00

XLC 1053

Softball:Speed and Agility

The class is focused around the game of softball and will work toward imporving base-running speed and the defensive quickness of the players. The instruction will focus on improving foot speed and the overall strength and speed of the athletes. In every meeting the girls will be taught the proper technique for running and apply that to the game of softball. The meeting will consist of various agiltiy drills and circuit training to imporve the strength and speed of the participants.

$150.00

XLC 1055

Beginning/Intermediate Positional Throwing and Fielding

JCCC softball coach Ron Meinert will direct this clinic emphasizing the proper techniques for throwing and fielding. This clinic is for beginners and intermediate softball players. Girls should bring their own gloves.

XLC 1056

Softball, Preseason Clinic, Girls

Start preparing for the upcoming softball season indoors. JCCC coaches will emphasize the offensive and defensive fundamentals of softball. The clinic includes fielding, throwing, hitting and base running instruction that will prepare you for the upcoming softball season. Participants should bring their own bats and gloves.

$100.00

XLC 1059

Softball, Defense/Hitting, Girls 6-10

Be ready to work hard in this intense Softball Defense and Hitting Clinic. This clinic will be directed by the JCCC Coaching staff. You will learn and improve your defensive and hitting skills. Drills and breakdown game situations will be used to help you improve your catching, throwing, hitting and the basic fundamentals in various positions. Be sure to bring your cleats, glove and bat.

$80.00

XLC 1060

Softball, Defense/Hitting Girls 10-14

Be ready to work hard in this intense Softball Defense and Hitting Clinic. This clinic will be directed by the JCCC Coaching staff. You will learn and improve your defensive and hitting skills. Drills and breakdown game situations will be used to help you improve your catching, throwing, hitting and the basic fundamentals in various positions. Be sure to bring your cleats, glove and bat.

$80.00

XLC 1061

Softball Defensive Skills Clinic, Girls 6-10

If you enjoy softball and want to improve your skills out on the field, this clinic is for you. You will learn and improve your defensive skills. JCCC Nationally ranked Softball Coaching staff will direct you in drills that will help you improve your catching and throwing, and the basic fundamentals in various positions. Breakdown drills will be used in actual game play in this clinic. Be sure to bring your cleats, glove and bat.

$80.00

XLC 1062

Softball Defensive Skills, Girls 10-14

If you enjoy softball and want to improve your skills out on the field, this clinic is for you. You will learn and improve your defensive skills. JCCC Nationally ranked Softball Coaching staff will direct you in drills that will help you improve your catching and throwing, and the basic fundamentals in various positions. Breakdown drills will be used in actual game play in this clinic. Be sure to bring your cleats, glove and bat.

$80.00

XLC 1063

Softball Hitting Clinic, Girls 6-10

Learn the proper fundamentals of hitting in this action packed clinic. You will learn the proper techniques through several breakdown drills. JCCC Softball coaching staff will work with each participant using hitting drills.

$80.00

XLC 1064

Softball, Hitting Clinic, Girls 10-14

Learn the proper fundamentals of hitting in this action packed clinic. You will learn the proper techniques through several breakdown drills. JCCC Softball coaching staff will work with each participant using hitting drills.

$80.00

XLC 1065

Tennis Clinic, Beginning/Intermediate, Boys and Girls, Ages 10 to 15

Come play Around the World or World Team Tennis at this comprehensive beginning/intermediate clinic. This clinic will be taught by the JCCC Coaching Staff and by the JCCC nationally ranked tennis players. This clinic is designed to help you bring your tennis game up a notch and improve your tennis fundamentals. You will participate in tennis instruction, practice drills, and participate in group competition. Meet in the Gym JCCC field house. Do not forget to bring your water bottles, sun block and racket. Lunch is included.

$150.00

XLC 1066

Tennis Clinic, Half Day 10-15

Beat the heat and learn tennis fundamentals. You will participate in tennis instruction, practice drills, and participate in group competition. Meet in the Gym JCCC field house. Bring your water bottles, sun block and racket. .

$80.00

XLC 1070

Track and Field Clinic-Boys and Girls (Ages 10-15)

Test the skills that you developed in the JCCC summer clinics. The following events will be included: 100 meters dash, 200 meters, 400 meters, 800 meters and 1600 meters races. Track competitors may compete in any of three running events. The pole vault will also be contested. Participation in the pole vault is limited to participants who have successfully completed the JCCC summer pole vaulting clinics. Lunch is included.

$35.00

XLC 1075

Sports Conditioning Boys/Girls 6-18

This Aerobic Conditioning clinic will emphasize movement. This clinic will be based on aerobic running and building the cardiovascular systems. Come share some of the great training techniques that the JCCC coaching staff has implemented with their NJCAAA All-Americans Athletes. Athletes will be divided by age groups. Be prepared to workout and please wear your workout gear and no tank tops allowed. NEW! Half day session for more intense workouts and flexibility in scheduling.

$80.00

XLC 1076

Speed Development, Boys & Girls, Ages 6-18

This clinic is designed for boys and girls to help them improve proper sprint/running mechanics so that they can be used for the sports of football, softball, baseball, basketball, tennis, soccer and track & field. Athletes will be divided by age groups. JCCC Coaches will direct and demonstrate to clinic participants by using fundamental drills, routines and workouts. The clinic will also include classroom learning on improving mechanics and weightlifting fundamentals.

$80.00

XLC 1077

High Jump Clinic, Boys/Girls 8-18

The purpose of this clinic is to gain experience in the high jump through learning drill and techniques that are essential to having success in the event. If you are serious about trying to high jump and would like to try something new and different this clinic is for you.

$80.00

XLC 1078

High Jump, Boys/Girls, Competitive Edge, 13-18

If you have previous experience as a high jumper, this clinic is the perfect opportunity to refine and improve your skills. You will receive your own biomechanical analysis and participate in intense activities such as drills, jump sessions and lectures. Enrollment is limited to participants who have previously participated in the high jump.

$80.00

XLC 1079

Sprint/Hurdle Clinic, Boys and Girls, 13-18

This program is designed for the introduction hurdler up through advanced. The clinic will teach the fundamentals of hurdles and hurdle technique. Whether beginning or expert, novice or world class athlete, this clinic will prepare and equip you with proper mechanics and winning techniques to help you move to the higher level. It is recommended to take Speed Development, Weight Training or Aerobic Conditioning clinic before this class.

$80.00

XLC 1080

Long Jump/Triple Jump, Boys/Girls 8-18

This clinic is a fun way to approach the basic fundamentals of both Long Jump and Triple Jump. This is the perfect opportunity to learn proper drills and techniques if you are serious about trying the long jump and triple jump.

$80.00

XLC 1081

Pole Vaulting Clinic, Boys & Girls, Ages 13-18

If you have previous experience pole vaulting, here?s your opportunity to refine and improve your skills. You participate in intense training activities such as lectures, drill and vault sessions. Due to the structure of this clinic, enrollment is limited to participants who have previously participated in pole vaulting.

$80.00

XLC 1082

Long Jump/Triple Jump Comp Edge, Boys/Girls 13-18

If you have previous experience as a long jumper and triple jumper, this clinic is the perfect opportunity to refine and improve your skills. You will receive your own biomechanical analysis and participate in intense activities such as drills, jump sessions and lectures. Enrollment is limited to participants who have previously participated in the long jump or triple jump.

$80.00

XLC 1083

Super Track and Field Clinic Boys/Girls 13-18

This clinic is designed to provide distance runner, sprinters, and field event competitors and combination of classroom and field instruction, stimulating training sessions, and fun! The training methods used by the most successful athletes in the world. These methods will be put to use in a week long quality, early season based. Training intended to stimulate interest and motivation in all aspects of track and field.

$150.00

XLC 1090

Volleyball Clinic, Beginning, Girls, Ages 8-10

Have a blast this summer and dig the fun game of volleyball. You will learn how to serve, the forearm pass, and how to set, spike and block. Get an introduction to digging, defensive rolls, set variations and multiple offenses. This clinic is especially designed for young players with little or no volleyball experience.

$145.00

XLC 1091

Volleyball Clinic, Girls, Beginning 8-10

Experienced and beginning volleyball players will bump up their game and develop individual skills in digging, defensive rolls, set variations and multiple offenses. Top-notch coaches will lead you in various drills and instruct you on

proper volleyball techniques.

$75.00

XLC 1092

Volleyball Clinic, Girls ages 11-13

This week long clinic you will learn how to serve, the forearm pass, how to set, attack and block. You will also be introduced to digging, defensive rolls, set variations and basic offenses. This clinic is especially designed for young players with little or no volleyball experience. Lunch is included.

$150.00

XLC 1093

Volleyball Dig and Pass Girls 14-18

This advanced level clinic focuses on refining your volleyball skills of digging and passing. JCCC Coaches will lead participants in various digging and passing drills and instruct on proper techniques.

$145.00

XLC 1094

Volleyball Setters Girls 14-18

If you are your teams setter, then this clinic is designed for you. This clinic will focus on developing your volleyball setting skills. Coaches will lead participants in various setting drills and instruct on proper techniques.

$145.00

XLC 1095

Volleyball Clinic, Girls 14-18

Attend this Volleyball clinic if you are a volleyball player that has played before and are looking to improve your skills in playing the game. You will develop and refine your individual skills in both offensive and defensive aspects of the game. Plan to work hard to prepare for the upcoming season. JCCC coaches will lead you in various drills and instruct you on proper volleyball techniques. Lunch is included.

$150.00

XLC 1096

Beach Volleyball, Boys & Girls, Ages 8-10

Want to catch some rays on the beach and play an up and coming sport? Get some sand between your toes and participate in an enthusiastic learning environment with action-packed volleyball instruction, competition and fun! JCCC's clinic staff is experienced and dedicated to providing a safe learning environment. Make sure you bring a water bottle and sun block.

$75.00

XLC 1097

Beach Volleyball Boys/Girls 11-13

A description is not available for this course.

$75.00

XLC 1099

Volleyball Preseason Clinic, Girls, Ages 14-18

Are you ready to sharpen your skills and be in the best condition for your upcoming season? If so, this clinic is for you. You must be between 14 to 18 years

of age and have played at the junior varsity or varsity level in volleyball. You will develop real game confidence and improve your mental toughness, aggressiveness, second effort and quickness through this clinic. Team communication skills, increasing your game concentration and poise will be stressed to help you refine and improve your individual skills. Excellent instruction with individual player development will occur in this clinic.

$80.00

XLC 1130

Volleyball Setters Clinic, Girls, Ages 12- 18

Get set - go! If you are your team's setter, this will teach you how to focus on developing your volleyball setting skills. Coaches will lead participants in various setting drills and instruct on proper techniques. Enrollment is limited to give special attention to each player.

$145.00

XLC 1135

Volleyball Dig & Pass Clinic, Girls, Ages 12-18

Dig it! Do you need to work on your digging and passing skills? This advanced level clinic focuses on refining your volleyball skills of digging and passing. Coaches will lead participants in various digging and passing drills and instruct on proper techniques. Enrollment is limited to give special attention to each participant.

$145.00

XLC 1136

Volleyball Parent/Daughter Clinic, Ages 7 - 10

Here's your chance to participate in the same sports clinic as your daughter.   This interactive clinic provides a fun opportunity to learn together fundamental skills taught in a positive and effective manner. Both you and your daughter will participate in the drills together. This is a perfect opportunity to help you reinforce your daughter's Volleyball skills. Note: Any family member over the age of 18 who wants to serve as "parent" may participate. $70 per parent/daughter pair.

$35.00

XLC 1140

Sports Week, Boys & Girls, Ages 6-8

Are you looking to have fun this summer? How about our Summer Sports Week! You will get a chance to try lots of different physical education activities including: team games, weight training, Frisbee, juggling, hiking, yoga, cooperative games and much more. The Summer Sports Week will challenge you to learn new skills and improve physical fitness in a fun learning environment. Activities are selected to develop cooperation, sportsmanship, and self-confidence. The clinic will encourage you to experience success by achieving goals that are appropriate for your ability. The camp is designed to give you exposure to a wide range of fun physical education activities.

$80.00

XLC 1141

Sports Week, Boys/Girls 9-13

Are you looking to have fun this summer? How about our Summer Sports Week! You will get a chance to try lots of different physical education activities including: team games, weight training, Frisbee, juggling, hiking, yoga, cooperative games and much more. The Summer Sports Week will challenge you to learn new skills and improve physical fitness in a fun learning environment. Activities are selected to develop cooperation, sportsmanship, and self-confidence. The clinic will encourage you to experience success by achieving goals that are appropriate for your ability. The camp is designed to give you exposure to a wide range of fun

physical education activities.

$80.00

XLC 1999

Supervised Lunch Break For Students Enrolled In Half-Day Clinics

Supervision is available during the lunch hour for students enrolled in both morning and afternoon half-day clinics.   Students are required to bring a sack lunch and drink. Please choose the course number below that corresponds to the week your child is participating in half-day clinics. No charge.

$20.00

XLC 2000

After-Clinic Activities Ages 6-13

After clinic activities in the gym are available for all students enrolled in full-day sports clinics and afternoon half-day sports clinics. Participants will be involved in specific planned activities in a safe learning environment. Please note: After clinic activities will be assigned to the gym for sports clinics participants only.

$35.00

XLC 2001

Advanced Baseball Hitting Clinic - Private Lessons, Boys, Ages 12 - 18

These individual lessons will provide participants the opportunity to improve their batting techniques in the off season. You will be called 2 weeks in advance to set up your individual lessons.

$300.00

XLC 2002

Advanced Baseball Pitching Clinic - Private Lessons, Boys, Ages 12 - 18

These individual pitching lessons will teach the proper mechanics and fundamentals of pitching through video analysis and hands on instruction. You will be contacted 2 weeks before the start date to set up your individual lesson time.

$300.00

XLC 2003

Advanced Pitching & Hitting Clinic - Group Lessons

Are you intertested in "taking your game to the next level"? Coaches with over 18 years of playing, coaching and teaching experience will be leading these clinics. Proper mechanics and fundamentals of pitching and hitting will be implemented. Video analyzation and hands on instruction will be used to improve your mechanics into excellent form and to better prepare yourself for the upcoming season.

$150.00

XLC 2005

Advanced Running Clinic, Boys and Girls, Ages 13 to 18

This running clinic provides middle and high school age cross country and distance runners the opportunity to learn more about distance running. The clinic will include intense training activities such as strength and conditioning, a stretching program, biomechanical form analysis, plyometric exercises as well as lectures. Runners will be exposed to a variety of running workouts that will help them prepare for the upcoming track season. Due to the structure of this clinic, enrollment is limited to participants who have previously participated on school sponsored Middle School or High School Cross Country and or Track programs.

$150.00

XLC 2006

Cross Country and Distance Clinic, Ages 14-17 (Evening)

Cross Country and Distance Clinic will provide elementary, middle school and high school age cross country and distance runners the opportunity to learn more about distance running. Each day sessions would include the following: stretching, running, light weight light weight lifting, plyometrics, lecture sessions, and and distance running. The clinic will provide participants with access to the cross country course, outdoor and indoor track facilities. Meals not included.

$95.00

XLC 2007

Cavalier Distance Camp, Boys & Girls, Ages 13 to 18

The Cavalier Distance Camp will include intense training activities such as strength and conditioning, a stretching program, biomechanical form analysis, plyometric exercises as well as lectures. Runners will be exposed to a variety of running workouts that will help them prepare for the upcoming Cross Country and Track season. Due to the structure of this clinic, enrollment is limited to participants who have previously participated on school sponsored Middle School or High School Cross Country and/or Track programs.

$75.00

XLC 2009

Weight Training/Flexibility, Advanced, Boys/Girls 12-18

Here is your chance to train with the USA Hall of Fame Conditioning Coach Istvan Javorek. Javorek has trained several Olympic Champions and this week long clinic will give you the opportunity to experience what it takes to be a champion. Be prepared to workout and expect to work hard... All athletes, in all sports will benefit. (4 sessions) $150

$150.00

XLC 2010

Weight Training, Boys and Girls, Ages 9-14

All sports require a combination of strength, speed, coordination, agility, flexibility and explosiveness. Weight training is the foundation of any budding athlete, in any sport. You will learn how to achieve the ultimate in athletic performance using dumbbells and barbells. Complementing a sports practice with stretching can bring many benefits including greater strength, fewer injuries, and improved recovery. All athletes, in all sports will benefit. Complete training for the complete athlete. Be ready to workout! NEW! Half day session for more intense workouts and flexibility in scheduling.

$80.00

XLC 2011

Conditioning Balanced Athletes, Ages 13 and up

(For ages 13 and up) For athletes with a desire to improve: men and women, high school or college level, professional, amateur, or recreational, ALL sports participants will benefit. The class will work on fundamentals of successful training: proper ways to lift dumbbell and barbells, plyometric work, core conditioning, and yoga. Everyone will walk away empowered with new ways to improve personal performance they can take back into daily training. Proper conditioning is instrumental in injury prevention and improved performance.

$160.00

XLC 2012

Conditioning Balanced Athletes

Proper conditioning is instrumental in injury pervention and improved performance for all athletes. You will learn the proper lifting techniques with dumbells and barbells to increase overall fitness, strength, and power. Plyometric work to improve speed and explosiveness and core conditioning will be included. Yoga and mental conditioning will be used to train the mind to 'see' performance. Everyone will walk away empowered with new tools to improve personal performances that you can take back into your daily training programs.

$70.00

XLC 2015

Weight Training Clinic,B/G Ages 13 and up

Excel in your chosen sport by working on the fundamentals of successful training - proper ways to lift dumbells/barbells, plyometric work, stair and core conditioning. Everyone will walk away empowered with new ways to improve their performance. Proper conditioning is critical in training, injury prevention and performance of young athletes.

$45.00

XLC 2016

Weight Training Clinic For Parent and Child, Ages 8 to Adult

This class will include weight training exercises that emphasize proper from to build not only muscle, but to improve the integrity of joints. New exercises will be taught each week along with stair plyometrics, abdominals and lower back instruction. This will be a great bonding experience for parents/grandparents and children, as well as an opportunity to reinforce the importance of physical exercise and a healthy lifestyle.

$35.00

XLC 2017

High Jump Clinic, Ages 13 - 18

This pre-season program is designed to help girls jumping under 5'2" and boys under 5'10" prepare for competitions and invitational meets. This clinic will focus on meet preparation, overcoming setbacks during competition and the importance of fundamentals.

$100.00

XLC 2018

High Jump, Advanced

This advanced program is designed for girls jumping marks over 5'2" and boys over 5'10" prepare for competitions and invitational meets. This clinic will focus on meet preparations, overcoming setbacks during competition and the importance of fundamentals.

$100.00

XLC 2019

Football Advanced, 7 on 7, Boys 10-15

This clinic will implement practice tecniques, and develop specific skills related to 7 on 7 football. Each session will reinforce various drills and techniques to enhance each players overall football understanding and skill level.

$100.00

XLC 2020

Football All Skills Clinic, Ages 6-7

Here is your chance to learn the fundamental skills of playing the game of football. You will be coached in the skills of throwing, catching, handing off and lining up in

legal formation. In addition, running pass routes, game strategies and defensive play will be emphasized in these action-oriented clinics. Bring your cleats and get ready for some non-contact football.

$80.00

XLC 2021

Football, Boys 8-10

Here is your chance to learn the fundamental skills of playing the game of football. You will be coached in the skills of throwing, catching, handing off and lining up in legal formation. In addition, running pass routes, game strategies and defensive play will be emphasized in these action-oriented clinics. Bring your cleats and get ready for some non-contact football.

$75.00

XLC 2022

Football, Boys 11-14

Here is your chance to learn the fundamental skills of playing the game of football. You will be coached in the skills of throwing, catching, handing off and lining up in legal formation. In addition, running pass routes, game strategies and defensive play will be emphasized in these action-oriented clinics. Bring your cleats and get ready for some non-contact football.

$80.00

XLC 2023

Football Quarterback Clinic, Boys, Ages 11-14

Are you ready to lead your team to victory? Quarterback clinic will set the pace on your victory road. You will learn the proper techniques for drop back, roll-out, play action passes and screens. Instruction will include reading defenses, secondary coverages and learning how to recognize specific plays.

$75.00

XLC 2024

Football, Running Back 11-14

A description is not available for this course.

$75.00

XLC 2025

Advanced Baseball Hitting League, Boys, Ages 12 to 18

This advanced hitting league will allow the team participants to work on their hitting mechanics and develop a better eye with live pitching. Sign-up should be in teams of 5 to 6 players but individuals who don't have a specific team can register and will be assigned to a team. Teams/Individuals will be contacted 2 weeks prior to start date to determine which time to attend.

$100.00

XLC 2026

Advanced Pitching Lessons

Participants will be taught proper mechanics and fundamentals through video analysis and hands on instruction.

$200.00

XLC 2030

Advanced Boy's Basketball Hoops Academy, Grades 9-10

Enhancement and development of individual basketball skills. Develop an understanding of individual and team concepts. Develop an understanding of individual weight training (Complex I) and conditioning (super sets).

$90.00

XLC 2031

Basketball Preseason Clinic, Boys, Ages 10-12

Start preparing for the upcoming basketball season at JCCC. JCCC Basketball coaches will emphasize the fundamental skills of the game including passing, dribbling, shooting and team concepts, that will help you prepare for the upcoming basketball season.

$40.00

XLC 2032

Boys Bball Individual Skills

A description is not available for this course.

XLC 2033

Boys Basketball Team Skills

Each session will cover a different team basketball concept as well as individual basketball skills. Each session will be divided into an instructional period and finish with team games. This clinic will provide opportunities to learn team concepts as well as work on individual skills through drills and game situations.

$55.00

XLC 2034

Boys BBall Individual Skills

Each weekly session will cover a different individual basketball concept and skill. This clinic will provide players the opportunity to learn individual basketball skills and concepts through drills and simulated game situations.

$100.00

XLC 2035

Advanced Girls Basketball Elite Clinic, Grades 4 thru 12

This clinic will meet 2 hours twice a week. We will work on fundamentals of individual, 1 on 1, 3 on 3 concepts, 5 on 5 full court scrimmaging. We will also hold contests after practicing these fundamentals. We will concentrate on all aspects of the game.

$50.00

XLC 2036

Advanced Girls Position Basketball Clinic, Grades 4 thru 12

Very intense and competitive position clnic for girls, 9th through 12th grade. This clinic is intended to give high school players an opportunity to advance their skills on both high school and collegiate levels. We will be emphasizing guard and post skills.

$80.00

XLC 2037

Advanced Girls Basketball Shooting Clinic, Grades 4 thru 12

4th grade through 12th grade girls will be instructed on shooting techniques. Attention will be given to shooting, layup and free-throw techniques. 1 on 1 play and reading screens plus a video on shooting form will be reviewed.

$80.00

XLC 2060

Softball Pitching Instruction

This advanced softball clinic will focus on the fundamentals of pitching. The fundamentals will be taught through a series of drills and breakdowns. Each participant will need to provide their own catcher.

$100.00

XLC 2080

Advanced Beginning Competitive Volleyball Clinic

Each session consists of a warm-up, specific skill improvement drills, 6-on-6 scrimmages, and conditioning. This clinic helps to improve beginning fundamental skills learning competitive strategies, and increasing conditioning levels. The limited number of players (students) will allow for coaches to instruct players in a small group setting.

$135.00

XLC 2085

Advancement of Fundamental Volleyball Skills

Improve your basic volleyball fundamentals skills to be able to play at advanced competition levels. Limited to small number of participants for more personalized instruction.

$100.00

XLC 2086

Advancement of Fundamental Volleyball Skills II

Improving the basic volleyball fundamental skills to be able to play at advanced competition levels. Limit to small number of attendees for more personalized instruction.

$300.00

XLC 2087

Advanced Fundamental Volleyball Skills, Self-Paced

This course allows the student to meet with the coach at times that are arranged week by week.

$150.00

XLC 2100

Pre-Clinic Activities, Ages 6-13

As an added convenience to parents, pre-clinic activities will be offered Monday through Thursday mornings from 7.00 am. to 8.30 am in the Gym JCCC Fieldhouse. Participants will be involved in specific planned activities in a safe learning environment.

$30.00

XLC 2101

Biking, Parent/Child Parent Boys and Girls 7-14

Hit the trail! This clinic teaches parents and children basic safety techniques and training tips for trail riding in Johnson County. This clinic will meet at different trailheads to give you a varitey of terrain and opportunites to learn new locations of trails. Each participant must have thier own bike and helmet and each child must be accompanied by an adult. Meet at JCCC Gym on the first night of class. Note: Any family member over 18 who wants to serve as "parent" may

participate.

$35.00
XLC 2102

Biking, Parent/Child, Child
Here's your chance to be a participant with your child! Learn basic safety techniques and training tips for trail riding in the Johnson County area. This clinic will meet at different trailheads to give you a varitey of terrian and opportunites to learn new locations of trails in the area. Each participant must have thier own bike and helmet and each child must be accompanied by an adult.

XLC 2103

College Recruiting of High School Athletes for Parents
Parents of college bound athletes will receive comprehensive information and resources to develop a step-by-step recruiting strategy. Some of the topics include: NCAA, NAIA and NJCAA Divisions, Timelines, Getting Noticed, Recruiting Services, Scholarships, Signing Dates and more.

$19.00
XLC 2104

Athletic Injuries/Sports Medicine Principles Workshop Ages 13-18
Athletic Injuries and Sports Medicine Principles Workshop, athletic training students and High School sports mangers. This 5 day intensive workshop will deliver opportunities for the students to learn and practice elements of the 5 basic foundations of sports injury care. 1) Emergency response 2) Recognition of common injuries and referral to an athletic trainer or physician, 3) Sports first aid 4) Common taping and strapping techniques and brace selection. 5) Professional behavior and ethics. This workshop is a must for all High School Athletic Training Students. Lunch is included. (5 sessions)

$100.00
XLC 3000

Sports Clinic Late Fee
$10 Late Fee charged to students that are picked up after 5:30pm from Extended Day Clinic.

$10.00
XLC 3001

Sports Clinic Additional Late Fee
$20.00 Additional Late Fee for students picked up after 6:00pm in Extended Clinic Activites.

$20.00
XLC 3002

Indoor Soccer Camp (9-14 B/G)
JCCC Indoor Soccer Camp is a great way to work hard, get prepared for the upcoming soccer seasons, and have a lot of fun. The winter is a very important time for those soccer players who are dedicated to becoming a better player. This camp will help develop each player's individual foot skills by using passing, shooting, dribbling, and juggling drills. Each session will include proper soccer conditioning training. You will particpate in Futsal games and small sided soccer games like 2v2, 3v3, and 4v4. The camp will consist of five (5) two hour sessions. You will need to bring a ball, shin guards, tennis shoes (NO BLACK SOLE SHOES), and water bottle (NO SPORTS DRINKS allowed in the indoor facility). This camp is for players that are dedicated to taking their soccer skills to the next level.

$50.00

XLC 3003

Baseball Hitting Camp (ages 7 - H.S. Senior)

The Cavalier Baseball Hitting Camp will allow players to fine tune their swings during the cold Kansas winter. Players will take part in an intense hitting circuit that will help fine tune and improve each player's swing. In addition to working on the fundamentals of hitting, campers will also be coached on the mental aspects of the hitting game. They will be given ideas and suggestions as to how they should mentally prepare for an at-bat in a game. Each one hour session will focus on a different part of the swing (I - Lower body, II - Grip and Hands, III - Finish and Balance). Campers should gain a more confident approach at the plate along with a better swing for more consistent results at the plate.

$65.00

XLC 3004

Baseball Pitching Camp (7-H.S. Senior)

The Cavalier Pitching camp will serve as a tune up for pitching fundamentals. Campers will be taught proper mechanics that they can incorporate into their pitching delivery. Players will also be taught how to be mentally prepared and focused in order to maximize their pitching performance. The pitchers will go through a drill series each night, in which each drill focuses on a different part of the pitching delivery. The campers should come out of the camp feeling more confident in their mental and mechanical approach to pitching as well as being able to throw strikes at a more consistent rate.

$65.00

XLC 3005

Pole Vault Camp (10-18 Boys and Girls)

This is a great opportunity for participants to learn the proper technique of pole vaulting. With the right technique, the athlete can increase their chances of success at pole vaulting. Proper technique is the key to success in pole vaulting. All athletes must be equipped with a good pair of running shoes, sweats, gym shorts, and water bottle. We recommend if athletes have their own poles to bring them, but poles will be available.

$250.00

Sports and Recreation (XYS)

XYS 1000

No Trump Bidding in 4 Easy Weeks

No Trump is very powerful bid. Learn how to make the most of this bid with the Stayman and Jacoby transfer conventional bids. Learn how to defend against No Trump bid with DONT - Disturb Opponents No Trump and other conventions. Note: This class is for the experienced bridge player.

$35.00

XYS 1003

Bowhunting Skills

This class is for the individual who has limited experience and is seeking assistance in enhancing their current skill levels in areas such as: equipment selection, set-up, maintenance and tuning; hunting methods for deer and turkey, habitat knowledge. Off campus Saturday class.

$40.00

XYS 1005

Beekeeping, Intermediate

This course offers an in depth review of current Beekeeping practices. You will study beekeeping in the classroom and explore a beehive in the field. This course will give students hands on exprience working a beehive.

$15.00

XYS 1008

Fly Fishing I

Learn the fundamentals of fly fishing, equipment selection and assembly, rigging and basic knots, casting, fly selection, and simple stream fishing tactics from professional guide/ instructor. Please bring $5 for practice materials to the first class. Class limit 10.

$51.00

XYS 1009

Fly Tying Basics

Of all the ways to catch a fish, few are more rewarding than catching one on a fly you tied yourself. No previous experience is necessary - learn step-by-step instructions of basic fly tying techniques. All materials are furnished. There is a $20 material fee payable to the instructors at the first class. Note: enrollment limited to 10.

$51.00

XYS 1022

Bridge: Don't Do It!

When the opponents open 1 no trump, what do you bid? Pass or bid - we will use the Rule of 8 to decide. Example hands will be played. NOTE: This class is for intermediate or experienced players.

$12.00

XYS 1030

Fencing, Beginning

Learn the basic techniques and knowledge for fencing. Topics include physical skills, basic foil technique, conditioning, terminology and rules. Equipment is provided.

$69.00

XYS 1040

Fencing, Mastering Skill I

This class is a continuation and expansion of Intermediate Fencing, to include the basic skills and techniques of Saber, Epee, and Foil, depending on the interests of the class. Practice exercises and bouting are emphazied. Additional topics addressed include fencing strategies and tactics. Equipment is provided.

$69.00

XYS 1045

Fencing, Master Skills II

This class is a continuation and expansion of Fencing, Mastering Skills I including skills and techniques in Foil, Saber and/or Epee depending on class interest. Practice exercises, bouting, strategies, tactics and officiating are emphasized.

$69.00

XYS 1052

Kansas Hunter Education

This is the state approved course for the Kansas Hunter Education certificate. You will learn safe firearms and hunting practices, responsible and ethical hunting behavior and basic wildlife conservation principles. You will also discover the vast hunting opportunities available within Kansas. Participants must be 11 years or older to attend this class. You will be able to experience the Laser Shot's Hunting Simulator, students will experience the thrills of sporting firearms while at the same time receive instruction in safety, proper ethics and the responsbilities of gun ownership. You must be able to attend all 3 sessions to qualify for the certificate. Class limit is 25 and no walk-ins will be admitted.

$20.00

XYS 1067

Tree Keepers: Volunteer Training for a Healthy Community Forest

A community forester will teach this class and you will learn proper tree planting, pruning, identification, selection, placement and maintenance of trees. Participants will learn about volunteering opportunities to work with the KC metro area public trees. Two class sessions will be spent in a lab enviroment (March 15 and April 5 place to be announced at the first session).

$14.00

XYS 1070

Golf, Beginning

Class is for the new or first-time golfer. Learn basic swing fundamentals and develop a general knowledge of the game. Clubs furnished, cost includes driving range and green fees. Wear comfortable clothes and shoes - meet in club house area. Limited 15

$124.00

XYS 1110

Contract Bridge, Basic

Introductory class, you will learn bidding and play of the hand in eight weeks. Join a friendly and non-intimidating group of other bridge novices. The textbook and supplies will be available from the instructor at the first session-cost $12.

$51.00

XYS 1111

Bridge: Making a Plan for Playing the Cards

Scenario: You and your partner have won the contract. You are the declarer and all eyes are on you, which cards do you play first? In this workshop, you'll learn how to plan the strategy for playing the hand.

$12.00

XYS 1117

Bridge: Opening Leads

Do you lead differently if defending a no-trump contract or a suit contract? Do you lead your partner's suit? Do you lead top of a sequence or fourth from your longest and strongest? Do you make a passive lead or an aggressive one? All these questions and more will be addressed.

$12.00

XYS 1119

Bridge: 5 Commonly Made Mistakes and How to Fix Them

As bridge players, we all make mistakes. In this workshop, we will discuss the five most common mistakes and how to fix them. We will have class discussions and

play example hands.

$12.00

XYS 1122

Bridge: Plan the Play

Scenario: You and your partner have won the contract. You are the declarer and all eyes are on you. Which cards do you play first? In this workshop, you'll learn how to plan the strategy of playing the hand.

$12.00

XYS 1130

Contract Bridge, Intermediate

Intermediate principals of bridge will be introduced to the player familiar with Goren's basic point count system and general play of the game. Further bidding information as well as play and defense strategies will be presented.

$55.00

XYS 1132

Bridge: Duplicate 'Lite'

Duplicate bridge does not have to be cutthroat and antisocial! This is a low-key, casual, non- threatening introduction to duplicate bridge. This class reaffirms that the primary purpose of bridge is to have fun. The textbook ($5) is available from the instructor at the first session. Note: Participants are expected to know basic bridge.

$55.00

XYS 1133

Bridge: Play of the Hand

This class is designed for intermediate players whose bidding is pretty good, but whose play of the hand and defense need some improving. Displayed hands will be analyzed, and alternative strategies for their play will be discussed and then demonstrated. Various advanced techniques will be presented to strengthen your game.

$55.00

XYS 1145

Basic Bridge Bidding Review

You need a basic knowledge of bidding but would like to practice your skill, also each session we will review by playing eight hands that illustrate bidding fundamentals. Hands records and bidding tips will be available during each class.

$35.00

XYS 1160

Bridge: Defensive Signals

You want to tell your bridge partner to continue leading that suit or to shift to another suit. How do you do that, since you cannot talk across the table? You will learn the basic signals you can give your partner. Note: This class is for intermediate or experienced players.

$12.00

XYS 1165

How to be a Desirable Bridge Partner

Class involves plenty of bidding and playing with real situation suggestions, for

those with basic knowledge of bridge. Emphasis less on technical skill and more on learning to be the kind of player others enjoy having around.

$55.00

XYS 1183

Bridge: Defense

Defense can be as exciting as getting the bid. Lots of fun playing hands, bidding defense, playing defense, teamwork defense, defensive signals, party and duplicate scoring differences. There will also be preset hands and some open hands. Join us for a great non-intimadating class and learn bridge lessons all at the same time.

$55.00

XYS 1185

Fly Fishing II

The class will critque your casting and teach techniques and strategies to improve your success with nymph, and dry fly and streamer fishing. A trip to a Missouri stream is included. Reserve Oct. 11 for stream portion. Class limit 20.

$111.00

XYS 2000

Sports Conditioning Program

Sports Conditioning Program

$60.00

XYS 2050

College Recruiting of High School Athletes for Parents

Parents of college bound athletes will receive comprehensive information and resources to develop a step-by-step recruiting strategy. Some of the topics include: NCAA, NAIA, and NJCAA Divisions, Timelines, Getting Noticed, Recruiting Services, Scholarships, Signing Dates and more.

$19.00

XYS 2051

College Recruiting: Student Edition

Freshmen thru Senior high school students interested in playing at the college level will gain valuable insight to the recruiting process. Set yourself apart and learn about timelines, getting noticed, college divisions, academics, scholarships, scouts and college visits.

$19.00

XYS 2052

College Recruiting: A Game Plan for High School Athletes- Coach Edition

Take advantage of available technology to save time, manage player information and communicate with college scouts. Identify simple, real-world steps to provide greater opportunities for your student-athletes and parents.

$19.00

Technical Trades (XND)

XND 1000

Cross Connection Control and Backflow Prevention Certification

This course and exam complies with KS, MO, OSHA/USEPA and ASSE requirements. Topics include cross connection, backflow accidents and preventers, contamination, thermal expansion, pollution and fire protection systems. A study guide is included. A written and hands-on exam will be administered at the end of the course.

$499.00

XND 1010

Cross Connection Control and Backflow Prevention Recertification

KS and MO require recertification every three years. A written and hands-on exam will be administered at the end of the course. Participants must provide a copy of their certification card to be submitted to ASSE upon completion of the course and exam.

$299.00

XND 2500

Introduction to GPS Surveying

This course will cover the basics of GPS as it relates to the land surveying, engineering, and construction industry. Four hours of lecture will cover GPS history and theory, static surveying, RTK surveying, map projections, localizations, and geoids. In 12 hours of outdoor field time, you will collect and process a static survey, prepare and collect data in a State Plane Coordinate system using an RTK system, and prepare and collect data in a localized system using an RTK system.

$149.00

XND 5010

Refrigerant Transition and Recovery Review and Exam

This course prepares you to take the EPA-Approved test for HVACR technicians and contractors. The exam will be given as part of the course. You can be certified in the following: Type I - Small Appliance; Type II - High Pressure and Very High Pressure; Type III - Low Pressure (Universal). Please bring the EPA Certification Exam Prep Manual, available at the JCCC bookstore, to participate in a pretest review.

$149.00

XND 5011

Plumbing Exam Prep

This course prepares you for the Journeyman or Master Plumber Exam. Loose-leaf 2003 or 2006 editions of both the International Plumbing Code and the Uniform Plumbing code, along with the Uniform Study Guide are required and available at the JCCC bookstore. An additional study guide is included in the course fee. Please bring the books, a calculator, a three-ring binder and a highlighter marker to class. You will need to contact your local city of county codes office directly to apply for the exam. -

$269.00

XND 5012

Mechanical/HVAC Exam Prep

This course prepares you for the Journeyman or Masters Licensing Exam. You will need the following books: International Mechanical Code, 2003 or 2006 loose-leaf edition; Uniform Mechanical Code, 2003 or 2006 loose-leaf edition; Manual N Commercial Load Calculation, Refrigeration and Air Conditioning, ARI 4th edition by Prentice Hall; Trane Ductulator, Low and Hi Pressure Boilers. All books may be purchased at the JCCC Bookstore. Please bring the books, a calculator, a three-ring binder and a highlighter marker to class. You will need to contact your local city or county codes office directly to apply for the exam

$369.00

XND 5013

Electrical Exam Prep (4.25 CR)

This course prepares electricians to sit for professional journeyman, master and electrical inspector exams including Experior (Block), IAEI, ICBO, NAI, SBCCI, as well as regional state exams. You will need to contact your city or county codes office to learn which code book(s) are required for your specific exam. Loose-leaf editions of these books are available at the JCCC bookstore. Please bring your books, a calculator, and two different colored highlighter markers to class.

$269.00

XND 5019

Mechanical/HVAC Exam Prep - Accelerated

This fast-paced, two-day course is designed for the experienced professional who is preparing for the masters and/or journeyman licensing exam. The book requirements are the same as the Mechanical/HVAC Exam Prep course. You will need to contact your local city or county codes department directly to apply for the exam.

$369.00

XND 5113

Electrical Exam Prep - Accelerated

This fast-paced, four-session course is designed for the experienced electrician to prepare you to sit for professional journeyman, master, and electrical inspector exams including Experior (Block), IAEI, ICBO, NAI, SBCCI, as well as regional state exams. You will need to contact your city or county codes department to learn which code book(s) are required for your specific exam. Loose-leaf editions of these books are available at the JCCC Bookstore. Please bring your selected code book(s), a calculator, and two different colored highlighter markers to class.

$269.00

XND 5500

Electrical Estimating and Bidding

In this course you will learn basic estimating of single and multi-family dwellings as well as small commercial projects. You will cover NEC, bid prep, take-off, billing of meterials, labor costs, and building in prfit margins.

$199.00

XND 6011

Plumbing Exam Prep - Accelerated

This fast-paced, two-day course is designed for the experienced plumber who is preparing for the journeyman or master plumber exam. The book requirements are the same as the Plumbing Exam Prep course. Please bring the books, a calculator, a three-ring binder and two different colored highlighter markers to class. You will need to contact your local city or county codes office directly to apply for the exam.

$269.00

XND 9000

QuickBooks 2007 for Contractors

Designed specifically for contractors, this course addresses the specific accounting needs of the construction industry. You will focus on how to use the Premier Contractor Edition of QuickBooks 2007 to run your contracting business more efficiently. Clear lessons and step-by-step instructions written in plain language will give you hands-on practice using the features that you are sure to use on a daily basis.

$99.00

XND 9010

Successful Construction Business Management

Your contracting business can gain a powerful and permanent advantage over the competition by practicing expert business management. This course can help you design and construct a superior business operation that serves your customers better and keeps them coming back. Better business operations usually keep talented employees happy and loyal too. Learn business skills the same way you learned your trade: one step at a time and with an eye on how the pieces go together successfully.

$99.00

Testing (XVT)

XVT 2000

Math Compass Re-Placement

This course is a 20 hour intensive review for students who have already taken the COMPASS placement test. It is appropriate for students whose goal is to enroll in Intermediate or College Algebra and would like to improve their placement.

$99.00

XVT 3000

Workkeys Testing for Students

Workkeys Testing for Students.

$99.00

XVT 5001

GRE Preparation - Part 1

This online course reviews all question types on the verbal and analytical sections of the GRE. How to do your best will be emphasized and time-saving techniques for both the paper-based and computer administrations of the test

$98.00

XVT 5002

GRE Preparation - Part 2

This online course features a math review and techniques for tackling the quantitative comparison, discrete quantitative, and data interpretation questions. We will also cover time-saving techniques for both the paper-based and computer administrations of the test.

$98.00

XVT 5003

Skills for Making Great Decisions

Master techniques for achieving your goals, managing risk, dealing with crises, and making decisions--big and small--with knowledge and confidence. Find out how to avoid many types of mistakes and how to recover from others.

$98.00

XVT 5005

ACT/SAT Preparation - Part 1

This online course includes verbal refreshers and discusses techniques aimed at reducing test-taking anxiety. Taking both parts 1 and 2 in this two-part series

prepares you for question types on each test using test-taking techniques.

$98.00

XVT 5006

ACT/SAT Preparation - Part 2

Continue online preparation for the ACT and SAT by learning test-taking techniques and practicing on previously administered ACT and SAT tests. Math and verbal areas will be reviewed and stress-reducing techniques will be taught.

$98.00

XVT 5007

Everyday Math

You'll get valuable hands-on experience and advice on using a calculator; discounts, and taxes; managing your income and expenses; checking your bills and bank statement for errors and overcharges; comparing investment vehicles; shopping for the best loans and more.

$98.00

XVT 5008

Introduction to Algebra

Understand how algebra is relevant to almost every aspect of your daily life, and become skilled at solving a variety of algebraic problems. This unique and thought- provoking online course integrates algebra with many other areas of study.

$98.00

XVT 5011

LSAT Preparation - Part 1

This online course you will practice on actual LSAT exams from previous years and learn proven test-taking techniques. Law school entrance procedures, law school survival techniques, analytical reasoning, and drafting diagrams are discussed in Course 1 of this two-course series.

$98.00

XVT 5012

LSAT Preparation - Part 2

Reading comprehension, logical reasoning, techniques for quick elimination of incorrect answers, explanations of correct answers and proven approaches for selecting the correct answer are discussed in Course 2 of this two-course series.

$98.00

XVT 5021

GMAT Preparation

Learn test-taking techniques and methods for improving your score while saving time with this online course. Review questions like critical reasoning and data sufficiency for verbal and quantative sections. You will practice on GMAT tests from previous years.

$98.00

Tours and Travel (XKO)

XKO 1008

Turkey: Crossroads of Civilizations

The land of Turkey is like a giant layer cake. In it you will find every layer of Western Civilization from the beginning to the present. Using audio-visual resources and sound, JCCC professor William Stockton, Ph.D. will introduce you to the treasures of Turkey. Land of the Hittites and legendary Troy, Turkey was Alexander the Great's road to Persia. Filled with Greek and Roman cities, Turkey was also the site of missionary visits by St. Paul, himself born in Turkey, and of important early Christian churches and theologians. Constantinople (now Istanbul) was the seat of the Byzantine and Ottoman Empires and features numerous architectural wonders, including the Hagia Sophia church and the Sulemaniye Mosque. Currently a modern nation state, Turkey is aiming to join the European Union. All these Turkish delights and more (e.g. belly dancers) will be on view in this course. If they wish, students may also participate in an educational trip to Turkey in March, 2009.

$0.00

Writing Center (XGW)

XGW 1103

Practical Writing Skills
A description is not available for this course.

$65.00

XGW 1107

Sentence Pattern Skills
A description is not available for this course.

$65.00

XGW 1108

Composing Skills
A description is not available for this course.

$65.00

XGW 1109

Proofreading Skills
A description is not available for this course.

$65.00

XGW 1110

English Grammar Review
A description is not available for this course.

$65.00

XGW 1112

Research Skills
A description is not available for this course.

$65.00

XGW 1115

Revising Skills
A description is not available for this course.

$65.00

XGW 1120

Writing in the Disciplines

A description is not available for this course.

$65.00

Youth and Talents (XLY)

XLY 1001

Etiquette for Boys and Girls

Learn appropriate behavior in different social settings and situations. Topics include telephone and table manners; courtesy in language, at home, at school, and in public places.

$35.00

XLY 1098

So You Want to be a Vet

Learn what it takes to be a vet through guest speakers and/or a trip to a vet office. You'll discover what a vet does on a daily basis. You'll learn what type of pet would work best in your house and the start-up costs and expenses of owning a pet. Finally you'll analyze pet food samples and find out what is best for your pet.

$60.00

XLY 1101

Zooland-Design a Zoo

Apply your creative talents as you design your own zoo. Develop an understanding of wild animals and their needs. Choose the most interesting animals as you develop a map of the perfect zoo.

$65.00

XLY 1107

Space Command

Apply for the space program and join your fellow astronauts-in-training as you explore the history of flight and the subsequent travels of humans in space. In hands-on learning activities you'll conduct experiments, record and interpret data in preparation for a lunar landing. In addition to having a 'real blast' you'll work with math skill builders that strengthen math concepts that directly relate to the intricacies of space. Each week is a different curriculum. Students may take one or any combination of the three offerings.

$60.00

XLY 1109

Vocabulary for the ACT/SAT

This course will cover basic information about the exams, along with tips for taking the exams. We'll focus on verbal preparation that will address a variety fo learnin styles. This course will provide valuable information and a confidence boost for students taking the test in the coming months.

$105.00

XLY 1113

Rhymes, Songs and Fingerplays for Young Children Birth-5 yrs.

Join "Miss Jackie" Silberg and boost your child's math, language, reading and

social skills with rhymes and songs that teach your children listening, language, cognitive and motor skills. Learn many new rhymes and songs and how the new research into early childhood brain development can be applied to your child. This class is for parents and grandparents only...no children.

$12.00

XLY 1123

Book Bug Bunch, 2nd and 3rd Grades

Give your student an opportunity to gain additional reading practice early in the school year to help boost reading skills. This will be a reading for pleasure enrichment class. Activities will include silent and oral reading, sharing, and book reviewing.

$19.00

XLY 1167

Fun with Science, Gr. 2-3

What makes a light bulb turn on when you flip the switch? How does a rocket fly high into the sky? What makes paper airplanes fly, twist, and turn in the air? Learn the answers to these questions and many more as you become a science investigator and have fun with science!

$65.00

XLY 1168

Petmania-All About Dogs

Have you always wanted a dog? Spend your mornings learning all about our wonderful canine companion and his needs. Learn about a variety of breeds and find the right one for you!

$65.00

XLY 1169

Petmania-Exploring Pet Ownership, Gr. 2-3

Have you always wanted to own a pet? Explore the responsibilities and options of pet ownership. Complete activities on the costs of owning a pet and picking the right pet for you.

$65.00

XLY 1174

Exploring with Mother Goose, Gr K-1

Join Mother Goose for a week of fun! Through hands-on math activities, science investigations, art projects, songs, and reading activities, you will explore the world of nursery rhymes. During the week, we will devise a safety plan for Humpty; explore density with Jack and Jill; and use a map to help Little Bo Peep find her sheep. Each day we will learn a new nursery rhyme as we engage in creative thinking activities.

$75.00

XLY 1176

Zoology

Use your math skills to develop a class zoo. Design the animals, determine the cage size, and build pattern pathways. You will practice estimating, problem solving, measuring and much more as you take on the role of a zookeeper.

$75.00

XLY 1177

Munch, Munch, Munch

Do you like to eat snacks? Would you like to learn how to make an edible mud pie? How about an American flag you can eat or an apple tree? Come practice math, reading, and science skills while following directions to make delicious snacks. We will measure ingredients, determine fair shares, practice problem solving, addition and subtraction, and much more. Bring your Chef's hat, you're in for a real treat! Note: Students who are picky eaters or have food allergies should be advised about taking this class. We will be using peanut butter and some products that contain milk.

$75.00

XLY 1178

Fantastic Frogs

Put your hopping feet on and jump into the world of frogs where you will explore the habitat and life cycle of the frog. Practice measuring and recording data as you compete in a frog jumping contest. In this class you will learn about frogs through hands-on activities, song, art projects, and stories.

$75.00

XLY 1179

News Casting, Gr. 6/7

Have you ever wanted to be a part of a newscast? Maybe you want to be a meteorologist or an anchor. Learn what it is like to be on a newscast team all the way from the reporting to the production.

$105.00

XLY 1186

Amazing Art - Gr. 2/3

Come and create all types of art projects. Make prints, books, paintings, leaf rubbings and anything else you can dream of. Be a part of our class as we explore the world of art.

$105.00

XLY 1187

Construction Junction, Gr. 6/7

Do you think that you can build a ten-foot tower structure out of newspaper? What about building something out of toothpicks that can hold 15 pounds? Come to Construction Junction and see if you can do these as well as a few other interesting projects.

$105.00

XLY 1189

Earth Awareness and Crazy Chemistry, Gr 5-6

Uncover how science will help us protect our planet. Learn interesting facts about water pollution and acid rain and the benefits of solar energy. Then mix, mush and brew together different chemicals to create solutions you can use in this very-fun hands-on chemistry lab.

$105.00

XLY 1190

Machine Mania & Robotics, Gr 5-6

Find out how useful wedges, levers, and inclined planes can be in this hands-on exploration of how simple machines help us with our daily lives. Then - it's off to the futuristic world of robotics! Learn about robot anatomy, understand robot fundamentals, and spend hands-on time experimenting with super cool red-hot

robots!

$105.00
XLY 1191

Animals, Plants, Sun, Water, and YOU!

Students will be examining the life of plants and animals in environmental communities. They will explore how living and non-living things are interdependent and how living organisms must adapt to survive. As students study the major biomes of the earth, they will investigate the relationships within the biosphere, an ecosystem, a population, and an organism. Through hands-on activities, students will explore the purpose of various animal adaptations.

$65.00
XLY 1192

Mad Messages & Jr. Engineers, Gr 5-6

Discover how to send secret messages to your friends using special codes! Become a "code cracker" detective. Then learn all about structures, investigate arches, and test loads as you put on an engineer's hat. Build a giant geodesic dome!

$105.00
XLY 1193

Birds & Beasts and Nature, Gr 5-6

Where do owls live and what do they eat? Take a walk on the wild side to investigate owls, birds and all kinds of bugs. Participate in nature's scavenger hunt which combines science exploration with animal kingdom.

$105.00
XLY 1194

Advanced Castle Building, Gr. 6-9

Students will travel back in time to study, design and build Medieval Castles. We will watch video clips and History, Learning & Discovery Channel shows regarding castles, and study the way middle age warfare was conducted. We will examine working catapults and build paper castles. Students will also be able to create their own unique castles using advanced Lego & Mega Blocks-castle building sets. The class will conclude with the study and viewing of the middle ages myth, LadyHawke. Students are encouraged to do research before class including checking out library books regarding Middle Age Castles and/or printing off pictures and articles from the internet.

$115.00
XLY 1196

This, That & More, Gr. 2-3

Students will have a wide variety of opportunities in exploring thinking and problem solving. They will use ingredients to make silly putty, slime, glue and then create their own creations. Students will build a maze and a landing pad to catch eggs. Every day the students will be developing their scientific thinking as they complete experiments and projects.

$115.00
XLY 1197

Game Factory, Gr. 4-5

The game is on! Join in as we explore games and their fairness through a simulation trip through the Game Factory. We will explore probability as we play a variety of games.   Show what you have learned by designing your own fair game

to play with your parents on the final day.

$115.00
XLY 1198

Sensational Science, Gr. K-1

Grab your magnifying glass and lab coat and join us for sensational science activities. During this week, we will use hands-on activities and experiments to introduce and practice the scientific process. Join us as we create volcanoes, explore the properties of water, launch Pringles rockets and much, much more.

$75.00
XLY 1201

Supervised Lunch Break

Supervision is available during the lunch hour for students enrolled in both morning and afternoon summer youth enrichment classes. Students are required to bring a sack lunch and a drink.

$0.00
XLY 1205

Reading Games for Young Children

Bend yourself into a letter shape or have an alphabet conversation and you will see that learning to read is fun. Join Miss Jackie and learn easy to do activities that are organized by elements of literacy that will help young children 2-5 years to be good readers. A must for parents of young children. Adults only please.

$12.00
XLY 1206

Exploring Our World, Gr. 2-3

Take a fascinating journey around the world through hands-on activities. Discover and create animals that live on different continents - a panda bear, boa constrictor and penguin. Play "Continent Lotto" and take home your very own ocean in a bottle.

$65.00
XLY 1207

The World of Living Things, Gr 2-3

Anyone craving a creepy crawly snack? In the World of Living Things you will make and eat edible insects, observe plants, conduct experiments and classify mammals, reptiles, birds and fish. Have fun as you construct your very own worm habitat.

$65.00
XLY 1208

Create & Design with Metal, Gr 4-5

Students have an opportunity to work with a variety of metals to create wearable art. They will learn building and surface techniques to add visual interest to these projects.

$65.00
XLY 1209

To Dye For, Gr 6-7

Students will learn a variety of textile handprinting techniques. They will have options of using these techniques to create a variety of projects to dye for!

$65.00

XLY 1221

3-D Design, Gr 6-7

Students will build and sculpt themselves into well-rounded artists as they use a variety of materials to create three dimensional projects.

$65.00

XLY 1223

Odyssey-Greek Mythology, Gr. 4-5

Design a maze for a minotaur. Race for Atlantas apples. Learn about the gods, goddesses, heroes, and monsters that make up Greek mythology as we read two myths each day. Let your creative juices flow as you help the mythical heroes in their quests.

$65.00

XLY 1226

Exploration of Young Adult Literature, Gr. 6-7

Read, eat, explore, create! Explore young adult literature, create projects and play vocabulary enhancing games. While sharing and relaxing with our literature, we will prepare snacks to share.

$65.00

XLY 1227

One Week in China-CRN 50383, Gr. 2-3; CRN 50401 & CRN 50406, Gr. 4-5

This class will introduce you to a variety of customs in the Chinese culture and language. Students will learn to speak basic conversations in Mandarin Chinese and writing. Get ready to explore the language, costumes, food and a lot more through fun activities and drills.

$65.00

XLY 1228

Math Games Galore, Gr. 2-3

Do you like to play games? Do you enjoy math? Then this class is for you! Join us as we explore math through fun hands-on learning activities.

$65.00

XLY 1231

Exploring with Mother Goose II, Gr K-1

Continue the exploration with new nursery rhymes. Find out if you can reach the moon with Hey Diddle Diddle. Practice telling time with Hickory Dickory Dock, and learn about spiders and determination with the Itsy Bitsy Spider. Each day will bring excitement and fun as we explore with Mother Goose.

$75.00

XLY 1232

Raising Responsible Kids by Using Household Chores and Allowance

Start the New Year out with a plan for your family by learning how to design an allowance and chores program that is just right for your household no matter the ages of the kids or family dynamics.

$12.00

XLY 1233

From Innocence to Entltlement

This class will offer ideas of how parents with kids of all ages can implement easy to learn techniques into their parenting skills to ward off entitlement from their kids and raise responsible, respectful children in a society that encourages entitlement.

$15.00

XLY 1235

High Flyin' - Grades 6-8

Launch into an action packed day of flight and flying. Complete your flight log as you create rockets, airplanes and other flying contraptions. Successfully finish all the challenges that await you and maybe you will be certified to take off!!!

$62.50

XLY 1236

Polyhedraville-City of the Future Grades 4-6

The year is 2106. You and a team of student architects have been hired to design a city of the future, using only polygons. Design and build a 3-d model of this futuristic city while staying within a budget of $100,000. Let your creative ideas flow as you become a futuristic architect in this design simulation.

$62.50

XLY 1237

Castle Building, Grades 5-8

Travel back in time to study, design and build Medieval Castles. You will watch video clips and History, Learning & Discovery Channel shows regarding castles and study the way middle age warfare was conducted. Examine working catapults, build paper castles. Then, create your own unique castles using advanced Lego and Mega Blocks - castle building sets. You are encouraged to do research before class including checking out library books regarding Middle Age Castles and/or printing Internet pictures and articles.

$62.50

XLY 1238

Storm Warning! Grades 6-8

Want to know how tornadoes form? What's an isobar? How does barometric pressure affect weather? Ever heard of weather forcast models? Learn about these topics and more through exciting, hand-on experiments, weather-related websites, projects and meteorological experts! Eligibility: Students must have an IEP (Individualized Education Plan) or have tested in the 98th percentile on an IQ test.

$150.00

XLY 1239

Wild Numbers! Grades 6-8

This course will allow students to explore and investigate mathematical topics not usually found in a traditional math curriculum. Many topics will be selected by the students! These might include Fibonnacci numbers, tessellations, advanced logical processes, and even statistical modeling! Eligibility: Students must have an IEP (Individualized Education Plan) or have tested in the 98th percentile on an IQ test.

$150.00

XLY 1246

Calming the Chaos of an ADHD Household

ADHD causes chaos but it can also bring many wonderful attributes when the

energy is funneled in a positive direction. Meet with an ADHD Parent Coach for ideas to guide your child through day-to-day issues if ADHD, learning differences, social skill issues, and anxiety.

$15.00
XLY 1250

Stretch Your Thinking: Games, Puzzles and Brain Teasers, Gr. 6-7

Come join the fun of learning by playing! Students will work together to strengthen those critical thinking skills through classic mind-challenging games, puzzles and brainteasers.

$65.00
XLY 1253

Art Throughout Time, Gr. 4-5

Move through time to learn about civilizations and artists in different times. At each stop on the art-venture, you create a work of art using the same styles to create original art work in clay, paint, sculpture and more.

$115.00
XLY 1254

Museum of Me

Design a museum all about you? Learn more about your personality and learning style. Choose the architectural elements, design the rooms and choose the items for display that help tell the viewer about your interests, strengths and dreams.

$115.00
XLY 1256

Beginning Chinese, Grades 6-8

This course will focus on the fundamental study of Mandarin Chinese pronunciations, grammars and sentence patterns. Students will develop vocabularies, learn basic writings and communicate in functional conversations in a fun and challenging environment. (A book will need to be purchased for this class.) Eligibility: Students must have an IEP (Individualized Education Plan) or have tested in the 98th percentile on an IQ test.

$150.00
XLY 1268

Creative Problem Solving

Have fun while being challenged to creatively solve problems. You will work on teams to push the limits of your imagination. There will be skits, structures and much more.

$65.00
XLY 1270

Debate

Learn the skills of public speaking, research and "thinking on your feet" as you explore topics of interest. You will learn debate techniques and fundamentals. Class will conclude with participation in an actual debate.

$65.00
XLY 1271

Debate, Gr 6-7

Learn the skills of public speaking, research and debate as you explore current

topics of interest. We will learn the fundamentals of debate technique. Each student will participate in a debate at the conclusion of the class.

$115.00

XLY 1272

It's a Doggy Dog World, Gr. 4-5

Calling all canine fans! Come enroll in this tail wagging course to learn about man's best friend. Students will discover popular AKC breeds, doggy care, ownership responsibility and dog training. Special guest dogs and speakers will highlight the course.

$65.00

XLY 1273

Pre-Algebra, Gr. 6-7

This course has been designed for the review and advancement of basic pre-algebra concepts. Topics include integers, simplifying expressions, evaluating and solving equations.

$115.00

XLY 1274

Drawing, Gr. 2-3

Join us to sharpen your drawing skills. You will create contour and gesture drawings while learning about space and shape. We will also dive into perspective and observational skills needed to be an artist.

$115.00

XLY 1276

Learning Through Literature, Gr. K-1

Use math and science skills to explore favorite children's literature. Each day, a different book will be used as a focus for discoveries in problem solving and language expression through games and creative activities.

$75.00

XLY 1277

Bookin' & Cookin', Gr 2-3

Do you like trying new recipes? Come explore some great books and fun recipes to go along with them. We're not just talking food, either. We'll do all sorts of cooking in this class! Note: Children will not operate any equipment.

$65.00

XLY 1278

Creativity, Gr. 2-3

Do you like to think up wild and crazy ideas? Do you like to make things? Do you like to read imaginative books? Then this class is for you! Let your creative juices flow as we learn about creativity. We'll share some great books and have a blast creating something new each day.

$65.00

XLY 1279

Inventions, Gr. 2-3

Do you look at a cardboard box and see a space ship? Do you look at old newspaper and see a hat or a sailboat? Could you design a game using only five recycled materials? Ideas will flow as we explore the topic of inventions. Join us

as we study famous inventors and explore the world of inventions.

$65.00
XLY 1280

Fairy Tale Fun, Gr. 2-3

Sleeping Beauty, the Three Little Pigs and more! Join us as we explore the fairy tale characters and their stories. We'll make masks, put on plays and create a fairy tale city.

$65.00
XLY 1281

Smileyburg-The Town You Create, Gr. 2-3

Come create a town that only you can call home. Make townspeople and give them names and jobs, decide what they are going to look like, buy materials and build your own home and a place to work. Design the streets of your town...where will houses and businesses go, what about that water park you wanted to build? Come do all of this in the miniature town of Smileyburg!

$65.00
XLY 1282

Creative Capers, Gr. 4-5

Let your creative juices flow as we learn about creativity. Do you like to think up wild and crazy ideas? Do you like to make things? Then this class is for you! We'll share some great books and have a blast creating something new each day.

$65.00
XLY 1283

Invention Mania, Gr. 4-5

Ideas will flow as we explore the topic of inventions. Who are some famous inventors and their inventions? Could you design a game using only five recycled materials? Join us as we explore the world of inventions.

$65.00
XLY 1284

Fairy Tale Fun, Gr. 4-5

Sleeping Beauty, the Three Little Pigs and more! Join us as we explore the fairy tale characters and their stories. We'll make masks, put on plays and create a fairy tale city.

$65.00
XLY 1285

Petmania-Exploring Pet Ownership, Gr. 4-5

Have you always wanted to own a pet? Explore the responsibilities and options of pet ownership. Complete activities on the costs of owning a pet and picking the right pet for you.

$65.00
XLY 1286

Computer Projects, Gr. 6-7

Create magnets, decals, posters and more on the computer. You will use your creative side to create these fun projects.

$65.00

XLY 1287

World War II, Gr. 4-5

World War II shaped the world we know today. Learn about the Axis, Allies, Hitler, Nazis, the Holocaust and Heroes of the war to end all wars. Do research, creative writing, create a board game, and read/hear real stories by real veterans.

$115.00

XLY 1288

Science in a Box! Gr 2-3

This class offers students the amazing opportunity to implement hands-on activities that meet state standards. It allows students to explore the three main areas of science from a common sense, everyday perspective.

$115.00

XLY 1289

Chinese, Intensive Beginning, Gr. 6-7

An intensive program of Mandarin Chinese in a semantic and fun environment. The course covers material of Beginning Chinese I and II, and focuses on proficiency and speaking/listening drills. Reading and writing are taught in related topics.

$115.00

XLY 1290

Fun With Thinking, Gr 2-3

Students will be brainstorming new ways to solve fun problems. Challenges will include: creating a picture using only torn paper, designing a lunch box of the future, and charades. Students will also increase their spontaneous thinking by learning to think out of the box.

$65.00

XLY 1291

ACT/SAT Advanced Vocabulary & Essay Writing, Gr. 8-9

This class is for students who have previously taken this course and want a review and new word studies. Add advanced words to your upper-level vocabulary through activities such as puzzles, games, worksheets and interactive websites. Advanced sentence and essay writing will prepare students for college entrance tests.

$115.00

XLY 1292

Language Game Show! Gr 2-3/CRN 50405 - GR 4-5/CRN 50408

Have you ever dreamed of being on Jeopardy or Wheel of Fortune? Well, here's your chance! From grammar to comprehension, this fun-filled game reinforces essential language skills in an exciting quiz show format! Come join the fun!

$65.00

XLY 1293

Explore the Caldecott Medal!, Gr. 2-3

The Caldecott-an award given to children's books for illustration! Learn about the different Caldecott Award winners, the illustrators, the illustration techniques and test out some illustrating. Your class will take part in JCCC Adventurers Mock Caldecott Award.

$65.00

XLY 1294

Books! Books! Books! Gr 4-5

There's more to your local library than fiction! Discover a treasure by exploring a variety of literature available in libraries! You'll learn about picture books connecting to history, explore poetry, folk tales, fairy tales, biographies, and informational text. Bring your Johnson County Public Library Summer Reading Log - you will have some terrific titles to add to your reading/listening list.

$65.00

XLY 1401

Spectacular Science, Gr. 2-3

Be prepared to get down and dirty with Spectacular Science! This class will be full of hands-on science experiments that will spark your curiosity. Bring your love of science and be prepared to be dazzled!

$65.00

XLY 1402

Fun Kitchen Math, Gr. 2-3

Learn basic math concepts through measuring and dividing real foods. Math class disguised as snacks are prepared for the students. Students will be introduced to Gallon Man to learn equivalents. Basic Kitchen Safety will also be covered. Children will not operate appliances.

$65.00

XLY 1403

Rockin' Rockets, Gr. 4-5

Can you make a rocket that shoots high into the sky? What about one that can twist in the air, or maybe turn a flip. Come create, modify, and fly your own rocket. Get ready to blast off!!

$65.00

XLY 1404

Beach Blast! CRN 50410, Gr. 2-3; CRN 50411, Gr. 4-5

Learning is a blast when you combine big-time summer fun and great beach crafts. Make your summer feel like you have been seaside for four days with literature and hands-on activities that will be a "shore" imaginary trip to the beach.

$65.00

XLY 1405

Super Science, Gr. 2-3

Super Science is a hands-on experience covering the Kansas State Science standards. Come spend a week as a scientist learning and conducting science investigations.

$65.00

XLY 1406

Spontaneous Thinking, Gr. 6-7

Looking for a challenge? You will be given challenges to create a non-verbal form of communication which will guide a blindfolded teammate to move through an unknown maze. Creative, spontaneous students needed for this fun session.

$65.00

XLY 1407

Picture Book Biographies, Gr. 2-3

Looking for some great books? Explore this exciting genre that will introduce you to interesting and unique individuals. Connect to picture book biographies through read alouds, writing, special book projects and illustration techniques.

$65.00

XLY 1408

Dinosaurs!, Gr. 2-3

Calling all Paleontologists! Come join the exciting study of dinosaurs through fun activities. Students will learn and analyze the footprints of dinosaurs. Activities will include creating habitats for dinosaurs and creating your own original dinosaur.

$65.00

XLY 1409

Whodunit, Gr. 4-5

Mystery lovers will love this crime solving class! Sleuths and problem solvers will learn many different techniques to solving mysteries. Each day the crime solvers will be faced with a new and exciting crime.

$65.00

XLY 1410

Edible Delicious Science, Gr. 2-3

Do you enjoy eating? Do you like science? Then this course is for you. Come explore the ocean, cells, rocks, soil, and graphs while experimenting with edible food. Participants will taste goldfish crackers, rice krispy ocean bottoms, pizza cells, skittles, M&M's and chocolate Oreo cookie pudding.

$65.00

XLY 1411

Science Challenge, Gr. 4-5

Who was Newton and what are his laws? Apply your knowledge of science as we build and test a variety of vehicles and inventions in this hands-on class.

$65.00

XLY 1412

To Infinity and Beyond-CRN 50385, Gr. 4-5; CRN 50403, Gr. 2-3

Be creative and have fun as you build, fly, and design your very own airplanes. Pilots of all kind will have so much fun learning about what makes things fly.

$65.00

XLY 1414

Fun Kitchen Math, Gr. 4-5

Learn grade level basic math concepts through measuring and dividing real foods. Math class disguised as snacks are prepared for the students. Students will be introduced to Gallon Man to learn equivalents. Basic kitchen safety will also be covered. Children will not operate appliances.

$65.00

XLY 1415

Fun Kitchen Math, Gr. 6-7

Students will practice everyday math skills while learning to prepare easy snacks using griddles, toaster ovens, and blenders. Students will have hands-on snack preparation opportunity while working on grade level math problems and learning basic measuring skills as well as kitchen safety skills.

$65.00

XLY 1416

Investigation: Games & Toys, Gr. 4-5

What is your favorite board, card, or video game? What puzzles and toys do you enjoy? In the computer lab, we will investigate the who, when, and where these games, puzzles and toys were developed, plus analyze and rate them. Be prepared to share your favorites and learn about new ones.

$115.00

XLY 1417

CSI Junior-Forensic Science Investigation, Gr. 4-5

This course is a multi-disciplinary, investigative approach to learning about forensic science. Our class will engage in activities designed to learn about how forensic science is used to solve mysteries, and how we continue to advance technologically through this science.

$115.00

XLY 1418

Math-E-Art, Gr. 4-5

Why math and art? Math is everywhere, even in art. What better way for your child to learn and practice math concepts than through exciting art experiences in which students create colorful and decorative projects.

$115.00

XLY 1419

Learning with Puppets, Gr. 2-3

In this class we will spend time creating and designing puppets to integrate the arts and the love of it as we express the joys of life in our creativity.

$59.00

XLY 1420

Color Me Healthy, Gr. 2-3

Introduction of nutrition in the world of kids using colors as we learn more about foods in the two primary food groups: fruits and vegetables. This class will include emphasis on the importance of being healthy as they learn to enjoy and prepare some of these foods.

$59.00

XLY 1421

Reading with Friends and Characters, Gr. 2-3

The choice of good stories and stuffed animals will be shared. Favorite book characters will be exchanged and correlated with stories. We will do puppet shows, write poems and express the arts in different ways.

$59.00

XLY 1422

Numbers in Our World and How We Use Them, Gr. 2-3

We will practice our Mad Minute facts in all four concepts as we drill and practice

daily. There will be fun games designed and used to express math concepts in our daily lives. Hands-on games and manipulatives will be a part of our daily schedule. Volunteers may come to show us how we use math daily.

$59.00

XLY 1423

CSI-Kansas, Gr. 6-7

You will act as real-life scientists, learning to observe, think critically and conduct lab tests to sleuth your way through each mystery.

$59.00

XLY 1424

Math Matters, Gr. 2-3

Join our investigation of math through hands-on experiences, games, and inquiries. You will enter the math world to explore numbers through problem solving in real-life situations. We will be using technology, the internet, and manipulatives.

$59.00

XLY 1425

Games & Cooking, Gr. 4-5

Explore a variety of mind enhancing games such as Apples to Apples and Squint while cooking and enjoying a daily snack. Create your own game as a culminating project.

$59.00

XLY 1426

Edible Science-CRN 50359, Gr. 4-5; CRN 50378, Gr. 6-7

Do you love Science? Do you love food? If so, this is the class for you! Students will conduct science activities with food. Some experiments will be edible, while other activities will use food to demonstrate a variety of science concepts. (All activities will be peanut free.)

$59.00

XLY 1427

Are You All Write? Writers Workshop, Gr. 4-5

Creative writers of all kind will love the opportunity to learn about different writing styles. Each day we will focus on a different genre of writing. Literature will be used to enrich our writing.

$59.00

XLY 1428

Wanted! Secret Agents, Gr. 5-6

Have you ever wanted to become a special agent searching for clues and solving mysteries? Your mission, should you choose to accept it, is to come and train with our Mad Science Secret Agent. Learn how to create and decode top-secret messages. Master forensic science through fingerprint analysis, chromatography, dental impressions, and more!

$105.00

XLY 1429

Crazy Chemistry, Gr. 5-6

Journey into our Mad Laboratory to create reactions that are sure to boggle your

mind as well as your eyes? Then tackle chemistry and physics as well. Analyze Gatorade to see if it's all it's cracked up to be. Discover the physics of balls, explore the center of gravity and more!

$105.00

XLY 1430

Creative Engineers, Gr. 5-6

After this awesome experience, you'll be prepared to build the next world wonder! Investigate simple machines and learn to use them to conquer complicated tasks. Use your engineering skills to build a giant geodesic dome to hangout in and to assemble bridges with your team of Engineers.

$105.00

XLY 1431

Rocket Blast Off!, Gr. 5-6

In this new, expanded version of this popular class, you will discover the principles of flight, the parts of a rocket, rocket design, the stages of rocket flight and the history of space travel. You will build your own model rocket to take home and participate in multiple rocket launches to test rockets of different sizes and designs. Design, build and launch your own water-powered rocket.

$105.00

XLY 1432

To Bee or Not to Bee, Gr. 6-7

Students will look at flora from a new perspective as we investigate the intricate details of a variety of flowers and plants. This will be our research and inspiration as we create Georgia O'Keefe inspired chalk drawings of flowers. We will explore the world of color and learn how to create and use a color wheel to create visually interesting art work.

$65.00

XLY 1433

Me, Myself & Eye, Gr. 6-7

Students will discover the importance of drawing what they see as they study their faces and break this complicated subject into basic lines and shapes. This class will be focused on creating a variety of self portraits using a variety of media. We will discuss and use a range of the elements of art and principles of design.

$65.00

XLY 1444

Polyhedraville, Gr. 2-3

Be an architect and design a city of the future! Students construct 2D shapes while learning about characterists of prisms, polygons, and polyhedra. With a team, they will determine surface area of futuristic buildings within an established budget. Polyhedraville is exciting and gives students a chance to be artistic, creative and most importantly, extends their understanding of math concepts as they begin applying math in a real world context.

$115.00

XLY 1445

Secret Formula Scientist, Gr. 2-3

If you are a young scientist and want to be challenged, join us as we jump into chemistry with Secret Formulas. Develop your own glue, cola, and ice cream by observing and testing ingredients, and creating/recording formulas for each product! In the process, you will learn important science skills and concepts as

you experience the scientific method firsthand. This program was developed by the Great Explorations in Math and Science (GEMS) program at the Lawrence Hall of Science, and has been tested in classrooms nationwide.

$115.00

XLY 1446

Fairy Tale Land, Gr. K-1

Welcome to the land of fairy tales where dreams may come true and people live happily ever after! Join us as we work to create a fairy tale land through reading, math, science, and creative activities. Each day we will discuss different fairy tales and story elements as we enter the world of the enchanted!

$75.00

XLY 1447

Puzzles, Puzzles, Puzzles, Gr. K-1

A fun hands-on exploration of a variety of Primary creative problem solving activities. We will investigate Tangrams, Pentominoes, Sets, Clip Clues, Yarn Puzzles, Analogy patterns and more.

$75.00

XLY 1448

On the Loose with Dr. Seuss, Gr. K-1

Dr. Seuss has gotten loose and has left several of his stories for us to read throughout the week. Join us for math, reading, and science investigations related to Dr. Seuss' most loved stories. Throughout the week we will engage in cooperative learning, cooking, problem solving, creating, and much, much more.

$75.00

XLY 2003

Writing Wrinkles, Gr. 4-5

If you really like to write, join us and try a new "wrinkle" of written expression. We will sample different types of writing experiences...poetry, myths, fables, fairy tales, summaries, scripts, etc. You'll participate in group activities and produce an individual project.

$115.00

XLY 2005

W-H-A-M (Writing in Harmony, Art & Music), Gr. 2-3

Do you like to make up stories, draw, and listen to music? We will focus activities around a theme for each day...Animals, Hats, Fairy Tales and others. Come and join us as we read and write, draw and color, listen and make music.

$115.00

XLY 2008

Game Factory

"Play Fair!" But are games always fair? In this class, you, will use all of your math skills to study probability and determine "fairness" in games. Working in pairs, you will explore whether games are fair, modify them when needed, and design your own fair game to share with the class. All this, while reinforcing your skills in addition, subtraction, multiplication, division, and fractions.

$105.00

XLY 2023

Creative Problem Solving

Have fun thinking outside the box! We will learn brainstorming techniques, solve problems and be challenged to think spontaneously. We will perform skits, build structures and use your sense of humor.

$115.00

XLY 2029

Music Technology & You, Gr. 8-9

Do you love music...and computers, too? Spend two weeks at a MIDI computerized work station learning the hardware and software currently used to produce music. You'll learn to operate a workstation capable of digitally recording 32 tracks of music utilizing over 1500 present instruments via the synthesizer. Course conclusion will feature a concert of student compositions.

$115.00

XLY 2041

Explore the World of Art, Gr 2-3

Come join us as we explore the world of art. Journey around the world and create art inspired by many cultures from Asia, Africa, Australia and the Americas.

$115.00

XLY 2050

Mock Trial Experience-CRN 50322 & CRN 50347, Gr. 6-7; CRN 50336, Gr. 8-9

Be part of a courtroom drama. Learn the criminal justice system's procedures, processes, and roles so you can actively participate in a mock trial, playing judge, lawyer or witness. Speakers from related professions and a field trip, too!

$115.00

XLY 2072

E.O.A.S. Earth, Oceans, Atmosphere, Space, Gr. 6-7

Students will explore and learn about astronomy, weather, tornadoes, caves, volcanoes, the oceans and other subjects while using the internet and other resources. Students will apply their knowledge while working with activities/ projects, and creating blogs, websites and presentations.

$115.00

XLY 2083

Exploring Veterinary Medicine and Other Animal Careers, Gr. 6-7

Do you love animals? Have you thought about working with animals as a career?In this seminar overview course, explore some of the exciting options available for a career working with animals. Visits by animals will be included as often as possible. Field trips may include contacts with animals. Guest speakers will be scheduled when possible as we "go to the dogs."

$115.00

XLY 2084

To Be or Not To Be

Join us and learn some techniques that could launch you on a stage career. Through improvisation, charades, scene work and acting games you'll become comfortable stepping into fictional roles. You'll also learn the basics of stage make-up application...this could be a real plus next Halloween.

$115.00

XLY 2100

Space Command - Space Travel, Gr 4-5

Take a trip into outer space. Learn about the solar system and the vehicles that are used to explore it. Design a lunar lander and a moon colony as we travel to the moon and beyond.

$65.00

XLY 2109

Maz-zles, Gr. 6-7

Do you enjoy solving unusual mazes and puzzles? You will design original mazes/puzzles plus create a board game based on a topic of special interest. Join us as we connect logic and critical thinking skills to creativity.

$115.00

XLY 2119

Creative Problem Solving in Mathematics, Gr 6-7

Students will learn creative problem techniques as applied to mathematics. These techniques will be applied in a variety of individual and group activities. Students will have a choice of individual logical thought problems and will team with others in the class in a competitive setting.

$115.00

XLY 2141

Exploring Veterinary Medicine II

Continuing your exploration into the world of veterinarians and other people who work with animals. Explore large animal medicine and other career opportun- ities. Field trips and guest speakers will be included. Prerequisite: Exploring Vet Medicine I.

$55.00

XLY 2149

Egyptology, Gr. 2-3

Explore the world of Egypt. Discover the secrets of mummification and take an archeological expedition into a pyramid. Learn to add using Egyptian symbols for numbers and send a letter to a friend inviting them to share an Egyptian meal. This wonderful hands-on history/archeology class will include some time on computers. Students should bring an empty checkbook box to class.

$115.00

XLY 2150

After Class Activities

The Carlsen Center After Class Activities is a college-supervised activity for students enrolled only in the following programs: TALENTS!, JCCC Adventurers, Crazy About Learning, and Mad Science.

$25.00

XLY 2153

Math Safari, Gr. K-1

Come practice your math skills while counting crocodiles and sorting bears. Every day will be an exciting math adventure when we explore math and reading with fun activities.

$75.00

XLY 2154

Sensational Science

Students will use their five senses to explore daily science activities. Students will gain insight through hands on activities such as mystery boxes, observations, literature and games.

$75.00

XLY 2155

Splish, Splash

Explore the water world with us! Come get wet as we get involved in water related activities. We will explore the ocean and ocean animals, learn about our earth's water cycle, experiment with soap and bubbles, and construct and race boats. Children will be involved in a variety of activities that build reading, science and research skills.

$75.00

XLY 2156

Collage Art

In this class you will express ideas in the full range of this creative medium. We will focus on masters of art that created collage along with some new ideas in collage.

$105.00

XLY 2157

It's All Greek To Me

Why do flowers bloom in spring? What was Hercules' sixth labor? Find out the answers to these questions and more as you travel through the world of Greek Mythology. Use your creativity to create your own monster or devise a plan to kill Medusa while on your very own odyssey.

$105.00

XLY 2158

Choc-a-lot, Gr. 4-5

Using this favorite sweet as a springboard for a variety of activities, students will study the history of chocolate, design original puzzles, stories, games, and make chocolate candy. Expect chocolate surprises!

$115.00

XLY 2159

Amazing Planet, Gr 4-5

Join us as we explore the many wonders of our amazing planet. You'll take a journey on the rock cycle, experience cupcake geology, research the biodiversity and the need for conservation while taking part in games, creative writing, craft activities and tasty snacks.

$115.00

XLY 2160

Exploring Architecture, Gr. 4-5

Come and explore the world of architecture and construction! You will study architectural elements and styles, learn how structures like domes, bridges and skyscrapers are built, then design and construct your own original building!

$115.00

XLY 2162

ACT/SAT Vocabulary & Essay Writing-CRN 50321, Gr. 6-7; CRN 50335, Gr. 8-9

This class is for first time attendees of this session. Add words to your upper level vocabulary through activities such as puzzles, games, worksheets, and interactive websites. Sentence and essay writing will prepare students for college entrance tests. Course culmination will be a review of techniques learned when students create group games.

$115.00

XLY 2165

Algebra Review

This course has been designed for the review and advancement of basic algebra concepts. Topics include simplifying expressions, evaluating and solving equations and inequalities, and graphing linear equations.

$115.00

XLY 2167

Be An Inventor

Come and be an inventor! Make a catapult or a landing pad for an egg. Use your mind and create wonderful "things" out of ordinary stuff!

$115.00

XLY 2170

Book-in-the-Box, Gr 4-5

What is your favorite fiction book? Bring it and a shoebox to class. You will have the fun of creating word puzzles, stories, mazes, activities and games...and they will all fit inside the box!

$115.00

XLY 2171

Picasso and Matisse, Gr 2-3

Do you love creating unique pieces of art? Join us as we compare and contrast the unique style of two of the world's greatest artists, Pablo Picasso and Henri Matisse. As we find similarities and differences we will create art of our own inspired by the rival artists.

$115.00

XLY 2172

Tease Your Brain!, Gr. 4-5

Twist, twist and tease your problem-solving skills as you work challenging brainteasers. We'll include mathematical, spatial and language puzzles for individual, team and group challenges. Also, try your skills at creating your own puzzles in this fun, interactive class.

$115.00

XLY 2173

Authors Wanted, Gr. 4-5

Create an impressive, hardback book with your original text and illustrations. After you've selected or written a favorite story and completed accompanying illustrations or graphics, you'll learn step-by-step how to create a professional-looking book. Join other junior authors for an unforgettable experience!

$115.00

XLY 2176

Zooland-Design a Zoo

Apply your creative talents as you design your own zoo. Develop an understanding of wild animals and their needs. Choose the most interesting animals as you develop a map of the perfect zoo.

$65.00

XLY 2179

Zooland-World of Animals

Explore the wonderful world of wild animals and zoos. Learn about the habitats and characteristics of your favorite animals as we explore zoos. Create a game about your animal and see if you can follow the clues for the mystery animal of the day.

$65.00

XLY 2180

Zooland-World of Animals

Explore the wonderful world of wild animals and zoos. Learn about the habitats and characteristics of your favorite animals as we explore zoos. Create a game about your animal and see if you can follow the clues for the mystery animal of the day.

$65.00

XLY 2181

Adventures in Nature

Learn what it would be like to be a tree, animal, stream, or maybe a rock; be a part of a fossil dig as we uncover fossils from when Kansas was an inland sea. Adventure into the environment that surrounds you.

$65.00

XLY 2183

Rainforest Rendezvous, Gr 2-3

Come enjoy the magical world of the rainforest. Learn about lemurs, monkeys, birds, and all the animals that make up the rainforest. Take an interactive trip into a rainforest to see all secrets that it hides. Learn to make your favorite animals and plants as you create a rainforest that will fill the room!

$65.00

XLY 2184

Space Command-Exploring Planet X, Gr 4-5

A new planet has been discovered. Be creative as you design your own alien civilization and explore a brand new planet. Analyze samples of the planet's surface. Map the planet's location as you announce to the world your newest discovery.

$65.00

XLY 2185

Author Adventures and Activities, Gr. K-1

Children will explore the world of picture book authors and illustrators through stories and hands-on activities correlated to books by Beatrix Potter, David Shannon, Tomie DePaola and others.

$75.00

XLY 2186

Bakin' Up Good English Stuff!, Gr. 2-3

Students will prepare summer fun recipes and become tasting critics. These tasting critics will share their personal opinion on great recipes by using good verbal structure and proper standard writing skills in paragraph form.

$65.00

XLY 2188

Exploring Careers: Thinking Beyond High School!, Gr. 6-7

This class will allow students to explore the world of careers! Discover a variety of careers and what careers interest you. Students will learn more about themselves and apply what they learn to possible future career options. This course will include use of a computer, guest speakers, and energizing group activities.

$65.00

XLY 2189

From Atoms to Volcanoes, Gr. 6-7

Explore how you interact with the world from atoms to volcanoes. We will use everyday items as manipulatives for this exciting hands-on program.

$65.00

XLY 2190

Weathering the Weather, Gr. 4-5

Take a look at the world of weather and the recent changes we've seen this year. Students will study the different types of weather from tsunamis to tornadoes through the study of plate tectonics and environment.

$65.00

XLY 2191

Exploring the Rain Forest, Gr. 2-3

Join us in this exciting hands-on class where we will do experiments, explore the habitats, taste food and answer the question-Why Should We Save the Rain Forest?

$115.00

XLY 2192

After Class Activities

The Carlsen Center After Class Activities is a college-supervised activity for students enrolled in Summer Academy.

$29.00

XLY 3001

Summer Academy, Gr 2-7

Summer Academy offers a full-day program where students experience fun and learning in team building activities, writing, art, and other interactive, hands-on classes. A supervised hot lunch is included in the Academy fee.

$170.00

XLY 3002

Summer Academy, Gr 2-7

Summer Academy offers a full-day program where students experience fun and learning in team building activities, writing, art, and other interactive, hands-on classes. A supervised hot lunch is included in the Academy fee.

$170.00

XLY 3003

Summer Academy Jump Start, Gr. K-1

Program for Kindergarten through First Grade students! Choose a morning session of fun-filled reading and math activities.

$69.00

XLY 4000

Lets Get Digital: Scrapbooking Grades 2-3

Have your picture taken and develop a virtual scrap book! Learn how to make the best pages for your favorite memories.

$65.00

XLY 4001

 Art: Made out of What? Grades 2-3

In art the possibilities are endless. In this class you never know what will be chosen to work with. We are guaranteed to get down and dirty with fun fun and more fun.

$65.00

XLY 4002

Jazz it up- Read, Grades 2-3

Jazz it up- Read, Join this class for a jazzy good time in the wonderful world of reading. We will swing through a variety of genres as we read the day away.

$65.00

XLY 4003

Reading Adventures Grades 2-3

Read and discuss several short stories that take you on amazing adventures. Increase your understanding of what you read and increase your vocabulary.

$65.00

XLY 4004

Fun with Reading Grades 2-3

Increase your vocabulary skills while reading and listening to award winning books for children. Come join the fun and get ready to read!

$65.00

XLY 4005

Hands on Science Grades 2-3

Science is everywhere! Making bubbles, modeling clay and more as you learn and design fun creations. Use color in coordinating with art and more about the world around you.

$65.00

XLY 4006

Science Discoveries Grades 2-3

Do you wonder how things work and why things are as they are? Come learn more about the world around you and all the little things in between.

$65.00

XLY 4007

Science Quest, Grades 2-3

Join us in this hands-on class as we mix and make scientific recipes to help us enjoy and experience nature as we learn.

$65.00

XLY 4020

Hands on Art Grades 4-5

Love Art? Come join the fun with paint, paste and much more to create your own fantastic project. Don't wear your good clothes.

$65.00

XLY 4021

Let's Get Digital: Scrapbooking Grades 4-5

In this computer scrap booking class, have your pictures taken and create a virtual scrap book to keep for years to come. Take home a hard copy at the end of the day.

$65.00

XLY 4022

Art: Made out of what? Grades 4-5

The focus will be on a fun learning experience. Try new materials and techniques as your imagination takes off! Don't wear your good clothes you may get dirty or bring a smock.

$65.00

XLY 4023

Chinese Cooking and Culture, Grades 4-5

Learn about Chinese food and games. There will be a variety of activities, such as paper-making, Chinese yo-yo, calligraphy, and making simple Chinese foods.

$65.00

XLY 4024

Hands on Science Grades 4-5

Get involved in this activity based science class. Through a unique combination of activities, games and demonstrations, learn how things work.

$65.00

XLY 4025

Chinese Language Learning Grades 4-5

Students will learn a few simple Chinese conversations in the morning and perform a short "movie" or photo clips in hte afternoon. Then we'll make a Chinese learning CD at the end of the day.

$65.00

XLY 4026

Finance for Kids, grades 4-5

What is a bull market? Can you win at the real game of life? Learn about the stock market and investments and watch your portfolio grow!

$65.00

XLY 4027

Math Quest, Grades 4-5

Get involved in learning strategies for problem solving. Games, activities and demonstrations will be used to prepare you for success in future math courses.

$65.00

XLY 4040

Let's Get Digital: Scrapbooking Grades 6-7

Time to get creative with your digital photos! Develop a virtual scrap book online. You will be able to view your creation for years to come.

$65.00

XLY 4041

Hands on Art, Grades 6-7

A wide variety of projects to choose from and all completed in one day! Explore colors, patterns and paints. Come ready to get inspired and maybe a little messy too.

$65.00

XLY 4042

Art: Made out of What? Grades 6-7

Love art but don't know where to start? Create your own masterpiece using a variety of mediums. Don't wear your good clothes, we may get dirty!

$65.00

XLY 4043

Chinese Cooking and Culture, Grades 6-7

Have fun with your taste buds and learn more about Chinese culture. Learn to make paper, calligraphy and Chinese yo-yo.

$65.00

XLY 4044

Chinese Language Learning, Grades 6-7

Be a foreign movie star! In the morning learn a few Chinese phrases and perform a short movie or phot clips in the afternoon. Take home your own CD.

$65.00

XLY 4045

Stock Market Simulation, Grades 6-7

Buy low and sell high! There is more to the stock market than this. Have fun making thousands in this stock market simulation.

$65.00

XLY 4046

Young Entrepreneurs, Grades 6-7

Do you aspire to be your own boss one day? Learn the basics of starting your

own business or creating a new product.

$65.00

XLY 4047

Money Matters, Grades 6-7

Got allowance? What should you do with it to prepare for your future? Learn the basics of money management and savings.

$65.00

XLY 4999

Friday After Class Activities

Game time is for students enrolled in the Friday Discoveries program. Bring your favorite board game as we wind down the day.   We will have an awesome time playing games from around the world! You may bring a snack if you like.

$10.00

XLY 6000

JCCC Youth Conference

Youth Conference Sept 11-12, 2008

$249.00

Student Handbook

Student Handbook

Faculty and Staff

Ali Abderrezak
Asst. Prof. Economics
M.A.,Ph.D., Kansas State University
BA - University of Constantine, Alg.

Larry Able
Prog Dir PS Trng/Audio Rec Eng
B.A., Univ of Texas/Arlington
M.S., Baker University

Margaret Ackelson
Professor Learning Strat.
B.A., MidAmerica Nazarene Univ
M.A., Univ of Missouri - Kansas City

Jacob Akehurst
Mgr. Student Act & Lead Devel
B.S., Northwest Missouri State Univ
M.A., Emporia State University

Mazen Akkam
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B.S.,M.S., Kansas State University

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M.B.A., Baker University

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Lowry Anderson Jr
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M.S., University of Kansas

Susan Annen
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B.S., University of Wisconsin - Stout

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A.A., Lee College
B.A., Angelo State University
M.A., Arizona State Univ
Ph.D., University of Kansas

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M.A., University of Colorado - Boulder
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M.S., Emporia State University
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B.S., Central Missouri State Univ

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Gerald Baird
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Professor Mathematics
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M.A., Fort Hays State University

Rhonda Barlow
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B.S.,M.S., Univ of Central Oklahoma

John Barnes
Professor Metal Fab./Welding
B.S., Metropolitan State College

Charles Barnett
Sr. Support Analyst
B.A.,M.B.A., MidAmerica Nazarene Univ

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A.A., Johnson County Comm College
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Meghan Beach
Asst. Prof. Cosmetology

Stuart Beals
Professor Interactive Media
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Robert Beasley

TV Producer/Director
B.A., Oklahoma State University - Stillwater

Lynne Beatty
Professor Science
B.S., Murray State University
M.S., Southern Illinois University - Carbondale

Joni Becker
Prog Dir, Oper & Fin Mgmt
A.A., Johnson County Comm College
B.G.S., University of Kansas

Robert Becker
Systems Programmer/Analyst
B.S., Rockhurst University

Kenneth Behrmann
Box Office Manager
B.A.,M.A., Univ of Missouri - Kansas City

Peter Belk
Prog. Dir. Admissions
B.B.A., Missouri Southern State Univ
M.A., Univ of Missouri - Kansas City

William Benjamin
Professor/CPF Fire Science
B.S.,M.S., Central Missouri State Univ

James Bennett
Professor HVAC
B.S., University of Kansas

Sean Bergman
Asst. Technical Director
B.A., University of Kansas

Roslyn Bethke
Professor Reading/Acad Ach Ctr
B.A., Fort Hays State University
M.S., University of Kansas

Mary Jean Billingsley
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