Catalog of Courses Spring 2007

JCCC Statement of General Education

Graduation Requirements

Associate's Degrees

Transfer Guides

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

Credit Career and Certificate Programs

JCCC's credit career and certificate programs, ranging from automotive technology to veterinary technology. JCCC's credit career and certificate programs give you the opportunity to study a specific career and enter the job market directly.

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: Dental Hygiene - American Dental Hygienists Association and American Dental Association; Hospitality Food and Beverage and Chef Apprentice - American Culinary Federation; Fire Service Administration - International Fire Service Accreditation Congress; 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; Basic Police Academy - University of Kansas; and Respiratory Care - Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon recommendation of the Committee on Accreditation for Respiratory Care; Accounting, Business Office Technology, Business Entrepreneurship, Business Administration and Marketing and Management - Association of Collegiate Business Schools and Programs.

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

The administration further extends its commitment to fulfilling and implementing the federal, state and local laws and regulations as specified in Title IX and Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. For assistance in these areas, contact the office of the dean of Student Services, Johnson County Community College, 12345 College Blvd., Overland Park, KS 66210-1299, 913-469-8500, or director, Office of Civil Rights, HHS, Washington, D.C. 20201.

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 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

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.

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/toccareerprograms/careerprograms to view the majors of study available at JCCC.)

Associate of General Studies

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

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.

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

B. Oral Communication - 3 hours

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SPD120Interpersonal Communication3SPD121Public Speaking3SPD125Personal Communication3SPD180Intercultural Communication3
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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*
ENGL	227	Introduction to Poetry*
ENGL	230	Introduction to Fiction*
ENGL	231	American Prose*3
ENGL	235	Drama as Literature*3
ENGL	241	British Writers*3
ENGL	250	World Masterpieces*3
ENGL	254	Masterpieces of the Cinema*
ENGL	256	American Poetry*3
		Introduction to Theater
*Prerequisite/Corequisite required		

B. Foreign Language

FL	178	Intermediate	Russian I*3
FL	179	Intermediate	Russian II*3
FL	190	Intermediate	Japanese I*
FL	191	Intermediate	Japanese II*3
FL	192	Intermediate	Chinese I*
FL	193	Intermediate	Chinese II*3
FL	220	Intermediate	German I*3
FL	221	Intermediate	German II*3
FL	230	Intermediate	Spanish I*3
FL	231	Intermediate	Spanish II*3
FL	240	Intermediate	French I*
FL	241	Intermediate	French II*

C. History

125	Western Civilization: Readings and Discussion I3
126	Western Civilization: Readings and Discussion II3
128	Medieval History3
129	Early Modern Europe 1500-1789
130	European History Since 17893
135	Eastern Civilization
137	African American Studies3
140	U.S. History to 1877
	U.S. History Since 1877
151	World History I: Traditional World3
152	World History II: Modern World
160	Modern Russian History3
	Modern Latin America
	141 151 152

D. Humanities

ART	180	See ARTH 180 for Art History: Ancient to Renaissan3
ART	182	Art History: Renaissance to Modern
ART	184	Art History: Twentieth Century
HUM	122	Introduction to Humanities
HUM	145	Introduction to World Humanities I
HUM	146	Introduction to World Humanities II
HUM	155	Classical Mythology3
HUM		Civilization
MUS	121	Introduction to Music Listening
MUS	125	Introduction to Jazz Listening
MUS	126	Introduction to World Music
PHOT	140	History of Photography3
REL	120	Exploring World Religions
REL	125	Religions of the East
REL		Religions of the West3

E. Philosophy

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

Social Science/Economics - 6 hours

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

A. Anthropology

	Cultural Anthropology
ANTH 126	Physical Anthropology3
ANTH 130	World Cultures

B. Economics

		Economics
		I3
ECON 231	Economics	II

C. Political Science

POLS 124	American National Government	.3
POLS 126	State and Local Government	. 3
	Introduction to Comparative Government	
POLS 135	International Relations	. 3

D. Psychology

PSYC 121	Applied Psychology3
PSYC 130	Introduction to Psychology3

E. Sociology

SOC	122	Introduction to Sociology
SOC	125	Social Problems
SOC	131	Marriage and the Family3

Science and/or Mathematics - 9 hours

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

A. Life Science

BIOL BIOL		Principles of Biology	
BIOL	124	Oceanus: Essentials of Oceanography	
BIOL	125	General Botany	
BIOL	127	General Zoology5	
BIOL	130	Environmental Science	
BIOL	131	Environmental Science Lab*1	
BIOL	140	Human Anatomy4	
BIOL	144	Human Anatomy and Physiology5	
BIOL	150	Biology of Organisms*5	
BIOL	225	Human Physiology*4	
BIOL	230	Microbiology*	
BIOL	231	Microbiology Lab*2	
*Prerequisite/Corequisite required			

B. Physical Science

ASTR	120	Fundamentals of Astronomy3
ASTR	122	Astronomy
CHEM	120	Chemistry in Society4
CHEM	122	Principles of Chemistry5
CHEM	124	General Chemistry I Lecture*4
CHEM	125	General Chemistry I Lab*1
CHEM	131	General Chemistry II Lecture*4
CHEM	132	General Chemistry II Lab*1
CHEM	140	Principles of Organic & Biological Chemistry*5
GEOS	130	General Geology5
GEOS	140	Physical Geography3
GEOS	141	Physical Geography Lab*2
GEOS	145	World Regional Geography3
PHYS	130	General Physics I*5
PHYS	131	General Physics II*5
PHYS	220	Engineering Physics I*5
PHYS	221	Engineering Physics II*5
PSCI	120	Physical Science4
*Prer	requis	site/Corequisite required

C. Mathematics

MATH	165	Finite Mathematics*
		College Algebra*^3
MATH	172	Trigonometry**3

MATH		Precalculus*^5
MATH	175	Discrete Mathematics and its Applications*3
MATH	181	Statistics*
MATH	225	Mathematics as a Decision Making Tool*
MATH	231	Business and Applied Calculus I*
MATH	232	Business and Applied Calculus II*
MATH	241	Calculus I*
MATH	242	Calculus II*5
MATH	243	Calculus III*
MATH	244	Differential Equations*
*Prei	requis	ite/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 Course1
EMS 121	CPR I - Basic Life Support for Healthcare Provider1
HMEC 151	Nutrition and Meal Planning3
HPER 192	Wellness for Life1
HPER 200	First Aid and CPR2
	Personal Community Health3
HPER 205	Individual Lifetime Sports2
HPER 240	Lifetime Fitness I1
HPER 255	Introduction to Physical Education

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.

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

B. Communications Elective - 6 hours

(two of the following)

ENGL	122	Composition II*
ENGL	123	Technical Writing I*3
ENGL	140	Writing for Interactive Media*3
BUS	150	Business Communications*3
SPD	120	Interpersonal Communication3
SPD	121	Public Speaking3
SPD	125	Personal Communication3
SPD	180	Intercultural Communication3
*Pre	requi	site/Corequisite required

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
ENGL	227	Introduction to Poetry*
ENGL	230	Introduction to Fiction*
ENGL	231	American Prose*
ENGL	235	Drama as Literature*3
ENGL	241	British Writers*3
ENGL	250	World Masterpieces*
ENGL	254	Masterpieces of the Cinema*3
ENGL	256	American Poetry*
THEA	120	Introduction to Theater
*Prei	requis	site/Corequisite required

B. Foreign Language

FL	178	Intermediate	Russian I*3
FL	179	Intermediate	Russian II*3
FL	190	Intermediate	Japanese I*
FL	191	Intermediate	Japanese II*3
FL	192	Intermediate	Chinese I*
FL	193		Chinese II*
FL	220	Intermediate	German I*3
FL	221	Intermediate	German II*3
FL	230	Intermediate	Spanish I*3
FL	231	Intermediate	Spanish II*3
FL	240	Intermediate	French I*3
FL	241	Intermediate	French II*
*Prer	requis	ite/Corequisi	te required

C. History

HIST	125	Western Civilization: Readings and Discussion I3
HIST	126	Western Civilization: Readings and Discussion II3
HIST	128	Medieval History3
HIST	129	Early Modern Europe 1500-17893
HIST	130	European History Since 17893
HIST	135	Eastern Civilization3
HIST	137	African American Studies
HIST	140	U.S. History to 1877
HIST	141	U.S. History Since 18773
HIST	151	World History I: Traditional World
HIST	152	World History II: Modern World3
HIST	160	Modern Russian History3
HIST	162	Modern Latin America

D. Humanities

ART	180	See	ARTH 180	for	Art	Histo:	ry:	Ancient	to	Renaissan.	3
ART	182	Art	History:	Rena	aissa	ance t	o Mo	odern			3

ART	184	Art History: Twentieth Century3
HUM	122	Introduction to Humanities
HUM	145	Introduction to World Humanities I
HUM	146	Introduction to World Humanities II
HUM	155	Classical Mythology3
HUM	164	Civilization3
MUS	121	Introduction to Music Listening3
MUS	125	Introduction to Jazz Listening
MUS	126	Introduction to World Music3
PHOT	140	History of Photography3
REL	120	Exploring World Religions3
REL	125	Religions of the East
REL	126	Religions of the West3

E. Philosophy

	Introduction to Philosophy3
PHIL 124	Logic and Critical Thinking3
	Ethics
	History of Ancient Philosophy3
PHIL 176	Philosophy of Religion3

Social Science/Economics - 6 hours

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

A. Anthropology

	Cultural Anthropology	
ANTH 126	Physical Anthropology3	
ANTH 130	World Cultures	

B. Economics

		Economics
ECON 230	Economics	I3
ECON 231	Economics	II

C. Political Science

POLS	122	Political Science
POLS	124	American National Government3
POLS	126	State and Local Government3
POLS	132	Introduction to Comparative Government
POLS	135	International Relations3

D. Psychology

PSYC 121	Applied Psychology	3
PSYC 130	Introduction to Psychology	3

E. Sociology

SOC	122	Introduction to Sociology
		Social Problems
SOC	131	Marriage and the Family3

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 Introduction to Algebra.

A. Science

(Life Science)

BIOL	122	Principles of Biology3		
BIOL	123	Principles of Biology Lab*1		
BIOL	124	Oceanus: Essentials of Oceanography		
BIOL	125	General Botany5		
BIOL	127	General Zoology5		
BIOL	130	Environmental Science3		
BIOL	131	Environmental Science Lab*1		
BIOL	140	Human Anatomy4		
BIOL	144	Human Anatomy and Physiology5		
BIOL	150	Biology of Organisms*5		
BIOL	225	Human Physiology*4		
BIOL	230	Microbiology*3		
BIOL	231	Microbiology Lab*2		
*Prerequisite/Corequisite required				

(Physical Science)

ASTR 120	Fundamentals of Astronomy3
ASTR 122	Astronomy
CHEM 120	Chemistry in Society4
CHEM 122	Principles of Chemistry5
CHEM 124	General Chemistry I Lecture*4
CHEM 125	General Chemistry I Lab*1
CHEM 131	General Chemistry II Lecture*4
CHEM 132	General Chemistry II Lab*1
CHEM 140	Principles of Organic & Biological Chemistry*5
GEOS 130	General Geology5
GEOS 140	Physical Geography3
GEOS 141	Physical Geography Lab*2
GEOS 145	World Regional Geography3
PHYS 130	General Physics I*5
PHYS 131	General Physics II*5
PHYS 220	Engineering Physics I*5
PHYS 221	Engineering Physics II*5
PSCI 120	Physical Science4
*Prerequi	site/Corequisite required

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 Course1
EMS 121	CPR I - Basic Life Support for Healthcare Provider1
HMEC 151	Nutrition and Meal Planning3
HPER 192	Wellness for Life1
HPER 200	First Aid and CPR2
HPER 202	Personal Community Health3
HPER 205	Individual Lifetime Sports2
	Lifetime Fitness I1
HPER 255	Introduction to Physical Education

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

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

	123	Composition II*		
BUS 1	150	Business Communications*3		
SPD 1	120	Interpersonal Communication3		
SPD 1		Public Speaking3		
SPD 1	125	Personal Communication3		
SPD 1		Intercultural Communication3		
*Prere	*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*	
ENGL 227		
ENGL 230	Introduction to Fiction*	
ENGL 231	American Prose*3	
ENGL 235	Drama as Literature*3	
ENGL 241	British Writers*3	
ENGL 250	World Masterpieces*3	
ENGL 254	Masterpieces of the Cinema*3	
ENGL 256	American Poetry*3	
THEA 120	Introduction to Theater3	

B. Foreign Language

FL	178	Intermediate	Russian I*3			
FL	179	Intermediate	Russian II*3			
FL	190	Intermediate	Japanese I*			
FL	191	Intermediate	Japanese II*3			
FL	192	Intermediate	Chinese I*			
FL	193	Intermediate	Chinese II*			
FL	220	Intermediate	German I*3			
FL	221		German II*3			
FL	230		Spanish I*3			
FL	231	Intermediate	Spanish II*3			
FL	240	Intermediate	French I*			
FL	241	Intermediate	French II*			
*Prer	*Prerequisite/Corequisite required					

C. History

HIST	125	Western Civilization: Readings and Discussion I3
HIST	126	Western Civilization: Readings and Discussion II3
HIST	128	Medieval History3
HIST	129	Early Modern Europe 1500-17893
HIST	130	European History Since 17893
HIST	135	Eastern Civilization3
HIST	137	African American Studies3
HIST	140	U.S. History to 1877
HIST	141	U.S. History Since 18773
HIST	151	World History I: Traditional World3
HIST	152	World History II: Modern World3
HIST	160	Modern Russian History3
HIST	162	Modern Latin America

D. Humanities

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E. Philosophy

PHIL 121	Introduction to Philosophy
PHIL 124	Logic and Critical Thinking3
	Ethics
PHIL 154	History of Ancient Philosophy3
PHIL 176	Philosophy of Religion3

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 Anthropology3
ANTH	126	Physical Anthropology3
ANTH	130	World Cultures

B. Economics

ECON 132	Survey of	Economics
		I3
ECON 231	Economics	II

C. Political Science

POLS 122	Political Science
	American National Government3
POLS 126	State and Local Government3
POLS 132	Introduction to Comparative Government
POLS 135	International Relations3

D. Psychology

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

E. Sociology

SOC	122	Introduction to Sociology	3
		Social Problems	
		Marriage and the Family	

Science and/or Mathematics - 3 hours

Any mathematics course except Fundamentals of Mathematics or Introduction to Algebra will satisfy this requirement, or the requirement can be satisified by any of the following courses.

A. Life Science

BIOL	122	Principles of Biology
BIOL	123	Principles of Biology Lab*1
BIOL	124	Oceanus: Essentials of Oceanography
BIOL	125	General Botany5
BIOL	127	General Zoology5
BIOL	130	Environmental Science
BIOL	131	Environmental Science Lab*1
BIOL	140	Human Anatomy4
BIOL	144	Human Anatomy and Physiology5
BIOL	150	Biology of Organisms*5
BIOL	225	Human Physiology*4
BIOL	230	Microbiology*3
BIOL	231	Microbiology Lab*2
*Prer	requis	site/Corequisite required

B. Physical Science

ASTR	120	Fundamentals of Astronomy3
ASTR	122	Astronomy
CHEM	120	Chemistry in Society4
CHEM	122	Principles of Chemistry5
		General Chemistry I Lecture*4
CHEM	125	General Chemistry I Lab*1
CHEM	131	General Chemistry II Lecture*4

CHEM 132	General Chemistry II Lab*1
CHEM 140	Principles of Organic & Biological Chemistry*5
GEOS 130	General Geology5
GEOS 140	Physical Geography3
GEOS 141	Physical Geography Lab*2
GEOS 145	World Regional Geography3
PHYS 130	General Physics I*5
PHYS 131	General Physics II*5
PHYS 220	Engineering Physics I*5
PHYS 221	Engineering Physics II*5
PSCI 120	Physical Science4
*Prerequi	site/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 Course1	
EMS		CPR I - Basic Life Support for Healthcare Provider1	
HMEC	151	Nutrition and Meal Planning3	
HPER	192	Wellness for Life1	
HPER	200	First Aid and CPR2	
HPER	202	Personal Community Health	
HPER	205	Individual Lifetime Sports2	
HPER	240	Lifetime Fitness I1	
HPER	255	Introduction to Physical Education3	

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.

General Education Requirements

The 64 hours of credit necessary to complete the associate of general studies degree include the following:

- General Education Requirements (26 credit hours)
- Computer Skills (3 credit hours)
- Global Issues/Diversity (3 credit hours)
- College level electives (32 credit hours)

This distribution was designed around JCCC's General Education Learning Outcomes institutional assessment process. At a minimum, the distribution must include:

- 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

• Global Issues/Diversity......3 hours

Courses may not be used to satisfy requirements in more than one category.

The Arts - 3 hours

ART	180		for Art History: Ancient to Renaissan3
ART	182		Renaissance to Modern3
ART	184	Art History:	Twentieth Century3
FL	178	Intermediate	Russian I*3
FL	179		Russian II*3
FL	190		Japanese I*3
FL	191		Japanese II*3
FL	192		Chinese I*
FL	193		Chinese II*
FL	220		German I*3
FL	221		German II*3
FL	230	Intermediate	Spanish I*3
FL	231		Spanish II*3
FL	240	Intermediate	French I*
FL	241		French II*
HUM	122		to Humanities3
HUM	145		to World Humanities I3
HUM	146		to World Humanities II3
HUM	155	Classical Myt	chology
HUM	164	Civilization	
MUS	121	Introduction	to Music Listening3
MUS	125		to Jazz Listening3
MUS	126	Introduction	to World Music3
PHOT	140	History of Ph	notography3
THEA			to Theater3
*Prer	requis	ite/Corequis	ite required

Culture and Ethics - 6 hours

Historical Perspective - 3 hours

ENGL	130	Introduction to Literature*
ENGL	230	Introduction to Fiction*
ENGL	231	American Prose*
ENGL	235	Drama as Literature*3
ENGL	241	British Writers*3
ENGL	250	World Masterpieces*3
ENGL	256	American Poetry*3
GEOS	130	General Geology5
GEOS	140	Physical Geography3
GEOS	141	Physical Geography Lab*2
HIST	125	Western Civilization: Readings and Discussion I3
HIST	126	Western Civilization: Readings and Discussion II3
HIST	128	Medieval History3
HIST	130	European History Since 17893
HIST	135	Eastern Civilization3
HIST	137	African American Studies3
HIST	140	U.S. History to 18773
HIST	141	U.S. History Since 18773
HIST		World History I: Traditional World3
HIST	152	World History II: Modern World3
HIST	160	Modern Russian History3
HIST	162	Modern Latin America3
PHIL		History of Ancient Philosophy3
POLS	124	American National Government3
POLS		State and Local Government3
*Prer	requis	site/Corequisite required

Cultural Perspective - 3 hours

ANTH 125 Cultural Anthropology......3

ANTH 130 ENGL 230 ENGL 231 ENGL 235 ENGL 241 ENGL 250 ENGL 254 ENGL 256 FL 178 FL 179 FL 190 FL 191 FL 192 FL 193	World Cultures.3Introduction to Literature*.3Introduction to Fiction*.3American Prose*.3Drama as Literature*.3British Writers*.3World Masterpieces*.3Masterpieces of the Cinema*.3American Poetry*.3Intermediate Russian I*.3Intermediate Japanese I*.3Intermediate Japanese II*.3Intermediate Chinese I*.3Intermediate Chinese I*.3Intermediate Chinese I*.3
FL 221	Intermediate German II*
FL 230	Intermediate Spanish I*
FL 231 FL 240	Intermediate Spanish II*
FL 240 FL 241	Intermediate French I*
GEOS 145	Intermediate French II*
PHIL 121	Introduction to Philosophy
PHIL 121 PHIL 143	Ethics
PHIL 143 PHIL 154	History of Ancient Philosophy
PHIL 134 PHIL 176	Philosophy of Religion
POLS 122	Political Science
POLS 122 POLS 124	American National Government
POLS 135	International Relations
REL 120	Exploring World Religions
REL 125	Religions of the East
REL 126	Religions of the West
SOC 122	Introduction to Sociology
SOC 131	Marriage and the Family
*Prerequi	site/Corequisite required

Computer Skills - 3 hours

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

OR

Three hours from the following courses:

	any CPCA* course1
	any CWEB* course1
	any CDTP* course1
LIBR 125	Introduction to Library Research1

OR

Communication Skills - 6 hours

Writing - 3 hours

Speaking - 3 hours

SPD 120 Interpersonal Communication......3

SPD	121	Public Speaking3
SPD	125	Personal Communication3
SPD	180	Intercultural Communication

Global Issues/Diversity - 3 hours

ADMJ 127 Criminology			5
ANTH 125 Cultural Anthropology.	ADMJ	127	Criminology
ANTH 130 World Cultures.	ΔΝΤΉ	125	
ANT 134 Native Americans		-	
AFT 186 Art History: Introduction to Asian Art. .3 BIOL 130 Environmental Science Lab* .3 BUS 235 Introduction to International Business .3 FL 116 Elementary Latin I. .3 FL 117 Elementary Latin II* .3 FL 120 Elementary German II* .5 FL 121 Elementary Spanish I. .5 FL 131 Elementary Spanish I. .5 FL 131 Blementary Spanish I. .5 FL 131 Blementary Spanish I. .5 FL 141 Blementary Spanish I. .5 FL 143 Basic Spanish for Hospitality Management. .5 FL 140 Blementary Russian I. .5 FL 150 Blementary Russian I. .5 FL 161 Elementary Mussian I. .5 FL 161 Elementary Chinese I. .5 FL 161 Elementary Brazilian Portuguese I. .5 FL 171 Elementary Brazilian Portuguese I. <			
BIOL 130 Environmental Science Lab*		-	Native Americans
BIOL 131 Environmental Science Lab*. .1 BUS 235 Introduction to International Business. .3 FL 116 Elementary Latin I.*. .3 FL 117 Elementary Latin II* .3 FL 120 Elementary German II* .5 FL 121 Elementary German II* .5 FL 131 Elementary Spanish I	ART	186	
BUS 235 Introduction to International Business.	BIOL	130	Environmental Science
BUS 235 Introduction to International Business.	BIOL	131	Environmental Science Lab*1
FL 116 Elementary Latin II*	BUS	235	
FL 117 Elementary Latin II*			
FL 120 Elementary German II*			
FL 121 Elementary German II*			
FL 130 Elementary Spanish I.*			
FL 131 Elementary Spanish II*	FL	121	Elementary German II*5
FL 133 Basic Spanish for Hospitality Management. 2 FL 140 Elementary French I.* 5 FL 150 Elementary Russian I.* 5 FL 151 Elementary Russian I.* 5 FL 151 Elementary Russian I.* 5 FL 160 Elementary Italian I.* 5 FL 161 Elementary Chinese I. 5 FL 165 Elementary Chinese I.* 5 FL 170 Elementary Japanese I.* 5 FL 171 Elementary Brazilian Portuguese I. 5 FL 175 Elementary Brazilian Portuguese I. 5 FL 205 Conversational Japanese*. 2 FL 205 Conversational Spanish* 2 FL 243 Conversational Russian* 2 HC 125 International Awareness Field Study.	FL	130	Elementary Spanish I5
FL 133 Basic Spanish for Hospitality Management. 2 FL 140 Elementary French I.* 5 FL 150 Elementary Russian I.* 5 FL 151 Elementary Russian I.* 5 FL 151 Elementary Russian I.* 5 FL 160 Elementary Italian I.* 5 FL 161 Elementary Chinese I. 5 FL 165 Elementary Chinese I.* 5 FL 170 Elementary Japanese I.* 5 FL 171 Elementary Brazilian Portuguese I. 5 FL 175 Elementary Brazilian Portuguese I. 5 FL 205 Conversational Japanese*. 2 FL 205 Conversational Spanish* 2 FL 243 Conversational Russian* 2 HC 125 International Awareness Field Study.	FL	131	Elementary Spanish II*5
FL 140 Elementary French I.*	FT.	133	
FL 141 Elementary French II*			
FL 150 Elementary Russian I			
FL151Elementary Russian II*5FL160Elementary Italian I.5FL161Elementary Italian II*5FL165Elementary Chinese I.5FL170Elementary Chinese II*5FL171Elementary Japanese I.5FL171Elementary Japanese II*5FL175Elementary Brazilian Portuguese II*5FL176Elementary Brazilian Portuguese II*5FL205Conversational Japanese*2FL233Conversational German*.2FL243Conversational French*2FL243Conversational Russian*2FL243Conversational Russian*2HLS126International Awareness Field Study.2HIST 137African American Studies.3HIST 137African American Studies.3HIST 151World History II: Modern World.3HIST 160Modern Russian History.3HIST 162Modern Latin America.3HUM145Introduction to World Humanities I.3HUM145Introduction to World Humanities I.3HUM145Introduction to World Music.3POLS 132International Relations.3POLS 132International Relations.3REL126Religions of the West.3SOC 145Social Problems.3SOC 125 <t< td=""><td></td><td></td><td></td></t<>			
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Modes of Inquiry - 6 hours

Scientific - 3 hours

ANTH 126 ASTR 120 ASTR 122	Physical Anthropology
BIOL 122	Principles of Biology
BIOL 123	Principles of Biology Lab*1
BIOL 124 BIOL 125	Oceanus: Essentials of Oceanography
BIOL 125 BIOL 127	General Botany
BIOL 127 BIOL 130	Environmental Science
BIOL 130 BIOL 131	Environmental Science Lab*1
BIOL 140	Human Anatomy
BIOL 144	Human Anatomy and Physiology
BIOL 150	Biology of Organisms*
BIOL 225	Human Physiology*4
BIOL 230	Microbiology*
BIOL 231	Microbiology Lab*2
CHEM 120	Chemistry in Society4
CHEM 122	Principles of Chemistry5
CHEM 124	General Chemistry I Lecture*4
CHEM 125	General Chemistry I Lab*1
CHEM 131	General Chemistry II Lecture*4
CHEM 132	General Chemistry II Lab*1
CHEM 140	Principles of Organic & Biological Chemistry*5
GEOS 130	General Geology5
GEOS 140	Physical Geography
GEOS 141 Phil 124	Physical Geography Lab*
	Logic and Critical Thinking
PHYS 130 PHYS 131	General Physics I*
PHIS 131 PHYS 220	General Physics II*5 Engineering Physics I*5
PHYS 220	Engineering Physics II*
PRIS 221 PSCI 120	Physical Science
PSYC 130	Introduction to Psychology
	site/Corequisite required

Social - 3 hours

ECON	132	Survey of Economics
ECON	230	Economics I
ECON	231	Economics II
GEOS	145	World Regional Geography3
POLS	126	State and Local Government3
POLS	132	Introduction to Comparative Government3
PSYC	121	Applied Psychology
PSYC	130	Introduction to Psychology
SOC	122	Introduction to Sociology
SOC	125	Social Problems
SOC	131	Marriage and the Family3

Mathematics - 3 hours

MATH 120	Business Math and higher*3
PHYS 220	Engineering Physics I*5
PHYS 221	Engineering Physics II*5
	site/Corequisite required

Health, Physical Education, Recreation - 2 hours

HPER	Any Activity Course1	
EMS 121	CPR I - Basic Life Support for Healthcare Provider1	
HMEC 151	Nutrition and Meal Planning3	
HPER 192	Wellness for Life1	

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 Programs

Credit Career and Certificate Program List

Listing of JCCC's career and certificate programs

Career Programs

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.

Certificate of Completion

To earn a certificate of completion at Johnson County Community College, students must have demonstrated the basic skills competencies as outlined. In addition, students must have successfully completed an approved certificate program with both a cumulative grade point average of 2.0 or better and a JCCC GPA of 2.0 or better. Students must complete a minimum of 50 percent of the required coursework at JCCC. Students must be enrolled at the college during the time they anticipate completing certificate requirements. An application to complete certificate requirements must be filed in the Success Center on campus by the following dates:

- Feb. 15 for spring graduation
- June 15 for summer graduation
- Oct. 15 for fall graduation

Certificates will be issued at the end of each semester or term. Graduation exercises will be 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. Specific course completion certificates will be awarded as appropriate and as specified in the college catalog.

Postsecondary/Vocational Certificates

are designed with an emphasis on a specific career program.

Postsecondary Certificates

- provide training in a focused program.
- require successful completion of a minimum of 31 credit hours with a 2.0 or higher GPA.must include ENGL 121, Composition I, and MATH 115,
- Introduction to Algebra, or higher.

Vocational Certificates

- provide specialized training.
- require successful completion of the courses specified with at least a 2.0 or higher GPA.
- can range from 3 to 30 credit hours (or up to 33 if additional credits are due to courses with 4 or 5 credit hours).

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.

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 Biotechnology Biotechnology, A.A.S. Biotechnology, A.S. **Biotechnology Certificate** Bookkeeping Entrepreneurship Cert (see Acccounting) **Business Administration Business Administration, A.A.S.** Business Entrepreneurship (see Entrepreneurship) **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

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 Certificate Microcomputer Programmer Analyst Certificate Personal Computer Application Specialist** Web Application 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 Maintenance, A.A.S. Industrial Maintenance 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 Automotive Technology Entrepreneurship Cert(see Automotive) Bookkeeping Entrepreneurship Cert (see Accounting) Business Admin Asst Entrepren Cert (see Busin Office Tech) **Business Plan Certificate** Entrepreneurship, A.A.S. Entrepreneurship Certificate

Fashion Design Entrepreneurship Cert (see Fash Merch-Design) Fashion Merchandising Entrepren Cert (see Fash Merch-Design) Game Entrepreneurship Advanced Certificate (see Game) Hospitality Entrepreneurship Cert (see Hospitality Manage) Interior Design and Merch Entrepren (see Interior Design) 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. Food and Beverage Management (see Hospitality Management) Game Game Art & 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 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 Horticulture Certificate Landscape Technician Certificate Hospitality Management 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) Information Systems (see Computer Information Systems) Information Technology Information Technology, A.A.S. Network Administration: UNIX Certificate Network 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 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 IV Therapy for LPN Certificate (see Health Occupations) Land Surveying Land Surveying, A.A.S. Land Surveying Certificate 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**

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) 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

This nationally recognized program teaches students with neurological disabilities, such as learning disabilities and brain injuries, 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.

A learning disabilities specialist works with each student to design an individualized curriculum. For more information, call Longview Community College, 816-672-2053, or Penn Valley Community College, 816-759-4089.

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.

(2400 52.0302)

Accounting Careers

Associate of Applied Science Degree

First Semester

ENGL	121	Composition I*
ACCT	121	Accounting I
MATH		Business Mathematics*3
		or
MATH	171	College Algebra or higher*3
BOT	101	Computerized Keyboarding1
		Business Electives3
		TOTAL CREDIT HOURS16

Second Semester

		Accounting II*
BUS	150	Business Communications*3
BUS	261	Business Law I
		Business Electives6
BOT	115	Electronic Calculators1
		TOTAL CREDIT HOURS16

Third Semester

ACCT	222	Managerial Accounting**3
		or
ACCT	231	Intermediate Accounting I**3
ACCT	278	Accounting Internship*1
ACCT	140	Computerized Accounting Problems*
BUS	225	Human Relations
PHIL	138	Business Ethics1
HIST	141	U.S. History Since 1877
		Business Electives
		TOTAL CREDIT HOURS16

Fourth Semester

ACCT 215	Accounting for Nonprofit Organizations**3
ACCT 221	Cost Accounting*^3
	or
ACCT 232	Intermediate Accounting II*^3
ACCT 131	Federal Income Taxes I
ACCT 135	Computerized Accounting Applications*3
ACCT 285	Accounting Capstone*3
	Business Electives3
	Health and/or Physical Education Elective1
	TOTAL CREDIT HOURS16
	TOTAL PROGRAM CREDIT HOURS64
Note: Bus	iness electives are any courses with the BUS,
ENTR or E	CON prefix.

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*Prerequisite/Corequisite required
Note: ^The student is required to complete two of the five
following accounting courses: ACCT 215, 221, 222,
231 or 232.
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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. Upon successful completion, the students should be prepared to develop and sustain their own bookkeeping service business.

(4050 52.0302)

Accounting Careers

Vocational Certificate

Prerequisite for Required Courses

ENGL 121 Composition I*.....3

Required Courses

ACCT	121	Accounting I
ACCT	135	Computerized Accounting Applications*
BUS	150	Business Communications*3
ENTR	120	Introduction to Entrepreneurship2
ENTR	180	Opportunity Analysis2
ACCT	122	Accounting II*
ACCT	140	Computerized Accounting Problems*
ACCT	222	Managerial Accounting*3
		or
ACCT	215	Accounting for Nonprofit Organizations*
		or
ACCT	231	Intermediate Accounting I*
ACCT	285	Accounting Capstone*
ENTR	142	Fast Trac Business Plan
		TOTAL PROGRAM CREDIT HOURS28

Additional Suggested Coursework

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ENTR 160 Legal Issues for Small Business......2
ENTR 195 Franchising*......3
ENTR 220 Entrepreneurial Marketing*.....2
*Prerequisite/Corequisite required
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Tax Preparation Entrepreneurship Certificate

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

(4310 52.1601)

Accounting Careers

Vocational Certificate

Prerequisite for Required Course

Required Courses

ACCT ACCT		Accounting I
ENTR	120	Introduction to Entrepreneurship2
ENTR	180	Opportunity Analysis
ENTR	160	Legal Issues for Small Business2
ACCT	122	Accounting II*
ACCT	135	Computerized Accounting Applications*
ACCT	140	Computerized Accounting Problems*
ACCT	285	Accounting Capstone*
ACCT	278	Accounting Internship*1
ENTR	142	Fast Trac Business Plan3
ENTR	220	Entrepreneurial Marketing*2
		TOTAL PROGRAM CREDIT HOURS

Additional Suggested Coursework

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 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. (2120 43.0107)

Administration of Justice

Associate of Arts Degree

First Semester

ENGL 121	Composition I*
	Social Science Course**3
ADMJ 121	Introduction to Administration of Justice [*] 3
ADMJ 124	Criminal Justice and Corrections3
ADMJ 127	Criminology
	TOTAL CREDIT HOURS

Second Semester

SPD	120	Interpersonal Communication3
ENGL	122	Composition II*
PHIL	143	Ethics
ADMJ	140	Constitutional Case Law [^] 3
ADMJ		Criminal Behavior*3
		ADMJ Program Electives
		TOTAL CREDIT HOURS18

Third Semester

	Elementary Spanish I
	ADMJ Program Electives

Fourth Semester

	Humanities Course3 (cannot be a philosophy course)
	Social Science Course**
admj 280	Criminal Justice and the Public*
	Science and/or Math Elective***3
	Health and/or Physical Education Elective1
	ADMJ Program Electives
	TOTAL CREDIT HOURS16
	TOTAL PROGRAM CREDIT HOURS64

Required Program Electives

9 hours -	any three courses
ADMJ 130	Crime Prevention
ADMJ 133	Juvenile Delinquency3
ADMJ 141	Criminal Law*^3
ADMJ 143	Crime Analysis
ADMJ 145	Fundamentals Private Security3
ADMJ 146	Retail Security3
ADMJ 148	Family Violence/Sexual Abuse3
ADMJ 154	Fundamentals of Criminal Investigation**3
ADMJ 170	Introduction to Substance Use and Abuse
ADMJ 201	Police Interrogation*3
ADMJ 221	Introduction to Forensics
ADMJ 224	Introduction to Terrorism3
ADMJ 235	Community Based Corrections3
ADMJ 281	Readings in Police Science*
ADMJ 285	Administration of Justice Internship*3

*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 Government3	
POLS 126	State and Local Government3	

Group 2:

PSYC 1	.30 In	ntrod	duction	to Ps	ychol	logy.		 	 	3	
Note:	This :	is a	prerequ	uisite	for	ADMJ	230.				

Group 3:

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.

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. (2630 10.0304)

Associate of Applied Science Degree

Prerequisites for Required Courses

Note: 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 101	Introduction to the Web using Internet Explorer*1
CWEB 105	Introduction to Web Pages: Dreamweaver*1
CWEB 130	Introduction to Flash*1
ANI 120	Conceptual Art for Animation1
	TOTAL CREDIT HOURS

First Semester

		Interactive Media Concepts2	
CIM	140	Interactive Media Assets*4	Į
CIM	133	Screen Design*4	Ł
ANI	145	Introduction to 3D Animation*	5
ENGL	121	Composition I*	5
		TOTAL CREDIT HOURS16	

Second Semester

ANI	245	Character Animation*3
ENGL	140	Writing for Interactive Media*
		Animation Elective
		Elective
		Humanities Electives3
		Science and/or Math Elective*
		TOTAL CREDIT HOURS

Third Semester

ANI 25	55	Advanced Animation and Effects*3	
ENGL 15	50	Digital Narratives*3	

MUS	156	MIDI Music Composition3
BUS	141	Principles of Management3
		Elective
		Health and/or Physical Education Elective1
		TOTAL CREDIT HOURS16

Fourth Semester

ANI	260	Animation Capstone*
ANI	273	Career Preparation*4
		Animation Elective
		Elective
		Social Science and/or Economics Elective
		TOTAL CREDIT HOURS16
		TOTAL PROGRAM CREDIT HOURS

Animation Electives

GAME	101	Computer Game Creation4		
GAME	110	Flash Gaming*4		
GAME	200	Game Design*3		
CIS	134	Programming Fundamentals4		
CIS	162	Database Programming*4		
CS	180	Introduction to Artificial Intelligence*		
CIM	135	Digital Imaging and Video*3		
CIM	154	Interactive Authoring I: Director*4		
CIM	156	Interactive Authoring I: Web*4		
CIM	200	Interactive Communication Form*3		
CIM	235	Advanced Digital Video*3		
CIM	254	Interactive Authoring II: Director*4		
ART	130	Drawing I		
ART	131	Drawing II*		
ART	231	Life Drawing I*3		
ART	232	Life Drawing II*		
PHOT	121	Fundamentals of Photography3		
PHOT	128	Digital Photography3		
*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.

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	f Applied Science Degree
Sequence of	Courses
Transferred	AVS/TC Program
ENGL 121 Co	omposition I*
Co	ommunication Elective3
Hu	umanities Elective3
Sc	ocial Science and/or Economics Electives3
Sc	cience and/or Math Elective*3
E	lectives
He	ealth and/or Physical Education Elective1
TOTAL PI	ROGRAM CREDIT HOURS64
*Prerequisit	te/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.

(2420 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 division administrator

First Semester

		Automotive Steering and Suspension*	
AUTO	234	Automotive Electrical System*4	ł
INDT	125	Industrial Safety	3
MATH	120	Business Mathematics*	3
ENGL	121	Composition I*	3
		TOTAL CREDIT HOURS16	5

Second Semester

		Automotive Engine Repair*	
		Automotive Brake System*	
AUTO	168	Automotive Manual Drivetrain and Axles*	. 3
ENGL	123	Technical Writing I*	. 3
		Technical/Related Electives	. 3
		Health and/or Physical Education Elective	.1
		TOTAL CREDIT HOURS	Lб

Third Semester

AUTO 250	Automatic Transmissions and Transaxles*4
AUTO 254	Automotive Engine Performance*5

MFAB 127	Welding Processes2
	Humanities Elective3
	Social Science and/or Economics Elective
	TOTAL CREDIT HOURS17

Fourth Semester

AUTO	230	Automotive Heating and Air Conditioning*	.3
AUTO	260	Automotive Service Management*	.3
AUTO	261	Automotive Service Techniques*	.3
BUS	140	Principles of Supervision	.3
		Technical/Related Electives	.3
		TOTAL CREDIT HOURS	15
		TOTAL PROGRAM CREDIT HOURS	64

Technical/Related Electives

AUTO	121	Small Engine Service
AUTO	122	Introduction to Automotive Glass
AUTO	123	Motorcycle Maintenance and Repair2
AUTO	128	Automotive Parts Specialist2
AUTO	130	Diesel Fundamentals*2
AUTO	201	ASE Certification Seminar1
AUTO	210	Advanced Engine Repair*3
AUTO	271	Automotive Technology Internship*
AUTO	291	Independent Study1-7
MATH	133	Technical Mathematics I*4
PHYS	133	Applied Physics*5
ENTR	142	Fast Trac Business Plan3
CIS	124	Introduction to Computer Concepts and Applications3
CPCA	105	Introduction to Personal Computers: Windows1
ELEC	120	Introduction to Electronics
RRT	165	Railroad Safety, Quality and Environment3
INDT	200	Workplace Skills1
*Prer	requis	ite/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.

(4710 47.0604)

Automotive Technology

Vocational Certificate

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

AUTO 125 Introduction to Automotive Shop Practices......3 or Approval of division administrator

Required Courses

	Automotive Electrical System*4 Automatic Transmissions and Transaxles*4
	Automotive Engine Performance*
AUIU 234	
AUTO 230	Automotive Heating and Air Conditioning*
MFAB 127	Welding Processes2
	TOTAL CREDIT HOURS
*Prerequi	site/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. Upon completion, the students should be better prepared to develop, grow and sustain their own automotive service business venture. (4180 47.0604)

Automotive Technology

Vocational Certificate

Prerequisites for Required Courses

Required Courses

INDT	125	Industrial Safety3
AUTO	163	Automotive Steering and Suspension*
AUTO	167	Automotive Brake System*2
AUTO	168	Automotive Manual Drivetrain and Axles*
INDT	155	Workplace Skills1
ENTR	120	Introduction to Entrepreneurship2
ENTR	180	Opportunity Analysis
AUTO	250	Automatic Transmissions and Transaxles*4
AUTO	254	Automotive Engine Performance*5
AUTO	230	Automotive Heating and Air Conditioning*
ENTR	142	Fast Trac Business Plan
		TOTAL PROGRAM CREDIT HOURS

Additional Suggested Coursework

ENTR	131	Financial Management for Small Business*2	
ENTR	160	Legal Issues for Small Business	2
ENTR	195	Franchising*3	5
ENTR	220	Entrepreneurial Marketing*2	2
*Prer	requis	ite/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. Missouri students should refer to Cooperative Program Information.

 $(2110\ 41.0101)$

Science Department

Associate of Applied Science Degree

Prerequisite for Required Courses

Note: The student must take the prerequisite, CHEM 122, or have taken the equivalent course. For a wavier, contact the assistant dean.

First Semester

BIOL	135	Principles of Cell and Molecular Biology4
BIOT	160	Introduction to Biotechnology*2
BIOT	165	Laboratory Safety*1
CHEM	122	Principles of Chemistry5
MATH	133	Technical Mathematics I or higher*4
		TOTAL CREDIT HOURS

Second Semester

BIOL	230	Microbiology*3
CIS	124	Introduction to Computer Concepts and Applications3
ENGL	121	Composition I*
		Applied Physics*5
		Social Science/Economics Elective
		TOTAL CREDIT HOURS17

Third Semester

BIOL	144	Human Anatomy and Physiology	.5
		Physical Education Elective	.1
BIOL	205	General Genetics*	.4
		Principles of Organic & Biological Chemistry*	
ENGL	123	Technical Writing I*	.3
		TOTAL CREDIT HOURS	18

Fourth Semester

BIOT	260	Biotechnology Methods*	5
BIOL	145	Human Anatomy and Physiology Dissection*	1
BIOT	265	Biotechnology Internship*	4
BIOL	155	Introduction to Bioethics*	3
		Humanities Elective	3
		TOTAL CREDIT HOURS1	6
		TOTAL PROGRAM CREDIT HOURS	8
*Prer	requis	site/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. Missouri students should refer to Cooperative Program Information.

(2130 41.0101)

Science Department

Associate of Science Degree

First Semester

MATH BIOL CHEM CHEM	135 124	Statistics*
SPD	120	Interpersonal Communication3
SPD	121	or Public Speaking3 or
SPD	125	Personal Communication3 or
SPD ENGL	180 121	Intercultural Communication

Second Semester

		Introduction to Biotechnology*2 Biology of Organisms*5
CHEM	131	General Chemistry II Lecture*4
		General Chemistry II Lab*1
ENGL	123	Technical Writing I*3
		Humanities Elective3
		TOTAL CREDIT HOURS18

Summer

BIOL 230	Microbiology*	
	Social Science/Economics Elective	.3
	TOTAL CREDIT HOURS	.6

Third Semester

	Laboratory Safety*1
CHEM 220	Organic Chemistry I*5
	General Physics I*5
BIOL 205	General Genetics*4
	Humanities Elective3
	TOTAL CREDIT HOURS18

Fourth Semester

BIOT 260	Biotechnology	Methods*	5
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CHEM 250	Biochemistry*4
PHYS 131	General Physics II*5
	Social Science/Economics Elective
	TOTAL CREDIT HOURS

Optional Course

BIOT	265	Biotechnology Internship4
		TOTAL PROGRAM CREDIT HOURS
with	the	optional course
		TOTAL PROGRAM CREDIT HOURS82
*Prei	requi	site/Corequisite required

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.

Missouri students should refer to Cooperative Program Information.

(6150 41.0101)

Science Department

Vocational Certificate

Prerequisite for Required Courses

Note: The student must take the prerequisite, CHEM 122, or have taken the equivalent course. For a wavier, contact the assistant dean.

First Semester

		Principles of Cell and Molecular Biology4
		Introduction to Biotechnology*2
BIOT	165	Laboratory Safety*1
CHEM	122	Principles of Chemistry
MATH	133	Technical Mathematics I or higher*
		TOTAL CREDIT HOURS15

Second Semester

BIOL 230	Microbiology*3
	Biotechnology Methods*5
CHEM 140	Principles of Organic & Biological Chemistry*5
PHYS 133	Applied Physics*5
	TOTAL CREDIT HOURS18

Third Semester

BIOT 265	Biotechnology Internship - optional*4			
	TOTAL PROGRAM CREDIT HOURS			
*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.

(2430 52.0101)

Business Administration

Associate of Applied Science Degree

First Semester

MATH BUS BUS	120 121 225	Composition I*
		Introduction to Computer Concepts and Applications3 and CPCA/CDTP elective1 105/106 will not meet this one hour requirement.

		or CPCA/CDTP electives4
CIS	134	or Programming Fundamentals

Second Semester

		Accounting I
BUS	141	Principles of Management3
		or
BUS	145	Small Business Management3
BUS	150	Business Communications*3
		Economics I
HIST	141	U.S. History Since 1877
		Health and/or Physical Education Elective1
		TOTAL CREDIT HOURS16

Third Semester

	Accounting II*
PHIL 138	Business Ethics1
ECON 231	Economics II
	Marketing
BUS 261	Business Law I
HUM 122	Introduction to Humanities3
	TOTAL CREDIT HOURS16

Fourth Semester

ACCT 222 BUS 123	Managerial Accounting*3 Personal Finance3
DI10 015	or
BUS 215	Savings and Investments3
BUS 263	Business Law II*3
BUS 243	Human Resource Management3
	or
BUS 235	Introduction to International Business
BIOL 130	Environmental Science3
	Elective
	TOTAL CREDIT HOURS
	TOTAL PROGRAM CREDIT HOURS64

Recommended Electives

BUS	120	Management	Attitudes	and	Motivation	 	 	.3
BUS	140	Principles	of Superv:	isior	1	 	 	.3
*Prer	requis	site/Corequi	site requi	ired				

Business-Logistics Mgt, A.A.S.

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		Composition I*
ECON	230	Economics I
MATH		Business Mathematics*3
MATH	116	Intermediate Algebra or higher*
PSYC	130	Introduction to Psychology3
SOC	122	Introduction to Sociology
SPD		Public Speaking3
		or
SPD	125	Personal Communication3

American Institutions

HIST	140	U.S. History to 1877
птот	1/1	or U.S. History Since 1877
птот	TTT	or
POLS	122	Political Science
		or

POLS 124	American National Government3
	or
POLS 126	State and Local Government3

Specific Program Requirements taken at JCCC

		Specific Program Electives9
ACCT	121	Accounting I
BUS	141	Principles of Management3
BUS	230	Marketing
BUS	150	Business Communications*3
BUS	261	Business Law I
CIS	124	Introduction to Computer Concepts and Applications3
		or
CPCA	128	PC Applications: Office 20033
		Electives6
		Note: Electives may be any non-developmental courses.

Specific Program Requirements-taken at MCC

KSS	300	Affiliate Social Science1-3
KSCL	210	Logistics Management3
KSCL	211	Operations Management3
KSCL	212	Transportation Operation and Management3
KSCL	213	Warehouse and Distribution Centers3
		TOTAL PROGRAM CREDIT HOURS64-66

Specific Program Electives

ACCT 11	
ACCT 13	
ACCT 22	
ACCT 22	
ACCT 23	
BOT 10	
BUS 12	
BUS 12	
BUS 14	40Principles of Supervision3
BUS 14	
BUS 22	25 Human Relations3
BUS 24	
BUS 26	
ENTR 12	
FASH 12	21 Fashion Fundamentals3
JOUR 12	
MKT 12	
MKT 13	33 Salesmanship3
SPD 12	
*Prerec	quisite/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.

(2680 52.0401)

Business Office Technology

Associate of Applied Science Degree Prerequisite for Required Course

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

		Intro to Business Computer Applications*3
MATH	120	Business Mathematics*3
ENGL	121	Composition I*
		Skillbuilding I*1
BOT	103	Business English
BOT	130	Office Systems Concepts
		Health and/or Physical Education Elective1
		TOTAL CREDIT HOURS17

Second Semester

		Word Processing Application I*2
BUS	225	Human Relations3
ACCT	121	Accounting I
BUS	121	Introduction to Business3
CPCA	141	Internet I*1
BOT	150	Records Management3
		TOTAL CREDIT HOURS15

Third Semester

LAW	121	Introduction to Law
BOT	125	Document Formatting*1
BUS	140	Principles of Supervision3
		or
BUS	141	Principles of Management3
BOT	255	Word Processing Applications II*2
BUS	150	Business Communications*3
		Humanities Elective
		TOTAL CREDIT HOURS15

Fourth Semester

ECON	132	Survey of Economics3
		or
		Economics I
BOT	275	Office Internship I*1
BUS	243	Human Resource Management3
BOT	265	Computerized Office Applications*
BOT	260	Desktop Publishing for the Office*
		BOT Electives4
		TOTAL CREDIT HOURS
		TOTAL PROGRAM CREDIT HOURS64

BOT Electives

BOT	118	Skillbuilding II*1
BOT	175	Conflict in the Workplace1
BOT	180	Business Spreadsheet Applications*1
BOT	185	Business Database Applications*1
BOT	205	Professional Image Development1
BOT	210	Working in Teams1
BOT	280	Office Internship II*1
*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.

(2780 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

		Intro to Business Computer Applications*3
LAW	121	Introduction to Law
BOT	103	Business English3
		Office Systems Concepts3
ENGL	121	Composition I*
BOT	115	Electronic Calculators1
		Health and/or Physical Education Elective1
		TOTAL CREDIT HOURS17

Second Semester

BOT BOT		Word Processing Application I*2 Skillbuilding I*1
BOT	150	Records Management3
MATH	120	Business Mathematics*3
BUS	150	Business Communications*3
ACCT	111	Small Business Accounting3
ACCT	121	Accounting I
CPCA	141	Internet I*1 TOTAL CREDIT HOURS16

Third Semester

LAW	223	Computer Applications in the Law Office*3
BOT	160	Legal Transcription*3
BUS	225	Human Relations3
BOT	255	Word Processing Applications II*2
BOT	125	Document Formatting*1
		BOT Electives
		TOTAL CREDIT HOURS15

Fourth Semester

ECON	132	Survey of Economics3
		or
ECON	230	Economics I
BOT	275	Office Internship I*1
BOT	265	Computerized Office Applications*
BUS	140	Principles of Supervision
		or
BUS	141	Principles of Management3

Humanities Elective3
General Electives3
TOTAL CREDIT HOURS16
TOTAL PROGRAM CREDIT HOURS64

BOT Electives

BOT	118	Skillbuilding II*1
BOT	175	Conflict in the Workplace1
BOT	180	Business Spreadsheet Applications*1
BOT	185	Business Database Applications*1
BOT	205	Professional Image Development1
BOT	210	Working in Teams1
BOT	280	Office Internship II*1
*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.

(2790 51.0710)

Business Office Technology

Associate of Applied Science Degree

Prerequisite for Required Course

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.

First Semester

BOT	106	Intro to Business Computer Applications*3
AAC	130	Medical Terminology3
		Composition I*3
BOT	103	Business English3
BOT	130	Office Systems Concepts3
		Health and/or Physical Education Elective1
		TOTAL CREDIT HOURS16

Second Semester

		Word Processing Application I*2
BOT	110	Skillbuilding I*1
BOT	170	Medical Coding and Billing*3
BOT	150	Records Management3
BOT	115	Electronic Calculators1
MATH	120	Business Mathematics*3
BUS	225	Human Relations3
		TOTAL CREDIT HOURS16

Third Semester

BOT	125	Document Formatting*	1
ACCT	111	Small Business Accounting	3

		or
ACCT	121	Accounting I
		Medical Keyboarding*1
LAW	121	Introduction to Law3
		Business Communications*3
BOT	255	Word Processing Applications II*2
		Humanities Elective3
		TOTAL CREDIT HOURS16

Fourth Semester

ECON	132	Survey of Economics
ECON BOT		Economics I
BOT	265 275	Computerized Office Applications*
BUS	141	Principles of Management

BOT Electives

BOT	118	Skillbuilding II*1
		Conflict in the Workplace1
BOT	180	Business Spreadsheet Applications*1
BOT	185	Business Database Applications*1
BOT	205	Professional Image Development1
BOT	210	Working in Teams1
BOT	280	Office Internship II*1
*Prer	requis	ite/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.

(4690 52.0401)

Business Office Technology

Vocational Certificate

Prerequisite for Required Course

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
BOT	130	Office Systems Concepts3
BOT	125	Document Formatting*1
		Business English3
BOT	106	Intro to Business Computer Applications*3
BUS	225	Human Relations3
BOT		Word Processing Application I*
BOT	115	Electronic Calculators1
BOT	150	Records Management3

BOT	255	Internet I*1 Word Processing Applications II*2 Computerized Office Applications*3		
BOI	205			
BOT	260	Desktop Publishing for the Office*3		
BOT	275	Office Internship I*1		
		or		
BOT	120	Machine Transcription*1 TOTAL PROGRAM CREDIT HOURS		
*Pre	*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. Upon successful completion, the students should be prepared to develop and sustain their own administrative assistance service business.

(4090 52.0401)

Business Office Technology

Vocational 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
CPCA	110	Spreadsheet on Microcomputers I or approval*1
		Databases on Microcomputers I or approval*1
CPCA	141	Internet I or approval*1
BUS	230	Marketing

Required Courses

вот	105	Keyboarding and Formatting I3
BOT	106	Intro to Business Computer Applications*3
вот	130	Office Systems Concepts3
BOT	260	Desktop Publishing for the Office*
ENTR	120	Introduction to Entrepreneurship2
BOT	255	Word Processing Applications II*2
вот	265	Computerized Office Applications*
BOT	110	Skillbuilding I*1
вот	125	Document Formatting*1
вот	180	Business Spreadsheet Applications*1
BOT	185	Business Database Applications*1
ENTR	180	Opportunity Analysis2
ENTR	142	Fast Trac Business Plan3
BOT	275	Office Internship I*1
		TOTAL PROGRAM CREDIT HOURS
*Drov		site/Corequisite required

*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. Upon successful completion, students should be prepared to develop and sustain their own administrative assistance service business to the medical profession.

(4290 52.0710)

Business Office Technology

Vocational 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.

BOT105Keyboarding and Formatting I or approval......3BOT155Word Processing Applications I or approval*.....2CPCA110Spreadsheet on Microcomputers I or approval*.....1CPCA114Databases on Microcomputers I or approval*.....1CPCA141Internet I or approval*.....1

Required Courses

AAC BOT BOT BOT	130 106 130 110	Medical Terminology3 Intro to Business Computer Applications*3 Office Systems Concepts3 Skillbuilding I*1
BOT	170	Medical Coding and Billing*3
ENTR	120	Introduction to Entrepreneurship2
ENTR	180	Opportunity Analysis2
BOT	255	Word Processing Applications II*2
BOT	265	Computerized Office Applications*
BOT	180	Business Spreadsheet Applications*1
BOT	185	Business Database Applications*1
ENTR	142	Fast Trac Business Plan3
BOT	275	Office Internship I*1
		TOTAL PROGRAM CREDIT HOURS

Additional Suggested Coursework

ENTR 160 Legal Issues for Small Business......2 ENTR 220 Entrepreneurial Marketing*.....2 ENTR 195 Franchising*.....3 ENTR 131 Financial Management for Small Business*.....2 *Prerequisite/Corequisite required

Medical Office Assistant Certificate

This certificate program is designed for students who want to work in doctors' offices and hospital offices. This program will provide training for students going into entry-level positions or those upgrading existing skills. (5400 52.0401)

Business Office Technology

Vocational 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.

Required Courses

AAC	130	Medical Terminology3
BOT	103	Business English3
BOT	110	Skillbuilding I*1
BOT	125	Document Formatting*1
BOT	155	Word Processing Application I*2
BOT	165	Medical Transcription*3
BOT	170	Medical Coding and Billing*
BOT	130	Office Systems Concepts3
BOT	106	Intro to Business Computer Applications*
BOT	122	Medical Keyboarding*1
		TOTAL PROGRAM CREDIT HOURS
*Dro	reaui	site/Corequisite required

*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.

(5410 52.0401)

Business Office Technology

Vocational 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	
BOT	106	Intro to Business Computer Applications*	3	
BOT	155	Word Processing Application I*	2	
BOT	255	Word Processing Applications II*	2	
BOT	103	Business English	3	
AAC	130	Medical Terminology	3	
BOT	165	Medical Transcription*		
BOT	270	Advanced Medical Transcription*		
BOT	170	Medical Coding and Billing*	3	
BOT	220	Pharmacology Terminology*	2	
BIOL	140	Human Anatomy	4	
BOT	275	Office Internship I*	1	
		TOTAL PROGRAM CREDIT HOURS	0	
*Prer	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. (4900 52.0401) Business Office Technology

Vocational Certificate

Required Courses

BOT	103	Business English3
BOT	105	Keyboarding and Formatting I
BOT	110	Skillbuilding I*1
BOT	125	Document Formatting*1
BOT	130	Office Systems Concepts3
BOT	155	Word Processing Application I*2
BOT	115	Electronic Calculators1
201	120	Machine Transcription*1
BOT	106	Intro to Business Computer Applications*3
		TOTAL PROGRAM CREDIT HOURS
*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.

Prerequisite: Completion of the virtual home office certificate (first and second semester courses) as well as BOT 105.

(5430 52.0401)

Business Office Technology

Vocational 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.

Prerequisites for Required Courses

CPCA	151	Internet II*1
BOT	155	Word Processing Application I*2

Required Courses

ENTR	142	Fast Trac Business Plan3
ENTR	180	Opportunity Analysis2
		Marketing
BUS	145	Small Business Management3
CPCA	161	Introduction to Web Pages using HTML*1
BOT	260	Desktop Publishing for the Office*
		TOTAL PROGRAM CREDIT HOURS
*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.

(5420 52.0401) Business Office Technology

Vocational Certificate

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.

Prerequisite for Required Courses

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

Required Courses

```
BOT
  130
    BOT
  103
    BOT 155
    Word Processing Application I*.....2
CPCA 141
    Internet I*.....1
CPCA 151
    Internet II*.....1
    Office Internship I*.....1
BOT 275
BOT 255
    Word Processing Applications II*.....2
BOT 106
    Intro to Business Computer Applications*.....3
    *Prerequisite/Corequisite required
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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. Prerequisite: Completion of virtual home office certificate. (5440 52.0401) Business Office Technology

Vocational Certificate

Prerequisite for Required Courses

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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 obtain a waiver
from the program administrator.
```

Required Courses

BOT	165	Medical Transcription*3
		Medical Terminology3
BOT	170	Medical Coding and Billing*3
BIOL	140	Human Anatomy4
BOT	270	Advanced Medical Transcription*
		TOTAL PROGRAM CREDIT HOURS16
*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.

(2210 15.0201)

Civil Engineering Technology

Associate of Applied Science Degree

First Semester

DRAF	129	Interpreting Architectural Drawings2
ENGR	131	Engineering Graphics I*4
MATH	133	Technical Mathematics I*4
CET	125	Construction Specifications*2
CET	105	Construction Methods3
INDT	155	Workplace Skills1
		TOTAL CREDIT HOURS16

Second Semester

CET	129	Construction Management3
DRAF	244	Land Development Desktop*2
		Civil Drafting*3
ENGL	121	Composition I*
MATH	134	Technical Mathematics II*5
		TOTAL CREDIT HOURS16

Third Semester

CET	127	Construction Estimating*3
CET	211	Technical Statics and Design*
		Engineering Land Surveying I*3
ENGL	123	Technical Writing I*3
PHIL	138	Business Ethics1
		Humanities Elective
		TOTAL CREDIT HOURS16

Fourth Semester

CET	140	Civil Engineering Materials*3	
CET	270	Fluid Mechanics*3	
DRAF	252	Structural Drafting*3	
CET	150	Construction Safety	
		Health/Physical Education Elective1	
		Social Science/Economics Elective	
		TOTAL CREDIT HOURS16	
		TOTAL PROGRAM CREDIT HOURS64	
*Prei	*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. (4750 15.0201)

Civil Engineering Technology

Vocational Certificate

Required Courses

DRAF CET	129 105	Interpreting Architectural Drawings2 Construction Methods
ACCT	111	Small Business Accounting3
1 a am	1 0 1	
ACCT	$\perp \angle \perp$	Accounting I
BUS	140	Principles of Supervision
MATH	120	Business Math or higher*3
CET	125	Construction Specifications*2
CET	127	Construction Estimating*
CET	129	Construction Management3
		Management Electives
CET	150	Construction Safety
INDT	155	Workplace Skills1
		TOTAL PROGRAM CREDIT HOURS

Approved Management Electives

		Principles of Management
BUS	145	Small Business Management3
BUS	243	Human Resource Management3
BUS	261	Business Law I
ENTR	131	Financial Management for Small Business*2
ENTR	160	Legal Issues for Small Business2
*Prei	requi	site/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. (6300 15.0201)

Civil Engineering Technology

Vocational Certificate

First Semester

Second Semester

CET	122	Engineered Plumbing Systems II	.3
CET	270	Fluid Mechanics*	.3
		TOTAL PROGRAM CREDIT HOURS	.9
*Pre	requi	site/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.

(2930 11.0202)

Computing Sciences and Information Technology Department

Associate of Applied Science Degree

Prerequisite for Required Course

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
CS	205	or Concepts of Programming Algorithms using JAVA*4
CIM		Screen Design*4
ACCT	121	Accounting I
ENGL	121	Composition I*
MATH	171	College Algebra*3
		or
		Any Precalculus/Calculus Course*
		TOTAL CREDIT HOURS17

Second Semester

		Level One Programming Language
		Option
CS	210	Discrete Structures I*3
CIS	162	Database Programming*4
		Introduction to System Design and Analysis*
SPD	125	Personal Communication3
		or
ENGL	123	Technical Writing I*3
		TOTAL CREDIT HOURS

Third Semester

		Level Two Programming Language
		Option
CIS	258	Operating Systems*3
		or
CIS	204	UNIX Operating System*
		CIS Elective
		Humanities/Art Elective
		Social Science and/or Economic Electives
		Health and/or Physical Education Elective1
		TOTAL CREDIT HOURS17

Fourth Semester

		Level Three Programming Language Option4
CIS	264	Application Development and Programming*4
CIS	260	Database Management*
CIS	262	Project Management*3
		CIS Elective
		TOTAL CREDIT HOURS
		TOTAL PROGRAM CREDIT HOURS69
		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	ı C++:
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CIS	235	Object-Oriented Programming Using C++*4
CS	250	Basic Data Structures using C++*4
Optic	on in	JAVA:
CS	255	Basic Data Structures using JAVA*4
Optic	on in	VISUAL BASIC:
CIS	138	Visual Basic .Net*4

Level Two Programming Language Options:

Option in C++:

CIS	235	Object-Oriented Programming Using C++*4
CS	250	Basic Data Structures using C++*4
Opti	on in	JAVA:
CIS	240	Advanced Topics in JAVA I*4
Opti	on in	VISUAL BASIC:
CIS	238	Visual Basic Intermediate Topics*4

Level Three Programming Language Options:

Option in C++: CIS 269 GUI Programming*.....4 Option in JAVA: CIS 280 Advanced Topics in JAVA II*.....4 Option in VISUAL BASIC: CIS 277 Active Server Pages.Net*.....4 Six hours of computer information systems electives are to be selected from the following list: CS 200 Concepts of Programming Algorithms Using C++*.....4 CS

CS	201	Concepts of Programming Algorithms using C#*4
CS	205	Concepts of Programming Algorithms using JAVA*4
CS	250	Basic Data Structures using C++*4
CS	255	Basic Data Structures using JAVA*4
CS	211	Discrete Structures II*3
CIS	138	Visual Basic .Net**4
CIS	204	UNIX Operating System**3
CIS	206	Programming in PERL*4
CIS	235	Object-Oriented Programming Using C++*4
CIS	238	Visual Basic Intermediate Topics*4
CIS	240	Advanced Topics in JAVA I*4
CIS	243	Object-Oriented Analysis and Design**4
CIS	244	Advanced Topics in C# I*4
CIS	254	UNIX System Administration*4
CIS	258	Operating Systems**3
CIS	269	GUI Programming*4
CIS	270	Information Systems Internship*^3
CIS	275	Web-Enabled Database Programming*4
CIS	277	Active Server Pages.Net*4
CIS	280	Advanced Topics in JAVA II*4
	150	Introduction to Computer Forensics*3
IT	200	Networking Technologies3
IT	210	Netware Administration*3
*Prer	requi	site/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.

(5190 11.0202)

Computing Sciences and Information Technology Department

Vocational 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 Fundamentals4
		Databases I: MS Access*1
CPCA	115	Databases II: MS Access*2
CPCA	141	Internet I*1
		TOTAL CREDIT HOURS

Second Semester

	Windows for Microcomputers*1
CIS 138	Visual Basic .Net*4
	Web-Enabled Databases I using Access*1
CWEB 145	Web-Enabled Databases II using Access*1
CPCA 117	Databases III: MS Access*1
	TOTAL CREDIT HOURS8

Third Semester

CIS	238	Visual Basic Intermediate Topics*4
CIS	162	Database Programming*4
		TOTAL CREDIT HOURS8

Fourth Semester

CIS	260	Database Management*4
CIS	242	Introduction to System Design and Analysis*
		TOTAL CREDIT HOURS
		TOTAL PROGRAM CREDIT HOURS
*Prerequisite/Corequisite required		

Desktop Publishing Certificate

Individuals with or without a college degree whose goal is to acquire or improve their personal desktop computer application skills will accomplish that goal 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 want to enhance their job skills. It provides current employers or prospective employers tangible evidence of computer competency. Application courses for the certificate are based on a combination of the Windows and Macintosh operating environments. Students will be encouraged to develop a cross-platform mastery.

(4830 11.0202)

Computing Sciences and Information Technology Department

Vocational Certificate

Required Courses

CPCA	105	Introduction to Personal Computers: Windows1
CPCA	106	Introduction to Personal Computers: MacIntosh1
CPCA	134	Managing Your Macintosh*1
		or
CPCA	138	Windows for Microcomputers*1
CPCA	123	E-Presentation: MS PowerPoint*1
CDTP	135	Desktop Photo Manipulation I: Photoshop*1
CDTP	155	Desktop Photo Manipulation II: Photoshop*1
CDTP	145	Desktop Illustration I: Illustrator*1
CDTP	165	Desktop Illustration II: Illustrator*1

Select four courses of the following eight:

CDTP	140	Desktop Publishing I: InDesign*1
CDTP	160	Desktop Publishing II: InDesign*1
CDTP	131	<pre>Desktop Publishing I: QuarkXpress*1</pre>
CDTP	151	<pre>Desktop Publishing II: QuarkXpress*1</pre>
CDTP	171	Desktop Publishing III: QuarkXpress*1
CDTP	175	Desktop Photo Manipulation III: Photoshop*1
CDTP	180	Photoshop for the Web: Photoshop and Image Ready*1
CDTP	185	Desktop Illustration III: Illustrator*1

Select two courses of the following five:

	Word Processing I: MS Word*1
CPCA 125	Word Processing II: MS Word*1
CPCA 134	Managing Your Macintosh*1
	or
CPCA 138	Windows for Microcomputers*1
CWEB 105	Introduction to Web Pages: Dreamweaver*1
CWEB 106	Introduction to Microsoft FrontPage*1
	TOTAL PROGRAM CREDIT HOURS14
*Preregui	site/Corequisite required

*Prerequisite/Corequisite required

Microcomputer Programmer Analyst Certificate

Prior to beginning the microcomputer programmer/analyst 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.

(5030 11.0202)

Computing Sciences and Information Technology Department

Vocational 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
		or
CS	205	Concepts of Programming Algorithms using JAVA*4
CS	210	Discrete Structures I*3
CIS	162	Database Programming*4
		TOTAL CREDIT HOURS11

Second Semester

CIS	235	Object-Oriented Programming Using C++**4
CS	250	Basic Data Structures using C++*^4 or
	242	Basic Data Structures using JAVA*4 Introduction to System Design and Analysis*3 UNIX Operating System*3 TOTAL CREDIT HOURS10

Third Semester

CIS	269	GUI Programming*4	
		or	
CIS	240	Advanced Topics in JAVA I*4	
CIS	262	Project Management*3	
		Database Management*4	
		TOTAL CREDIT HOURS11	
		TOTAL PROGRAM	
		CREDIT HOURS	
*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. (4730 11.0202)

Computing Sciences and Information Technology Department

Vocational Certificate

Required Courses

First Semester

CPCA	105	Introduction to Personal Computers: Windows1
		Word Processing I: MS Word*1
		Spreadsheets I: MS Excel*1
		Databases I: MS Access*1
		Windows for Microcomputers*1

Second Semester

		Spreadsheets II: MS Excel*1 Databases II: MS Access*2
CPCA	123	E-Presentation: MS PowerPoint*1 Word Processing II: MS Word*1
	141	Internet I*1
		CPCA Elective1 TOTAL CREDIT HOURS12

CPCA Electives

CPCA 118	Groupware*1
CPCA 121	Introduction to Project Management*1
CPCA 151	Internet II*1
CPCA 161	Introduction to Web Pages using HTML*1

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. *Prerequisite/Corequisite required

Web Application 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. (5610 11.0202)

Computing Sciences and Information Technology Department

Vocational Certificate

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

		Concepts/Techniques using Explorer*1
CPCA 114	Databases I:	MS Access*1
CWEB 106	Introduction	to Microsoft FrontPage*1
CWEB 105	Introduction	to Web Pages: Dreamweaver*1
	and either	
CWEB 116	Intermediate	Microsoft FrontPage*1
	or	
CWEB 115	Intermediate	Web Pages: Dreamweaver*1
CWEB 230	Introductory	E-Commerce Applications*1
	TOTAL CREDIT	HOURS

Second Semester

```
CWEB 135Web-Enabled Databases I using Access*.....1CWEB 145Web-Enabled Databases II using Access*.....1CWEB 240Intermediate E-Commerce Applications*.....1
```

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
```

Select two of the following three courses listed

CPCA	161	Introduction to Web Pages using HTML*	1
		Introduction to JavaScript*	
		Web Tools: Microsoft Office*	
		TOTAL CREDIT HOURS	
		TOTAL PROGRAM CREDIT HOURS1	4
*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.

(5150 11.0202)

Computing Sciences and Information Technology Department

Vocational 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
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
   200
CS
       Concepts of Programming Algorithms Using C++*.....4
        or
CS
    205 Concepts of Programming Algorithms using JAVA*.....4
CIS 235 Object-Oriented Programming Using C++*......4
        or
CS
    255 Basic Data Structures using JAVA*......4
```

First Semester

CIM	133	Screen Design*4
CIS	204	UNIX Operating System*3
		Advanced Topics in JAVA I*4
CIS	260	Database Management*4
		TOTAL CREDIT HOURS15

Second Semester

CIS	254	Interactive Media Concepts
		or
CIS	277	Active Server Pages.Net*4
CIS	280	Advanced Topics in JAVA II*4
		TOTAL CREDIT HOURS
		TOTAL PROGRAM CREDIT HOURS
*Dro	reauio	site/Corequisite required

isite/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.

 $(3760\ 12.0409)$

Cosmetology

Area Vocational School Certificate

AVCO 218 Advanced Esthetics Training*.....100 Note: TOTAL CONTACT HOURS.....100 *Prerequisite/Corequisite required

Cosmetology, A.A.S.

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

Specifically, this degree may be earned only by a student who has completed the JCCC cosmetology program. A student must have 19 additional credits from JCCC in order to receive a degree from Johnson County Community College. The 45 hours of documented transfer credit will be placed on the student's record when the student applies for graduation. 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. $(2090\ 12.0401)$

Cosmetology

Associate of Applied Science Degree

Sequence of Courses

AVCO 110	Introduction to Cosmetology21
AVCO 112	Clinical Cosmetology12
AVCO 114	Advanced Cosmetology*12
ENGL 121	Composition I*
	Communication Elective
	Humanities Elective
	Social Science and/or Economics Electives
	Science and/or Math Elective
	Electives
	Health and/or Physical Education Elective1
	TOTAL PROGRAM CREDIT HOURS64
*Prerequi	site/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.

(3700 12.0401)

Cosmetology

Area Vocational School Certificate

	Introduction to Cosmetology	
AVCO 112	Clinical Cosmetology50)0
	Advanced Cosmetology*50	
	TAL CONTACT HOURS	
*Prerequi	site/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.

(3740 12.0401)

Cosmetology

Area Vocational School Certificate

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. (3720 12.0409)

Cosmetology

Area Vocational School Certificate

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.

(3690 12.0410)

Cosmetology

Area Vocational School Certificate

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 81-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 1, 2006. Fall course transcripts are due January 15, 2007. 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

BEGINNING FALL 2008, STUDENTS WILL BE REQUIRED TO TAKE BIOL 231 MICROBIOLOGY LAB FOR TWO CREDIT HOURS.

(223A 51.0602)

Dental Hygiene Program

Associate of Applied Science Degree

Before beginning clinical courses

CHEM 122	Principles of Chemistry5			
ENGL 121	Composition I*			
	Human Anatomy4			
PSYC 130	Introduction to Psychology			
BIOL 230	Microbiology*3			
	TOTAL CREDIT HOURS			
Note: CHE	M 122 or BIOL 230 and one of the other			
prerequisites must be completed by Dec 1.				

First Semester

DHYG	121	Clinical Dental Hygiene I: Pre-Clinic*	5
DHYG	125	Developmental Dentistry*	2
DHYG	135	Dental Materials*	2
		Head and Neck Anatomy*	
SOC	122	Introduction to Sociology	3
		TOTAL CREDIT HOURS1	.4

Second Semester

DHYG	140	Clinical Dental Hygiene II*4
DHYG	142	Dental Radiology*2
DHYG	146	Periodontics*3
DHYG	148	Dental Health Education*2
BIOL	225	Human Physiology*4
		TOTAL CREDIT HOURS15

Summer

BIOL :	235	Gener	ral	Νı	utrition*					
Note:	BIOI	225	is	а	prerequisite	or	corequisite	to	BIOL	235

Humanities Elective3
Mathematics Elective*3
TOTAL CREDIT HOURS9

Third Semester

DHYG	221	Clinical Dental Hygiene III*6
DHYG	225	Pathology*
DHYG	230	Dental Therapeutics*
DHYG	240	Community Dental Health*2
		TOTAL CREDIT HOURS14

Fourth Semester

DHYG	245	Nitrous Oxide Analgesia*1
DHYG	250	Clinical Dental Hygiene IV*6
SPD	120	Interpersonal Communication3
		or
SPD	121	Public Speaking3
		or
SPD	125	Personal Communication3
		Health and/or Physical Education Elective1
		TOTAL CREDIT HOURS11
		TOTAL PROGRAM CREDIT HOURS
*Prei	requis	site/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 69 credit hours.

(2220 15.1301)

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 Drafting2
BOT	101	Computerized Keyboarding1
DRAF	130	Introduction to CAD Concepts: AutoCAD 2007*3
CPCA	105	Introduction to Personal Computers: Windows1
CPCA	138	Windows for Microcomputers*1
CPCA	141	Internet I*1

First Semester

DRAF	129	Interpreting Architectural Drawings2
DRAF	123	Interpreting Machine Drawings*2
DRAF	135	Graphic Analysis*
DRAF	230	Intermediate CAD: AutoCAD*
ENGL	121	Composition I*
MATH	133	Technical Mathematics I*4
		TOTAL CREDIT HOURS17

Second Semester

DRAF	238	Architectural Drafting*3
DRAF	231	CAD 3-D*
DRAF	252	Structural Drafting*3
		Technical Electives
MATH	134	Technical Mathematics II*5
		TOTAL CREDIT HOURS17

Third Semester

CET 211	Technical Statics and Design*
DRAF 222	2 Mechanical Drafting*3
DRAF 250	Electrical Drafting*3
	Health and/or Physical Education Elective1
ENGL 123	3 Technical Writing I*3

PHYS 133	Applied Physics*	5
	TOTAL CREDIT HOURS	18

Fourth Semester

DRAF DRAF		Industrial Design Applications*3 Architectural Desktop*2
DRAF	244	or Land Development Desktop*2
		or
DRAF	0	Mechanical Desktop*2
DRAF	225	Civil Drafting*3
		Social Science and/or Economics Elective3
		Humanities Elective
		Technical Electives3
		TOTAL CREDIT HOURS17
		TOTAL PROGRAM CREDIT HOURS

Technical Electives

CPCA	108	Word Processing I: MS Word*1						
CPCA	110	Spreadsheets I: MS Excel*1						
CPCA	111	readsheets II: MS Excel*1						
CPCA	114	abases I: MS Access*1						
CPCA	115	Databases II: MS Access*2						
CPCA	117	Databases III: MS Access*1						
CPCA	121	Introduction to Project Management*1						
CPCA	123	E-Presentation: MS PowerPoint*1						
CPCA	125	Word Processing II: MS Word*1						
CPCA	151	Internet II*1						
CPCA	158	Internet Application and Utilities*						
CPCA	161	Introduction to Web Pages using HTML*1						
DRAF	140	Topics in CAD I						
DRAF	232	CAD Applications Workstation Environment*2						
DRAF	233	CAD Administration2						
DRAF	240	Introduction to AutoLISP*2						
DRAF	242	Topics in CAD II*2						
DRAF	243	Architectural Desktop*2						
DRAF	244	Land Development Desktop*2						
DRAF	245	Mechanical Desktop*2						
DRAF	271	Drafting Internship I*3						
DRAF	272	Drafting Internship II*3						
CET	105	Construction Methods3						
CET	125	Construction Specifications*2						
CET	127	Construction Estimating*3						
CET	129	Construction Management3						
CET	270	Fluid Mechanics*						
MFAB	152	Manufacturing Materials and Processes						
ENGR	180	Engineering Land Surveying I*						
*Prer	requis	ite/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.

(4800 15.1301)

Computer Aided Drafting and Design

Vocational Certificate

Sequence of Required Courses

	Introduction to Personal Computers: Windows1
CPCA 138	Windows for Microcomputers*1
CPCA	Elective1

DRAF	130	Introduction to CAD Concepts: AutoCAD 2007*3
DRAF	230	Intermediate CAD: AutoCAD*
DRAF	231	CAD 3-D*
		TOTAL PROGRAM CREDIT HOURS12
*Prei	requi	site/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).

(2100 19.0708)

Early Childhood Education Program

Associate of Science Degree

First Semester

EDUC	130	Foundations of Early Childhood Education3
ENGL	121	Composition I*
		Math Elective*^3
PSYC	130	Introduction to Psychology
SPD	121	Public Speaking3
		TOTAL CREDIT HOURS15

Second Semester

		Early Childhood Curriculum I*
PSYC	215	Science course with Lab***
PSYC	218	or Human Development*

Summer

ENGL 122	Composition II*	. 3
	Humanities Elective	. 3
	TOTAL CREDIT HOURS	6

Third Semester

EDUC 231	Early Childhood Curriculum II*
EDUC 210	Creative Experiences for Young Children*3
EDUC 260	Observing and Interacting with Young Children*3
ANTH 130	World Cultures
	or
ANTH 125	Cultural Anthropology3
	or
SOC 131	Marriage and the Family3
	Science or Math
	TOTAL CREDIT HOURS16-17

Fourth Semester

Parenting*
Seminar: Early Childhood Education*
Student Teaching: Early Childhood Education*3
Humanities Elective
Specialization courses6
TOTAL CREDIT HOURS
TOTAL PROGRAM CREDIT HOURS

Area of Specialization - select one:

Child Care Administration

ACCT 121	Accounting I		
EDUC 280	Administration of	E Early Childhood	Program3

Children with Special Needs

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

Infant and Toddler Care and Education

EDUC 270	Early Childhood Development	3
EDUC 225	Infant and Toddler Education and Care*	3

School-Age Programs

^Recommended math course information

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

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Specific recommended course
MATH 171 College Algebra*.....3
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**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
			Biology Lab*	
			Science	
BIOL	131	Environmental	Science Lab*	.1

Physical Science

ASTR	122	Astronomy
GEOS	130	General Geology5
GEOS	140	Physical Geography3
GEOS	141	Physical Geography Lab*2
		Physical Science4

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 agencies such as The Midwest Whole Child Development Group or your local hospital; 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).

(6600 19.0708)

Early Childhood Education Program

Postsecondary Certificate

First Semester

		Foundations of Early Childhood Education3
EDUC	131	Early Childhood Curriculum I*
EDUC	270	Early Childhood Development
ENGL	121	Composition I*
		Interpersonal Communication**3
		or
SPD	121	Public Speaking3
		TOTAL CREDIT HOURS15

Summer Session

Second Semester

	Early Childhood Curriculum II*	
	Child Health, Safety and Nutrition	
	Business Mathematics*	
EDUC 235	Parenting*	2

Plus one of the following EDUC courses below:

EDUC 20)5 (Concepts in Early Childhood Education*^3		
EDUC 24	40 s	School-Age Programs and Curriculum I*		
EDUC 28	30 2	Administration of Early Childhood Program3		
EDUC 21	15 1	Young Children with Special Needs		
EDUC 22	25 3	Infant and Toddler Education and Care*		
	5	TOTAL CREDIT HOURS14		
	5	TOTAL PROGRAM CREDIT HOURS		
		ite/Corequisite required		
	++0	NOTE: **Course is not sensidered sudit in the esseriete of		

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.

Vocational Certificate

Required Courses

		National Electrical Code I4
		Electromechanical Systems4
ELTE	200	Commercial Wiring Methods*4
INDT	125	Industrial Safety
INDT	155	Workplace Skills1
		TOTAL PROGRAM CREDIT HOURS16
*Prei	requis	site/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.

(2260 46.0301)

Electrical Technology Program

Associate of Applied Science Degree

First Semester

		National Electrical Code I4
ELTE	125	Residential Wiring Methods*4
ELTE	123	Electromechanical Systems4
INDT	125	Industrial Safety
INDT	155	Workplace Skills1
		TOTAL CREDIT HOURS16

Second Semester

		Commercial Wiring Methods*4
ENGL	121	Composition I*
MATH	133	Technical Mathematics I*4
CPCA	105	Introduction to Personal Computers: Windows1
		Related Electives4
		TOTAL CREDIT HOURS16

Third Semester

DRAF	129	Interpreting Architectural Drawings2
ELTE	205	Industrial Electrical Wiring*4
ELTE	210	Code Certification Review*3
		Electrical Internship I*3
HPER	200	First Aid and CPR2
		Social Science and/or Economics Elective3
		TOTAL CREDIT HOURS17

Fourth Semester

ENGL	123	Technical Writing I*3
ELTE	215	Generators, Transformers and Motors*4
CET	105	Construction Methods3
		Humanities Elective3
		Related Electives3
		TOTAL CREDIT HOURS16
		TOTAL PROGRAM CREDIT HOURS65

Related Electives

ELTE	291	Independent Study1-7		
CPCA	128	PC Applications: Office 20033		
DRAF	120	Introduction to Drafting2		
DRAF	130	Introduction to CAD Concepts: AutoCAD 2007*3		
DRAF	250	Electrical Drafting*3		
ELEC	120	Introduction to Electronics		
ELEC	125	Digital Electronics I4		
ELEC	131	Introduction to Sensors and Actuators3		
ELEC	133	Programmable Controllers		
ELEC	165	Advanced Programmable Controllers*3		
ELEC	185	LAN Cabling and Installation3		
HVAC	121	Basic Principles of HVAC*4		
MFAB	121	Introduction to Welding4		
BUS	140	Principles of Supervision3		
BUS	145	Small Business Management3		
ENTR	142	Fast Trac Business Plan3		
RRT	165	Railroad Safety, Quality and Environment3		
*Prer	*Prerequisite/Corequisite required			

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.

(5200 46.0301)

Electrical Technology Program

Vocational Certificate

First Semester

		National Electrical Code I	
ELTE	125	Residential Wiring Methods*	4
		Electromechanical Systems	
		Industrial Safety	
		TOTAL CREDIT HOURS1	5

Second Semester

		Commercial Wiring Methods*4
ELTE	210	Code Certification Review*3
ELTE	271	Electrical Internship I*3
		Technical Electives
INDT	155	Workplace Skills1
		TOTAL CREDIT HOURS14
		TOTAL PROGRAM CREDIT HOURS

Technical Electives

ELTE 205	Industrial Electrical Wiring*4
ELTE 291	Independent Study1-7
ELTE 215	Generators, Transformers and Motors*4

ELEC 185	LAN Cabling and Installation3
CET 105	Construction Methods3
draf 120	Introduction to Drafting2
draf 129	Interpreting Architectural Drawings2
ELEC 120	Introduction to Electronics
ELEC 126	Microcomputer A+ Preparation4
ELEC 125	Digital Electronics I4
ELEC 131	Introduction to Sensors and Actuators
ELEC 133	Programmable Controllers
ELEC 165	Advanced Programmable Controllers*
HVAC 121	Basic Principles of HVAC*4
MFAB 121	Introduction to Welding4
*Prerequi	site/Corequisite required

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.

(2270 46.0301)

Electrical Technology Program

Associate of Applied Science Degree

First Semester

DRAF	129	Interpreting Architectural Drawings2
MFAB	180	Blueprint and Symbols Reading for Welders2 or
HVAC	143	Reading Blueprints and Ladder Diagrams2
ENGL		Composition I*
INDT	125	Industrial Safety
HVAC		Electromechanical Systems4
MATH	133	Technical Mathematics I*4
		TOTAL CREDIT HOURS16

Second Semester

		PC Applications: Office 20033
ELTE	122	National Electrical Code I4
ENGL	123	Technical Writing I*3
INDT	155	Workplace Skills1
		Technical Electives5
		TOTAL CREDIT HOURS16

Third Semester

	Survey of Economics	
120	Welding Processes	3 3 5

Fourth Semester

EMS 121 CPR I - Basic Life Support for Healthcare Provider...1

Humanities Elective3
Related Electives3
Technical Electives9
TOTAL CREDIT HOURS16
TOTAL PROGRAM CREDIT HOURS64

Technical Electives

AUTO	165	Automotive Engine Repair*4
AUTO	210	Advanced Engine Repair*3
CET	105	Construction Methods3
ELEC	120	Introduction to Electronics
ELEC	133	Programmable Controllers
ELEC	165	Advanced Programmable Controllers*
ELTE	200	Commercial Wiring Methods*4
ELTE	205	Industrial Electrical Wiring*4
ELTE	271	Electrical Internship I*3
HVAC	150	Refrigerant Management and Certification1
HVAC	121	Basic Principles of HVAC*4
HVAC	146	Plumbing Systems Applications3
HVAC	221	Commercial Systems: Air Conditioning*4
HVAC	223	Commercial Systems: Heating*4
HVAC	271	HVAC Internship*
MFAB	125	Advanced Gas and Arc Welding*4
MFAB	170	Basic Machine Tool Processes4
MFAB	240	Metallurgy2
MFAB	140	Maintenance Repair Welding*3
MFAB	271	Metal Fabrication Internship*3

Related Electives

BUS	140	Principles of Supervision
		Principles of Management3
CET	129	Construction Management3
CET	140	Civil Engineering Materials*3
Note	: Mu	st take concurrent with Math 133

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CPCA 105 Introduction to Personal Computers: Windows.....1
CPCA 121 Introduction to Project Management*.....1
CPCA 141 Internet I*.....1
IT 200 Networking Technologies......3
*Prerequisite/Corequisite required
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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.

(5210 46.0301)

Electrical Technology Program

Vocational Certificate

Required Courses

DRAF	129	Interpreting Architectural Drawings2
MFAB	180	or Blueprint and Symbols Reading for Welders2
		or Reading Blueprints and Ladder Diagrams2 Electromechanical Systems4

INDT 125 MFAB 121	Industrial Safety
	or
MFAB 127	Welding Processes
	TOTAL PROGRAM CREDIT HOURS

Technical Electives

ELEC	120	Introduction to Electronics
ELEC	133	Programmable Controllers
ELEC	165	Advanced Programmable Controllers*
ELTE	122	National Electrical Code I4
ELTE	200	Commercial Wiring Methods*4
ELTE	205	Industrial Electrical Wiring*4
HVAC	121	Basic Principles of HVAC*4
CET	105	Construction Methods3
MFAB	125	Advanced Gas and Arc Welding*4
MFAB	140	Maintenance Repair Welding*3
MFAB	170	Basic Machine Tool Processes4
MFAB	240	Metallurgy2
INDT	155	Workplace Skills1
*Pre	requis	site/Corequisite required

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.

(4020 46.0301)

Electrical Technology Program

Vocational Certificate

First Semester

		Electromechanical Systems
		or
ELTE	200	Commercial Wiring Methods*4
INDT	125	Industrial Safety
INDT	155	Workplace Skills1
		TOTAL CREDIT HOURS12

Second Semester

ELEC	133	Programmable Controllers
ELTE	205	Industrial Electrical Wiring*4
ELTE	210	Code Certification Review*3
ELTE	215	Generators, Transformers and Motors*4
		TOTAL CREDIT HOURS14
		TOTAL PROGRAM CREDIT HOURS
*Prei	requis	site/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).

(4030 46.0301)

Vocational Certificate

Required Courses

ELTE 122	National Electrical Code I4		
	Electromechanical Systems4		
	Residential Wiring Methods*4		
INDT 125	Industrial Safety3		
INDT 155	Workplace Skills1		
	TOTAL PROGRAM CREDIT HOURS16		
*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.

(2690 47.0101)

Electronics Technology

Associate of Applied Science Degree

First Semester

ELEC	120	Introduction to Electronics
ELEC	126	Microcomputer A+ Preparation4
ELEC	125	Digital Electronics I4
MATH	133	Technical Mathematics I or higher*4
ENGL	121	Composition I*3
		TOTAL CREDIT HOURS

Second Semester

		Circuit Analysis I*	
ELEC	225	Digital Electronics II*	3
MATH	134	Technical Mathematics II or higher*	5
SPD	125	Personal Communication	3
		Humanities Elective	3
		TOTAL CREDIT HOURS1	.7

Third Semester

	Electronic Devices I*4
ELEC 140	Circuit Analysis II*3
ENGL 123	Technical Writing I*3
	Technical Elective3
	Social Science/Economics Elective
	TOTAL CREDIT HOURS16

Fourth Semester

		Electronic Devices II*
		Technical Elective
PHYS	133	Applied Physics or higher*5
		Health and/or Physical Education Elective1
		TOTAL CREDIT HOURS16
		TOTAL PROGRAM CREDIT HOURS67

Technical Electives

ELEC	131	Introduction to Sensors and Actuators3
ELEC	133	Programmable Controllers
ELEC	165	Advanced Programmable Controllers*
ELEC	175	Telecommunications*3
ELEC		LAN Cabling and Installation3
ELEC	245	Microprocessors*3
ELEC	250	Microcomputer Maintenance*3
		Electronics Internship I*1
ELEC	272	Electronics Internship II*1
*Prei	requis	site/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.

(4720 47.0101)

Electronics Technology

Vocational Certificate

Required Courses

ELEC	131	Introduction to Sensors and Actuators	3
ELEC	133	Programmable Controllers	3
		Advanced Programmable Controllers*	
		TOTAL PROGRAM CREDIT HOURS	9
*Prei	requis	site/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.

Vocational Certificate

Required Courses

ELEC	126	Microcomputer A+ Preparation4
CPCA	128	PC Applications: Office 2003
ELEC		LAN Cabling and Installation
IT	205	Implementing Windows Client*
ELEC	250	Microcomputer Maintenance*3
BUS	225	Human Relations3
		or
SPD	125	Personal Communication3
		TOTAL PROGRAM CREDIT HOURS
*Prei	requis	site/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. (4400)

Electronics Technology

Vocational Certificate

ELEC 123	Smart House Technology3
ELEC 126	Microcomputer A+ Preparation4
ELTE 122	National Electrical Code I4
ELTE 123	Electromechanical Systems4
	or
HVAC 123	Electromechanical Systems4
ELTE 125	Residential Wiring Methods*4
IT 200	Networking Technologies3
ELEC 185	LAN Cabling and Installation
INDT 155	Workplace Skills1
	TOTAL PROGRAM CREDIT HOURS
*Drereaui	site/Corequisite required

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. Additionally, students will arrange to participate as an observer with a local EMS service. Students participate in seven hours of lecture and two hours of lab a week. Students are also required to attend approximately two Saturday classes lasting between four and eight hours each. Saturday dates and times will be announced during the first class session.

Students successfully completing this course 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.

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 will be allowed to sit for the certification examinations administered by the Kansas Board of Emergency Medical Services.

(248A 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 Physiology5
BIOL	140	Human Anatomy4
BIOL		Human Physiology*4
ENGL	121	Composition I*
SOC	125	Social Problems
		or
		Social Science/Economics Elective
PHIL	143	Ethics
		or Humanities Elective3
		Health/Physical Education Elective1
		Electives
		{depending on which science
		class(es) are taken}
		TOTAL GENERAL EDUCATION
		CREDIT HOURS

First Semester

EMS	220	MICT I*1	0
EMS	225	MICT II*1	.0
		TOTAL CREDIT HOURS2	20

Second Semester

EMS	230	MICT	III	Clinicals*	12
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Third Semester

EMS	271	MICT IV	Field	Intern	ship*.		 	
		TOTAL P	ROFESSI	ONAL C	REDIT	HOURS	 	47
		TOTAL P	ROGRAM	CREDIT	HOURS		 	64-65
*Pre	requis	site/Cor	equisit	e requ	ired			

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.

(486A 51.0904)

Emergency Medical Science

Vocational Certificate

First Semester

EMS	220	MICT I*	10
EMS	225	MICT II*	10
		TOTAL CREDIT HOURS	20

Second Session

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EMS 230 MICT III Clinicals*.....12
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Third Semester

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EMS 271 MICT IV Field Internship*......15
TOTAL PROGRAM CREDIT HOURS.......47
*Prerequisite/Corequisite required
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Emergency Medical Technician Certificate

(Major Code 4760; 51.0904) Emergency Medical Science

Vocational Certificate

Required Course

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EMS 130 Emergency Medical Technician*......9
TOTAL PROGRAM CREDIT HOURS......9
*Prerequisite/Corequisite required
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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.

(4810 52.0701)

Entrepreneurship

Vocational Certificate

Required Courses

ENTR	120	Introduction to Entrepreneurship2	
ENTR	180	Opportunity Analysis2	
		Fast Trac Business Plan3	
		TOTAL PROGRAM CREDIT HOURS7	

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.

(2340 52.0701)

Entrepreneurship

Associate of Applied Science Degree

First Semester

ENTR	120	Introduction to Entrepreneurship2
BUS	230	Marketing
BUS	225	Human Relations
ENGL	121	Composition I*
MATH	120	Business Math or higher*3
		Health and/or Physical Education Elective1
		TOTAL CREDIT HOURS15

Second Semester

ENTR ENTR BUS MKT	195 150	Opportunity Analysis
ACCT	111	Small Business Accounting3
		or
ACCT	121	Accounting I
ECON	132	Survey of Economics3
		or
ECON	230	Economics I
		or
ECON	231	Economics II
		TOTAL CREDIT HOURS17

Third Semester

ENTR 131	Financial Management for Small Business*2
ENTR 160	Legal Issues for Small Business2
ENTR 210	Entrepreneurship Internship I*1
BUS 140	Principles of Supervision3
HIST 141	U.S. History Since 18773
CIS 124	Introduction to Computer Concepts and Applications3
	and
	CPCA/CDTP elective1
Note: CPC	A 105/106 will not meet this one hour requirement.

	CPCA/CDTP electives4
ENTR 225	Family Business*3
	TOTAL CREDIT HOURS18

Fourth Semester

or

ENTR	220	Entrepreneurial Marketing*2
ENTR	142	Fast Trac Business Plan3
ENTR	215	Entrepreneurship Internship II*1
ENTR	190	Small Business Analysis*2
PHIL	138	Business Ethics1
		Humanities Elective3
ENTR	240	Funding Acquisition for Entrepreneurs*2
		TOTAL CREDIT HOURS14
		TOTAL PROGRAM CREDIT HOURS64

Additional Suggested Coursework

BUS	120	Management Attitudes and Motivation3
BUS	123	Personal Finance3
BUS	235	Introduction to International Business
BUS	141	Principles of Management3
BUS	243	Human Resource Management3
BUS	261	Business Law I
BUS	263	Business Law II*
CPCA	105	Introduction to Personal Computers: Windows1
CPCA	108	Word Processing I: MS Word*1
CPCA	110	Spreadsheets I: MS Excel*1
CPCA	111	Spreadsheets II: MS Excel*1
CPCA	114	Databases I: MS Access*1
CPCA	115	Databases II: MS Access*2
CPCA	141	Internet I*1
CPCA	151	Internet II*1
FASH	231	Merchandising Planning and Control*
HMGT	121	Perspectives of Hospitality Management3
MKT	121	Retail Management3
MKT	202	Consumer Behavior3
MKT	234	Services Marketing*3
*Prei	requi	site/Corequisite required

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. (5080 52.0701)

Entrepreneurship

Vocational Certificate

Prerequisites for Required Courses

ACCT 121	Accounting I
	or
ACCT 111	Small Business Accounting3

Required Courses

ENTR ENTR ENTR ENTR CIS	180 160 210	Introduction to Entrepreneurship
		CPCA/CDTP electives
ENTR	131	Financial Management for Small Business*2
ENTR	195	Franchising*
ENTR	220	Entrepreneurial Marketing*2
ENTR	142	Fast Trac Business Plan
ENTR	190	Small Business Analysis*2
MKT	134	Professional Selling
ENTR	225	Family Business
ENTR	240	Funding Acquisition for Entrepreneurs*
		TOTAL PROGRAM CREDIT HOURS

Additional Suggested Coursework

BUS	120	Management Attitudes and Motivation3	
BUS	123	Personal Finance	
BUS	141	Principles of Management3	
BUS	235	Introduction to International Business	
BUS	243	Human Resource Management3	
BUS	261	Business Law I	
BUS	263	Business Law II*	
CPCA	105	Introduction to Personal Computers: Windows1	
CPCA	108	Word Processing I: MS Word*1	
CPCA	110	Spreadsheets I: MS Excel*1	
CPCA	111	Spreadsheets II: MS Excel*1	
CPCA	114	Databases I: MS Access*1	
CPCA	115	Databases II: MS Access*2	
CPCA	141	Internet I*1	
CPCA	151	Internet II*1	
FASH	231	Merchandising Planning and Control*3	
HMGT		Perspectives of Hospitality Management3	
MKT	121	Retail Management3	
MKT	202	Consumer Behavior3	
ENTR	215	Entrepreneurship Internship II*1	
*Prerequisite/Corequesite required			

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.

(2520 19.0906)

Fashion Merchandising and Design

Associate of Applied Science Degree

First Semester

FASH	277	Fashion Seminar: Career Options2
FASH	283	Fashion Internship I1
FASH	121	Fashion Fundamentals
FASH	220	CAD Apparel Design
MKT	134	Professional Selling
ENGL	121	Composition I*
FASH	135	Image Management1
		TOTAL CREDIT HOURS16

Second Semester

		Consumer Product Evaluation
		Health and/or Physical Education Elective1
MATH	120	Business Math or higher*3
		Textiles
FASH	125	Visual Merchandising3
BUS	150	Business Communications*3
		TOTAL CREDIT HOURS17

Third Semester

		Human Relations
		Marketing Communications3
MKT	121	Retail Management3
ECON	132	Survey of Economics3
ECON	230	Economics I
		Electives

Fourth Semester

1
3
3
3
3
3
.16
.65
•

Recommended Electives

FASH 123	Apparel Construction I4
	Fashion Illustration I3
FASH 140	Garment Design I*3
FASH 224	History of Costume
FASH 268	Field Study: The Market Center*
*Prerequi	site/Corequisite required

Fashion Design Entrepreneurship Certificate

The fashion design entrepreneurship certificate prepares students to realize their entrepreneurial dream of opening 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. Upon successful completion, students should be prepared to develop and sustain their own fashion design business venture.

(4110 19.0906)

Fashion Merchandising and Design

Vocational Certificate

Required Courses

TRATE 101	
FASH 121	Fashion Fundamentals3
FASH 123	Apparel Construction I4
FASH 130	Fashion Illustration I3
FASH 150	Textiles
ENTR 120	Introduction to Entrepreneurship2
ENTR 180	Opportunity Analysis2
FASH 124	Apparel Construction II*4
FASH 220	CAD Apparel Design3
FASH 127	CAD: Pattern Design I*4
	or
FASH 140	Garment Design I*3
	or
FASH 143	Tailoring*
ENTR 142	Fast Trac Business Plan3
FASH 283	Fashion Internship I1
	TOTAL PROGRAM CREDIT HOURS
*Prerequis	site/Corequisite required

Additional Suggested Coursework

ENTR	220	Entrepreneurial Marketing*	2
ENTR	195	Franchising*	3
ENTR	131	Financial Management for Small Business*	2
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.

Associate of Applied Science Degree

First Semester

FASH	121	Fashion Fundamentals3
FASH	123	Apparel Construction I4
FASH	135	Image Management1
FASH	220	CAD Apparel Design
FASH	277	Fashion Seminar: Career Options2
ENGL	121	Composition I*
		TOTAL CREDIT HOURS16

Second Semester

FASH	130	Apparel Construction II*
		History of Costume

Third Semester

	CAD: Pattern Design I*4 Consumer Product Evaluation3
	Fashion Internship I1
MATH 120	Business Math or higher*3
	Fashion Electives3
	Elective
	TOTAL CREDIT HOURS16

Fourth Semester

		<pre>Fashion Portfolio Development*2 Capstone: Industry Topics*3</pre>
FASH	284	Fashion Internship II1
FASH	140	Garment Design I*
		Humanities Electives3
		Social Science and/or Economics Elective3
		TOTAL CREDIT HOURS15
		TOTAL PROGRAM CREDIT HOURS64

Suggested Fashion Electives

		CAD: Pattern Design II*4
FASH	143	Tailoring*4
FASH	230	Fashion Illustration II*3
FASH	268	Field Study: The Market Center*3
BUS	225	Human Relations
MKT	134	Professional Selling
*Prer	requis	site/Corequisite required

Fashion Merchandising Entrep Certificate

The fashion merchandising entrepreneurship certificate prepares students to realize their entrepreneurial dream of opening 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. Upon successful completion, students should be prepared to develop and sustain their own fashion retail business venture.

(4150 19.0906)

Fashion Merchandising and Design

Vocational Certificate

Prerequisite for Required Courses

Required Courses

FASH 121	Fashion Fundamentals3
FASH 125	Visual Merchandising3
MKT 134	Professional Selling
ENTR 120	Introduction to Entrepreneurship2
ENTR 180	Opportunity Analysis2
FASH 150	Textiles
FASH 242	Consumer Product Evaluation3
FASH 231	Merchandising Planning and Control*
MKT 121	Retail Management3
ENTR 142	Fast Trac Business Plan3
FASH 283	Fashion Internship I1
	TOTAL PROGRAM CREDIT HOURS

Additional Suggested Coursework

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.

(7200 19.0906)

Fashion Merchandising and Design

Vocational Certificate

FASH	121	Fashion Fundamentals3
FASH	125	Visual Merchandising3
		Fashion Elective
MKT	121	Retail Management3
ITMD	127	Elements of Floral Design1
ITMD	147	Lighting Basics*1
FASH	283	Fashion Internship I1
FASH	225	Store Planning*3
		TOTAL PROGRAM CREDIT HOURS
*Prer	equis	site/Corequisite required

Recommended Fashion Electives for Certificate

FASH 130	Fashion Illustration I3	
	Marketing Communications3	
FASH 150	Textiles	
FASH 242	Consumer Product Evaluation3	

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.

 $(4040\ 52.1902)$

Fashion Merchandising and Design

Vocational Certificate

Prerequisites for Required Courses

BUS	230	Marketing
FASH	125	Visual Merchandising3

Required Courses

FASH ENTR ENTR	120	Fashion Fundamentals
ACCT		Accounting I
ACCT		Small Business Accounting3
ITMD TTMD		Elements of Floral Design1 Lighting Basics*1
FASH		Store Planning*
FASH	130	Fashion Illustration I3
FASH	132	or Marketing Communications3
L'ADII	192	or
FASH	150	Textiles
FASH	242	Consumer Product Evaluation
MKT	121	Retail Management3
ENTR	131	Financial Management for Small Business*2
ENTR	142	Fast Trac Business Plan3
ENTR	220	Entrepreneurial Marketing*2
FASH	283	Fashion Internship I
+ D		TOTAL PROGRAM CREDIT HOURS
*Prei	requis	site/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. (2320 43.0203)

Associate of Arts Degree

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
BUS	140	Principles of Supervision	3
		College Algebra equivalent or higher*	
FIRE		Fire Tactics and Strategy*	
		Social Science Elective	3
		Health and/or Physical Education Elective	L
		TOTAL CREDIT HOURS16	5

Second Semester

ENGL	122	Composition II*
		Principles of Management
FIRE	224	Incident Command Systems*3
		Humanities Elective3
		Physical Science, with lab4
		TOTAL CREDIT HOURS16

Third Semester

FIRE	135	Building and Fire Codes*	,
FIRE	130	Fire Investigation*1	
FIRE	222	Fire Science Law*	
		Technical Electives	,
		Oral Communication	
		Science and/or Math Elective	
		TOTAL CREDIT HOURS16	,

Fourth Semester

FIRE	220	Fire Administration*	.3
FIRE	250	Fire Service Science Instructional Methodology*	.3
		Technical Electives	.4
		Humanities Electives	.3
		Social Science Elective	. 3
		TOTAL CREDIT HOURS	16
		TOTAL PROGRAM CREDIT HOURS	54

Technical Electives

FIRE 110	Essentials of Fire Fighting*9
EMS 128	EMS First Responder5
EMS 130	Emergency Medical Technician*
EMS 220	MICT I*10

EMS	225	MICT II*
CS	200	Concepts of Programming Algorithms Using C++*4
CS	205	Concepts of Programming Algorithms using JAVA*4
CS	210	Discrete Structures I*3
CIS	162	Database Programming*4
CIS	242	Introduction to System Design and Analysis*3
CIS	243	Object-Oriented Analysis and Design*4
CIS	258	Operating Systems*3
CIS	204	UNIX Operating System*3
BUS	120	Management Attitudes and Motivation
BUS	121	Introduction to Business3
BUS	145	Small Business Management3
BUS	150	Business Communications*3
BUS	225	Human Relations3
BUS	230	Marketing
BUS	243	Human Resource Management3
BUS	261	Business Law I
POLS	245	Introduction to Public Administration3
*Pre	requi	site/Corequisite required

Game Art & Music Advanced Certificate

The advanced certificate in game art 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. (4170 11.0899)

Computing Sciences and Information Technology Department

Vocational 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

CDTP	135	Desktop Photo Manipulation I: Photoshop*1
CS	200	Concepts of Programming Algorithms Using C++*4
CIS	235	Object-Oriented Programming Using C++*4

Required Courses

ANI	120	Conceptual Art for Animation1
ANI	145	Introduction to 3D Animation*3
ANI	245	Character Animation*3
GAME	101	Computer Game Creation4
GAME	140	Game Programming I - 2D*4
GAME	150	Game Programming II - 2D*4
GAME	200	Game Design3
GAME	230	Game Programming III -3D*4
MATH	191	Math & Physics for Games I*4
		or
PHYS	191	Math & Physics for Games I*4
MUS	156	MIDI Music Composition
		TOTAL PROGRAM CREDIT HOURS
*Prer	requis	site/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. (4160 11.0899)

Computing Sciences and Information Technology Department

Vocational 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 242 Introduction to System Design and Analysis*.....3
CS 200 Concepts of Programming Algorithms Using C++*.....4
CIS 235 Object-Oriented Programming Using C++*.....4
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Required Courses

CIS	262	Project Management*3
GAME	101	Computer Game Creation4
GAME	102	The Business of Games
GAME	140	Game Programming I - 2D*4
GAME	150	Game Programming II - 2D*4
GAME	200	Game Design3
GAME	230	Game Programming III -3D*4
MATH	191	Math & Physics for Games I*4
		or
PHYS	191	Math & Physics for Games I*4
		TOTAL PROGRAM CREDIT HOURS
*Prer	equis	site/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. (2650 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

First Semester

CS 200 Concepts of Programming Algorithms Using C++*.....4 GAME 101 Computer Game Creation.....4 GAME 102 The Business of Games.....3

Composition I*
or Any Precalculus/Calculus Course*

Second Semester

		Game Programming I - 2D*4 Object-Oriented Programming Using C++*4
		or
CS	250	Basic Data Structures using C++*4
ANI	120	Conceptual Art for Animation1
GAME	200	Game Design
MATH	191	Math & Physics for Games I*4
		or
PHYS	191	Math & Physics for Games I*4
		TOTAL CREDIT HOURS16

Third Semester

		Digital Narratives*
		Game Programming II -3D*4
		Introduction to 3D Animation*
GAME	180	Artificial Intelligence for Games*
		Health and/or Physical Education Elective1
		TOTAL CREDIT HOURS18

Fourth Semester

250	Game Programming IV - Capstone*4
110	Flash Gaming4
155	Classical Mythology3
	Social Science and/or Economics Elective
140	Writing for Interactive Media*3
	TOTAL CREDIT HOURS17
	TOTAL PROGRAM CREDIT HOURS
	110 155

Additional Suggested Coursework

		Interactive Media Assets*4
ANI	245	Character Animation*3
CIS	243	Object-Oriented Analysis and Design*4
CIS	262	Project Management*3
MUS	156	MIDI Music Composition3
*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. (4140 11.0899)

Computing Sciences and Information Technology Department

Vocational Certificate

Prerequisites for Required Courses

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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
```

BUS	230	Marketing
		Concepts of Programming Algorithms Using C++*4
CIS	235	Object-Oriented Programming Using C++*4

Required Courses

ENTR	120	Introduction to Entrepreneurship2
ENTR	180	Opportunity Analysis2
ENTR	142	Fast Trac Business Plan3
ENTR	220	Entrepreneurial Marketing*2
GAME	101	Computer Game Creation4
GAME	140	Game Programming I - 2D*4
GAME	150	Game Programming II - 2D*4
GAME	200	Game Design3
GAME	230	Game Programming III -3D*4
MATH	191	Math & Physics for Games I*4
		or
PHYS	191	Math & Physics for Games I*4
		TOTAL PROGRAM CREDIT HOURS
*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.

(4130 11.0899)

Computing Sciences and Information Technology Department

Vocational 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:

Required Courses

ENGL	150	Digital Narratives*3	
ENGL	140	Writing for Interactive Media*	
GAME	101	Computer Game Creation4	
GAME	140	Game Programming I - 2D*4	
GAME	150	Game Programming II - 2D*4	
GAME	200	Game Design3	
GAME	230	Game Programming III -3D*4	
HUM	155	Classical Mythology3	
MATH	191	Math & Physics for Games I*4	
		or	
PHYS	191	Math & Physics for Games I*4	
		TOTAL PROGRAM CREDIT HOURS	
*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. (4120 11.0899)

Computing Sciences and Information Technology Department

Vocational 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 CIS 235 Object-Oriented Programming Using C++*.....4

Required Courses

GAME		Computer Game Creation4
GAME	110	Flash Gaming4
GAME		Game Programming I - 2D*4
GAME	150	Game Programming II - 2D*4
GAME	180	Artificial Intelligence for Games*
GAME	200	Game Design3
GAME	230	Game Programming III -3D*4
MATH	191	Math & Physics for Games I*4
		or
PHYS	191	Math & Physics for Games I*4
		TOTAL PROGRAM CREDIT HOURS
*Prerequisite/Corequisite required		

Geographic Info Systems Cert

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.

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

Vocational Certificate

Certificate granted by Metropolitan Community College

Specific Program Requirements-must be taken MCC

 KEOG 224Applications in Geographic Information Systems*.....3KEOG 228Administrative Issues in GIS*.....1KEOG 230Internship in Cooperating GIS Facility*.....1-3

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*
CIS	162	Database Programming*4
		or
CIS	260	Database Management*4
GEOS	145	World Regional Geography3
GEOS	130	General Geology5
		or
GEOS	140	Physical Geography3
		and
GEOS	141	Physical Geography Lab*2

Select two courses from the following list:

ADMJ BIOL		Introduction to Administration of Justice3 Principles of Biology
BIOL BIOL BIOL BIOL	125 127	and Principles of Biology Lab*1 General Botany5 General Zoology5 Environmental Science3
BIOL BUS DRAF	230	and Environmental Science Lab*1 Marketing3 Introduction to Drafting2 and
	DRAE	Introduction to CAD Concepts: AutoCAD 2007*3 F 120 and DRAF 130 must both be taken and only ONE course.
ECON ECON CIS	231	Economics I
CIS GEOS		Database Management*
GEOS GEOS *Prei	130	Physical Geography Lab*

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: Some 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. (2290 50.0402)

Graphic Design

Associate of Applied Science Degree

Transformation Semester

		Design 2D	
GDES	120	Introduction to Graphic Design	3
		Humanities Electives	3
		TOTAL CREDIT HOURS)

First Semester--Fall

ART	129	Design Color
GDES	130	Drawing and Media Methods 1*3
GDES	132	Typography*3
		Fundamentals of Photography3
ENGL	121	Composition I*
		TOTAL CREDIT HOURS15

Second Semester--Spring

ART	127	Design 3D*3
GDES	131	Drawing and Media Methods 2*3
GDES	134	Layout Design*
GDES	140	Technical Processes*3
		Humanities Electives
		TOTAL CREDIT HOURS15

Third Semester--Fall

GDES		Drawing and Media Methods 3*3
GDES	231	Advanced Typography*3
GDES	235	Production Methods*3
PHOT	123	Studio Photography*3
		or
CIM	135	Digital Imaging and Video*3
		Social Science and/or Economics Elective3
		Health and/or Physical Education Elective1
		TOTAL CREDIT HOURS16

Fourth Semester--Spring

GDES	236	Electronic Production*	3
GDES	244	Communication Systems*	3
GDES	245	Advanced Design Practice*	3
GDES	272	Professional Preparation*	3
		Science and/or Math Elective*	
		Technical/Studio Elective	L
		TOTAL CREDIT HOURS16	5
		TOTAL PROGRAM CREDIT HOURS7	L

Technical/Studio Electives

CDTP 151	Desktop Publishing II: QuarkXpress*1
CDTP 171	Desktop Publishing III: QuarkXpress*1
CDTP 145	Desktop Illustration I: Illustrator*1
CDTP 155	Desktop Photo Manipulation II: Photoshop*1
CDTP 165	Desktop Illustration II: Illustrator*1
CDTP 185	Desktop Illustration III: Illustrator*1
CWEB 105	Introduction to Web Pages: Dreamweaver*1
CWEB 115	Intermediate Web Pages: Dreamweaver*1

CWEB 130	Introduction to Flash*1
CPCA 123	E-Presentation: MS PowerPoint*1
PHOT 122	Advanced Photography*+3
PHOT 127	Color Photography*+3
ART 135	Painting I
ART 136	Painting II*
ART 172	Watercolor Painting3
art 231	Life Drawing I*
ART 232	Life Drawing II*3
GDES 275	Graphic Design Internship* [^] 1
*Prerequi	site/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

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.

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

BIOL	144	Human Anatomy and Physiology	5
		Human Pathophysiology*	
ENGL	121	Composition I*	3
SPD	121	Public Speaking	3
		Elective (Intro to Psych strongly recommended)	3

American Institutions

HIST 140	U.S. History to 18773
HIST 141	U.S. History Since 18773
POLS 122	Political Science3 or
POLS 124	American National Government3
POLS 126	State and Local Government3

Specific Program Requirements-must be taken at JCCC

CIS 124 Introduction to Computer Concepts and Applications...3 CPCA 110 Spreadsheets I: MS Excel*.....1 CPCA 114 Databases I: MS Access*.....1 CPCA 141 Internet I*.....1

Specific Program Requirements-taken at MCC-Penn Valley

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KSS 300 Affiliate Social Science.....1-3
KMRT 101 Introduction to the Health Information Technology ...2
KMRT 102 Health Records Systems, Analysis and Control.....3.5
KMRT 106
KMRT 108
       Health Care Statistics*.....3
       Legal Aspects of the Health Information Technology*...2
KMRT 109
       Directed Practice I*.....2.5
KMRT 110
       Pharmacology*.....1.5
KMRT 200 Introduction to Classification Systems......1
KMRT 202 Class. Systms/Nomenclatures/Indexes & Registers I*...4
KMRT 203
      Directed Practice II*.....2
KMRT 205
KMRT 206
KMRT 207
KMRT 208
       Specialized Health Records Systems......2
       Class. System/Nomenclature/Index & Register II*.....3
       Directed Practice III*.....2
KMRT 210
      Classif Systems & Nomenclatures/Ambulatory Care*....3
KMRT 211 Organization & Administration in Health Informat*....3
KMRT 212 Intro to Medical Insurance & Office Procedures*.....1
       *Prerequisite/Corequisite required
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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.

The safety of clients in long-term care is also discussed and demonstrated by students in this course. Enrollees in this course must show proof of Kansas CNA certification and complete a reading level exam/assessment prior to admission. 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.

(3560 51.2603)

Health Occupations

Area Vocational School Certificate

Required Course

Certified Medication Aide Update Certificate

Certified medication aides in Kansas are required to obtain 15 hours of continuing education every two years to renew the CMA certificate. This course meets the state requirements for recertification. This 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. (3600 51.2603)

Health Occupations

Area Vocational School Certificate

Required Course

AVHO 108 Certified Medication Aide Update*.....15 Note: TOTAL CONTACT HOURS.....15

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.

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.

Enrollees for this course must pass a reading level exam/assessment prior to admission. A current CPR for Health Care Providers card and documentation of current TB test is required. Upon successful completion of the course, students will be scheduled to take the Kansas CNA examination.

This course is offered in a classroom setting as well as online.

(3530 51.1614)

Health Occupations

Area Vocational School Certificate

Required Course

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.

Enrollees for CNA refresher course must show proof of certification as a Kansas CNA.

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.

(3540 51.1614)

Health Occupations

Area Vocational School Certificate

Required Course

AVHO 103 Certified Nurse Aide Refresher Course*......21

Dental Assisting, A.A.S.

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.

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

		Composition I*	
MATH	116	Intermediate Algebra or higher*	3
SPD	121	Public Speaking	3
PSYC	130	Introduction to Psychology	3
		Introduction to Sociology	

American Institutions

HIST	140	U.S. History to 1877
HIST	141	U.S. History Since 18773
POLS	122	Political Science
POLS	124	American National Government3
POLS	126	State and Local Government

Specific Program Requirements

The following courses can be taken at any campus

BIOL 144	Human Anatomy and Physiology5
BIOL 145	
	or
BIOL 140	Human Anatomy4
BIOL 225	Human Physiology*4
BIOL 230 BIOL 231	Microbiology*3 Microbiology Lab*2

Specific Program Requirements-taken at MCC-Penn Valley

KSS	300	Affiliate Social Science1-3
KDA	100	Introduction to Dental Assisting1
KDA	101	Body Structure and Function*2
KDA	102	Head & Neck Anatomy*2
KDA	103	Dental Anatomy2
KDA	104	Dental Emergencies & Pharmacology1
KDA	105	Dental Materials I*2
KDA	108	Oral Microbiology & Infection Control2
KDA	110	Chairside Assisting I*5
KDA	115	Dental Radiology I*4
KDA	125	Clinical Experience I*2
KDA	205	Dental Materials II*3
KDA	210	Chairside Assisting II*5
KDA	215	Dental Radiology II*2
KDA	225	Dental Office Management*2
KDA	230	Oral Pathology*2
KDA	250	Clinical Experience II*4
KDA	260	Dental Assisting Seminar*2

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

Dental Assisting Certificate

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.

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

Vocational Certificate

Certificate granted by Metropolitan Community College

Specific Program Requirements-must be taken at JCCC

	Introduction to Psychology	
SPD 121	Public Speaking3	

Specific Program Requirements taken at MCC-Penn Valley

KDA	100	Introduction to Dental Assisting
KDA	101	Body Structure and Function*2
KDA	102	Head & Neck Anatomy*2
KDA	103	Dental Anatomy2
KDA	104	Dental Emergencies & Pharmacology1
KDA	105	Dental Materials I*2
KDA	108	Oral Microbiology & Infection Control2
KDA	110	Chairside Assisting I*5
KDA	115	Dental Radiology I*4
KDA	125	Clinical Experience I*2
KDA	205	Dental Materials II*3
KDA	210	Chairside Assisting II*5
KDA	215	Dental Radiology II*2
KDA	225	Dental Office Management*2
KDA	230	Oral Pathology*2
KDA	250	Clinical Experience II*4
KDA	260	Dental Assisting Seminar*2

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

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 for home health aide training must show proof of certification as a Kansas CNA and complete a reading comprehension exam/assessment prior to admission. A current CPR for Health Care Providers card and documentation of current TB test is required. The HHA course includes a practicum with local home health agencies. Those who successfully complete this course will be scheduled to take the Kansas HHA certification examination.

(3580 51.2602)

Health Occupations

Area Vocational School Certificate

Required Course

IV Therapy for LPN's Certificate

This 48-hour course is designed to prepare the student for clients who require intravenous fluid therapy. Students are required to have at least one year of experience as a licensed nurse prior to taking this course. A current CPR for

Health Care Providers card and documentation of current TB test is required. Enrollees for this course must submit proof of professional liability insurance. 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.

Equipment and supplies routinely used to initiate and administer IV therapy will be used in instruction. Principles of infection control, correct legal documentation and calculation of infusion rates will be taught.

You will use the laboratory setting to demonstrate the basic skills of initiating intravenous therapy along with a clinical session in a hospital setting. Upon completion of clinical requirements, a written comprehensive examination must be completed to earn IV therapy certification.

(3640 51.2602)

Health Occupations

Area Vocational School Certificate

Required Course

Occupatnl Therapy Asst, A.A.S.

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.

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

Health Occupations

Associate of Applied Science Degree

American Institutions

HIST 140 U.S. History to 1877...... or

HIST 141	U.S. History Since 18773
POLS 122	Political Science
POLS 124	or American National Government3
POLS 126	or State and Local Government3

Prerequisite Courses-must be taken at JCCC

CHEM 12	2 Princip	oles of Chemistry	5
AAC 13	30 Medical	l Terminology	3

Specific Program Requirements-must be taken at JCCC

Option 1

BIOL	144	Human	Anatomy	and	Physiology5
		and			
BIOL	145	Human	Anatomy	and	Physiology Dissection*1
Note:	BIOI	144 n	nust be	taker	n before BIOL 145

or

Option 2

BIOL 140	Human Anatomy	1
	and	
BIOL 225	Human Physiology*	1
Note: BIO	L 140 and CHEM 122 must be taken prior to BIOL 225	

Specific Program Requirements-taken at MCC-Penn Valley

KSS	300	Affiliate Social Science1-3
KOT	112	Basic Emergency Patient Care1
KOT	100	Introduction to Occupational Therapy2
KOT	102	Documentation Guidelines*2
KOT	103	Clinical Conditions*2
KOT	106	Therapeutic Interventions I*4
KOT	116	Level I Fieldwork I*1
KOT	118	Assistive Technology*2
KOT	120	Pediatrics*3
KOT	121	Level I Fieldwork II*5
KOT	130	Analysis of Physical Performance*
KOT	154	Applied Neurology*2
KOT	201	Mental Health*2.5
KOT	202	Physical Dysfunction*3
KOT	203	Gerontology*3
KOT	208	Therapeutic Interventions II*
KOT	212	Level I Fieldwork III*2
KOT	217	Fieldwork Seminar*3
KOT	222	Level II Fieldwork*12
		TOTAL PROGRAM CREDIT HOURS
*Pre	requis	site/Corequisite required
NOTE	: КОТ	121 is .50 credit hours

Physical Therapist Asst, A.A.S

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.

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

American Institutions

HIST	140	U.S. History to 1877
HIST	141	U.S. History Since 18773 or
POLS	122	Political Science3 or
POLS	124	American National Government3 or
POLS	126	State and Local Government3

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

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BIOL 144 Human Anatomy and Physiology.....5
and
BIOL 145 Human Anatomy and Physiology Dissection*....1
Note: BIOL 144 must be taken first
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or

Option 2

BIOL	140	Human	Ana	atomy								 4
		and										
BIOL	225	Human	Phy	ysiolo	bgy*							 4
Note:	BIO	L 140	and	CHEM	122	must	be	taken	before	BIOL	225.	

Specific Program Requirements-taken at MCC-Penn Valley

KPT	151	Affiliate Social Science1-3 Introduction to Physical Therapy2 151 is a prerequisite course)
		Basic Emergency Patient Care1 Physical Therapy Fundamentals I*4

KPT	153	Kinesiology*4
KPT	154	Applied Neurology*2
KPT	155	Rehabilitation*4
KPT	158	Therapeutic Exercise*4
KPT	159	Orthopedic Pathology*2
KPT	160	Medical Diseases*2
KPT	161	Physical Therapy Fundamentals II*4
KPT	162	Clinical Experience I*2
KPT	164	Pediatrics and Gerontology*2
KPT	170	Clinical Experience II*2
KPT	171	Clinical Seminar*2
KPT	172	Clinical Experience III*12
		TOTAL PROGRAM CREDIT HOURS
*Pre	requi	site/Corequisite required

Radiologic Technology, A.A.S.

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*
SPD	121	Public Speaking
PSYC	130	Introduction to Psychology3

American Institutions

HIST	140	U.S. History to 18773
		U.S. History Since 18773 or
		Political Science3
POLS	124	American National Government3
POLS	126	State and Local Government3

Specific Program Requirements-must be taken at JCCC

BIOL 1	140	Human Anatomy4
AAC 1	130	Medical Terminology3

Specific Program Requirements-taken at MCC-Penn Valley

KSS 300 Affiliate Social Science.....1-3

krad 150	Introduction to Radiologic Technology2
krad 160	Survey of Radiologic Technology6
krad 162	Image Processing*2
KRAD 165	Patient Care*
KRAD 170	Delicities Diclose and Dectorties*
1000	Radiation Biology and Protection*3
krad 171	Radiographic Exposures I*3
krad 172	Radiographic Positioning I*3
krad 173	Clinical Practice I*
krad 174	Radiographic Exposures II*3
krad 175	Clinical Practice II*4
krad 176	Radiographic Positioning II*3
krad 178	Clinical Practice III*4
krad 278	Imaging Modalities and Pathology*
krad 279	Radiographic Positioning III*2
krad 280	Clinical Practice IV*4
krad 281	Radiation Physics*3
krad 282	Clinical Practice V*4
krad 283	Final Seminar*2
krad 285	Special Procedures*2
	TOTAL PROGRAM CREDIT HOURS
*Preregui	site/Corequisite required

*Prerequisite/Corequisite required

Rehabilitative Aide Certificate

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.

(3620 51.2601)

Health Occupations

Area Vocational School Certificate

Required Course

Surgical Technology Cert

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.

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

Vocational Certificate

Certificate granted by Metropolitan Community College

The following courses should be taken first at JCCC

BIOL 144	Human Anatomy a	and	Physiology5
BIOL 145	Human Anatomy a	and	Physiology Dissection*1

Specific Program Requirements-taken at MCC-Penn Valley

KST	100	Introduction to Surgical Technology2
KST	102	Fundamentals of Operating Room Technique*11
KST	105	Pharmacology for the Surgical Technologist*2
KST	106	Aseptic Technique for the Surgical Technologist*2
KST	109	Principles/Surgial Procedure I*8
KST	110	Principles/Of Surgical Proc II*7
KST	114	Principles/Surgical Proced III*7
KST	111	Career Development for the Surgical Technologist*2
		TOTAL PROGRAM CREDIT HOURS
*Pre	requi	site/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.

(3770 15.0501)

Heating, Ventilation, & Air Conditioning Technology

Vocational Certificate

Required Courses

HVAC	121	Basic Principles of HVAC*4
HVAC	123	Electromechanical Systems4
HVAC	150	Refrigerant Management and Certification1
HVAC	155	Workplace Skills1
		TOTAL PROGRAM CREDIT HOURS10
*Prer	requis	site/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.

(3780 15.0501)

Heating, Ventilation, & Air Conditioning Technology

Vocational Certificate

Required Courses

HVAC	121	Basic Principles of HVAC*4	Ė
HVAC	123	Electromechanical Systems	Ł
HVAC	150	Refrigerant Management and Certification1	_
HVAC	155	Workplace Skills1	_
INDT	125	Industrial Safety	3
HVAC	167	Sheet Metal Layout and Fabrication	3

MATH 133	Technical Mathematics	I*4		
	TOTOAL PROGRAM CREDIT	HOURS		
*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. (3790 15.0501)

Heating, Ventilation, & Air Conditioning Technology

Vocational Certificate

Required Courses

HVAC	121	Basic Principles of HVAC*4
HVAC		Electromechanical Systems4
HVAC		Refrigerant Management and Certification1
HVAC	155	Workplace Skills1
INDT	125	Industrial Safety3
HVAC	167	Sheet Metal Layout and Fabrication3
HVAC	146	Plumbing Systems Applications3
ELTE	125	Residential Wiring Methods*4
		TOTAL PROGRAM CREDIT HOURS23
*Dror		vite/Corequisite required

*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.

(3800 15.0501)

Heating, Ventilation, & Air Conditioning Technology

Vocational Certificate

Required Courses

HVAC 121 HVAC 123	Basic Principles of HVAC*4 Electromechanical Systems4
HVAC 150	Refrigerant Management and Certification1
HVAC 155	Workplace Skills1
ENGL 121	Composition I*
HVAC 124	Equipment Selection and Duct Design4
MKT 134	Professional Selling3
*Prerequi	TOTAL PROGRAM CREDIT HOURS

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.

(2870 15.0501)

Heating, Ventilation, & Air Conditioning Technology

Associate of Applied Science Degree

First Semester

HVAC	121	Basic Principles of HVAC*4
HVAC	123	Electromechanical Systems4
HVAC		Reading Blueprints and Ladder Diagrams2
HVAC	155	Workplace Skills1
INDT	125	Industrial Safety3
		Composition I*
EMS	121	CPR I - Basic Life Support for Healthcare Provider1
		TOTAL CREDIT HOURS

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
HVAC	231	HVAC Rooftop Units*	3
		TOTAL CREDIT HOURS1	4

Third Semester

MATH	133	Technical Mathematics I*4
		Social Science and/or Economic Elective
		Commercial Systems: Heating*4
ELTE	122	National Electrical Code I4
CPCA	105	Introduction to Personal Computers: Windows1 TOTAL CREDIT HOURS1

Fourth Semester

HVAC	229	Advanced Control Systems*4
ELTE	205	Industrial Electrical Wiring*4
		Technical Elective2
		Humanities Elective
		General Education Elective3
		TOTAL CREDIT HOURS16
		TOTAL PROGRAM CREDIT HOURS64

Technical Electives

HVAC 125	Energy Alternatives2	
HVAC 271	HVAC Internship*	,
HVAC 291	Independent Study1-7	
ELTE 125	Residential Wiring Methods*4	:

General Education Electives

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.

(6250 15.0501)

Heating, Ventilation, & Air Conditioning Technology

Postsecondary Certificate

Required Courses

ENGL	121	Composition I*
HVAC	121	Basic Principles of HVAC*4
HVAC	123	Electromechanical Systems4
HVAC	143	Reading Blueprints and Ladder Diagrams2
HVAC	150	Refrigerant Management and Certification1
HVAC	167	Sheet Metal Layout and Fabrication3
HVAC	221	Commercial Systems: Air Conditioning*4
HVAC	223	Commercial Systems: Heating*4
HVAC	229	Advanced Control Systems*4
HVAC	231	HVAC Rooftop Units*3
INDT	125	Industrial Safety3
HVAC	155	Workplace Skills1
MATH	115	Introduction to Algebra*
		TOTAL PROGRAM CREDIT HOURS
*Prer	requis	site/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.

(6270 15.0501)

Heating, Ventilation, & Air Conditioning Technology

Vocational Certificate

Required Courses

		Basic Principles of HVAC*	
HVAC	123	Electromechanical Systems	4
HVAC	167	Sheet Metal Layout and Fabrication	3
HVAC	155	Workplace Skills	1
INDT	125	Industrial Safety	3
		HVAC Installation and Start-up Procedures*	
HVAC	146	Plumbing Systems Applications	3

HVAC 143	Reading Blueprints and Ladder Diagrams2
HVAC 124	Equipment Selection and Duct Design*4
HVAC 150	Refrigerant Management and Certification
	TOTAL PROGRAM CREDIT HOURS
*Drereaui	site/Corequisite required

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.

 $(2880\ 15.0501)$

Heating, Ventilation, & Air Conditioning Technology

Associate of Applied Science Degree

First Semester

		Basic Principles of HVAC*4
HVAC	123	Electromechanical Systems4
HVAC	143	Reading Blueprints and Ladder Diagrams2
HVAC	155	Workplace Skills1
INDT	125	Industrial Safety
ENGL	121	Composition I*
EMS	121	CPR I - Basic Life Support for Healthcare Provider1
		TOTAL CREDIT HOURS18

Second Semester

HVAC	146	Plumbing Systems Applications	3
HVAC	150	Refrigerant Management and Certification	1
HVAC	137	Residential Systems: Air Conditioning*	4
HVAC	124	Equipment Selection and Duct Design*	4
HVAC	167	Sheet Metal Layout and Fabrication	3
		TOTAL CREDIT HOURS1	5

Third Semester

MATH	133	Technical Mathematics I*	4
		Social Science and/or Economics Elective	3
		Residential Systems: Heating*	
HVAC	148	HVAC Installation and Start-up Procedures*	3
		Technical Elective	3
		TOTAL CREDIT HOURS1	7

Fourth Semester

HVAC 235	Residential Heat Pump Systems*4
	Humanities Elective3
	Technical Electives4
	General Education Elective3
	TOTAL CREDIT HOURS14
	TOTAL PROGRAM CREDIT HOURS64

Technical Electives

AUTO 230	Automotive Heating and Air Conditioning*3
ELTE 122	National Electrical Code I4
ELTE 125	Residential Wiring Methods*4
HVAC 125	Energy Alternatives2
HVAC 271	HVAC Internship*3
	Independent Study1-7

General Education Electives

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.

(6260 15.0501)

Heating, Ventilation, & Air Conditioning Technology

Postsecondary Certificate

Required Courses

ENGL	121	Composition I*
HVAC	121	Basic Principles of HVAC*4
HVAC	123	Electromechanical Systems4
HVAC	124	Equipment Selection and Duct Design*4
HVAC	150	Refrigerant Management and Certification1
HVAC	137	Residential Systems: Air Conditioning*4
HVAC	127	Residential Systems: Heating*4
HVAC	235	Residential Heat Pump Systems*4
HVAC	167	Sheet Metal Layout and Fabrication
HVAC	155	Workplace Skills1
MATH	115	Introduction to Algebra*
		Technical Electives
		TOTAL PROGRAM CREDIT HOURS

Technical Electives

HVAC	125	Energy Alternatives	2
HVAC	143	Reading Blueprints and Ladder Diagrams	2
HVAC	271	HVAC Internship*	3
HVAC	291	Independent Study	1
		Introduction to Personal Computers: Windows	
INDT	125	Industrial Safety	3
*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. Missouri students should refer to Cooperative Program Information. (6180 01.0601)

Science Department

Vocational Certificate

First Semester

HORT	140	Turfgrass3
HORT	214	Woody Plants I, Deciduous
HORT	220	Herbaceous Plants
		Elective (choose from list below)3
		TOTAL CREDIT HOURS12

Second Semester

HORT	215	Woody Plants II, Evergreens
		Plant Problems*
HORT	135	Landscape Design3
		TOTAL CREDIT HOURS9

Third Semester

HORT	235	Landscape Maintenance and Techniques3
HORT	150	Fruits, Vegetables and Herb Crops2
		Elective (choose from list below)
		TOTAL CREDIT HOURS8
		TOTAL PROGRAM CREDIT HOURS
*Prer	requis	site/Corequisite required

Electives

		Introduction to Business
BUS	145	Small Business Management3
HORT	160	Garden Center Operations3
SPD	128	Business and Professional Speech3

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. (6190 01.0601)

Science Department

Vocational Certificate

First Semester

HORT 201 Introduction to Horticultural Science......4

HORT 214	Woody Plants I, Deciduous3
HORT 140	Turfgrass3
	TOTAL CREDIT HOURS10

Second Semester

		Herbaceous Plants
HORT	205	Plant Propagation*3
HORT	260	Horticulture Soils
		TOTAL CREDIT HOURS9

Third Semester

HORT	135	Landscape Design
HORT	225	Plant Problems*
		TOTAL CREDIT HOURS6

Fourth Semester

		Landscape Maintenance and Techniques3
HORT	265	Landscape Construction3
		TOTAL CREDIT HOURS6
		TOTAL PROGRAM CREDIT HOURS
*Prer	requis	site/Corequisite required

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. Missouri students should refer to Cooperative Program Information.

(2440 19.0505)

Hospitality Management

Associate of Applied Science Degree

First Semester

	Perspectives of Hospitality Management3
HMGT 123	Professional Cooking I*3
MATH 120	Business Math or higher*3
HMGT 120	Food Service Sanitation1
HMGT 281	Culinary Arts Practicum I*2
	TOTAL CREDIT HOURS12

Second Semester

HMGT 273	Hospitality Cost Accounting*	3
HMGT 230	Professional Cooking II*	3

HMEC 151	Nutrition and Meal Planning3
	Computer Elective1
HMGT 282	Culinary Arts Practicum II*2
	TOTAL CREDIT HOURS12

Summer

		Composition I*
SPD	121	or Public Speaking3 or
SPD	125	Personal Communication

Third Semester

HMGT	Hospitality Program Elective	,
HMGT 271	Seminar in Hospitality Management: Purchasing3	;
HMGT 220	American Regional Cuisine*	5
HMGT 285	Culinary Arts Practicum III*2	2
	TOTAL CREDIT HOURS11	

Fourth Semester

		Garde Manger*
HMGT	277	Seminar in Hospitality Management: Menu Planning*3
HMGI		Culinary Arts Practicum IV*

Fifth Semester

		Advanced Food Preparation*4
		Beverage Control3
PSYC	121	Applied Psychology3 or
		Introduction to Psychology
111101	207	TOTAL CREDIT HOURS12

Sixth Semester

HMGT	128	Supervisory Management	3
HMGT	228	Advanced Hospitality Management*	3
HMGT	288	Culinary Arts Practicum VI*	2
		Humanities Elective	3
		TOTAL CREDIT HOURS1	.1
		TOTAL PROGRAM CREDIT HOURS7	5

Hospitality Program Electives

HMGT	126	Food Management*4
HMGT	130	Hospitality Law
HMGT	132	Seminar in Housekeeping Operations3
HMGT	150	Seminar: Food Service Sales and Marketing3
HMGT	203	Hotel Sales and Marketing*3
HMGT	207	Hospitality Human Resource Management*3
HMGT	221	Design and Facilities Management*
HMGT	240	Advanced Baking*4
HMGT	248	Confectionery Arts3
HMGT	250	Introduction to Catering
HMGT	256	Casino Management3
HMGT	265	Front Office Management3
HMGT	268	Hospitality Managerial Accounting*
*Pre	requi	site/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. Missouri students should refer to Cooperative Program Information.

(2550 19.0505)

Hospitality Management

Associate of Applied Science Degree

First Semester

HMGT SPD		Perspectives of Hospitality Management3 Interpersonal Communication3
SPD	121	or Public Speaking
		or
SPD	125	Personal Communication3
MATH		Business Math or higher*3
CPCA		Computer Elective1
ENGL	121	Composition I*
HMGT	120	Food Service Sanitation1
		TOTAL CREDIT HOURS14

Second Semester

HMGT	128	Supervisory Management	. 3
		Professional Cooking I*	
HMGT	277	Seminar in Hospitality Management: Menu Planning*	. 3
		Seminar in Hospitality Management: Purchasing	
HMEC	151	Nutrition and Meal Planning	. 3
		TOTAL CREDIT HOURS	15

Summer

PSYC 12	1 Applied Psyc	hology	 3
	or		
PSYC 13	0 Introduction	to Psychology. equirement	
		HOURS	
	101112 0112211		

Third Semester

HMGT	230	Professional Cooking II*
HMGT	207	Hospitality Human Resource Management*3
		Beverage Control3
		Design and Facilities Management*3
HMGT	273	Hospitality Cost Accounting*3
		TOTAL CREDIT HOURS15

Fourth Semester

HMGT 126	Food Management*4
HMGT 228	Advanced Hospitality Management*3

HMGT HMGT 268 HMGT 150	Hospitality Program Elective
Hospitali	ty Program Electives
HMGT 130	Hospitality Law
HMGT 203	Hotel Sales and Marketing*3
HMGT 223	Fundamentals of Baking
HMGT 250	Introduction to Catering3
HMGT 256	Casino Management 3

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.

(4840 19.0505)

Hospitality Management

Postsecondary Certificate

Required Courses

ENGL	121	Composition I*
HMGT	121	Perspectives of Hospitality Management3
HMGT	123	Professional Cooking I*
HMGT	126	Food Management*4
HMGT	128	Supervisory Management
HMGT	230	Professional Cooking II*3
HMGT	271	Seminar in Hospitality Management: Purchasing3
HMGT	273	Hospitality Cost Accounting*
HMGT	275	Seminar in Hospitality Management: Internship*3
MATH	120	Business Mathematics*3
		TOTAL PROGRM CREDIT HOURS
* Droom		ita/Companiaita magnimad

*Prerequisite/Corequisite required

Hospitality Entrepreneurship Certificate

The hospitality entrepreneurship certificate prepares students to realize their entrepreneurial dream of opening their own hospitality business. This certificate is designed to provide the student with basic skills in restaurant operation small business development and management. Upon successful completion, students should be better prepared to develop and sustain their own hospitality entrepreneurial business venture.

(4190 19.0505)

Hospitality Management

Vocational Certificate

Prerequisites for Required Courses

		Professional Cooking I*3
MATH 12	20	Business Math or higher*3
BUS 23	30	Marketing

Required Courses

HMGT 121 HMGT 120	Perspectives of Hospitality Management
HMGT 128	Supervisory Management3
HMGT 277	Seminar in Hospitality Management: Menu Planning*3
ENTR 120	Introduction to Entrepreneurship2
ENTR 180	Opportunity Analysis2
ENTR 195	Franchising*3
HMGT 230	Professional Cooking II*3
HMGT 273	Hospitality Cost Accounting*3
ENTR 160	Legal Issues for Small Business2
entr 220	Entrepreneurial Marketing*2
ENTR 142	Fast Trac Business Plan3
	TOTAL PROGRAM CREDIT HOURS

Additional Suggested Coursework

HMEC	151	Nutrition and Meal Planning3	
HMGT	279	Beverage Control	
HMGT	271	Seminar in Hospitality Management: Purchasing3	
HMGT	130	Hospitality Law	
		Introduction to Catering	
HMGT	203	Hotel Sales and Marketing*3	
FL	133	Basic Spanish for Hospitality Management2	
*Prer	requis	site/Corequisite required	

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. Missouri students should refer to Cooperative Program Information.

(2510 19.0505)

Hospitality Management

Associate of Applied Science

First Semester

	Perspectives of Hospitality Management3 Composition I*
	Applied Psychology3
	or
PSYC 130	Introduction to Psychology3
HMGT 120	Food Service Sanitation1
HPER 200	First Aid and CPR2
HMGT 132	Seminar in Housekeeping Operations3
	TOTAL CREDIT HOURS15

Second Semester

HMGT 26	5 Front Office Management3
HMGT 12	8 Supervisory Management3
HMGT 23	5 Seminar: Risk Management and Loss Prevention3
HMGT 12	3 Professional Cooking I*3
	TOTAL CREDIT HOURS15

Summer

HMGT	275	Seminar in Hospitality Management: Internship*3
CPCA		Computer Elective1
		TOTAL CREDIT HOURS4

Third Semester

SPD	120	Interpersonal Communication3
SPD	121	or Public Speaking
SPD	125	Personal Communication
HMGT	230	Professional Cooking II*
HMGT	279	Beverage Control
HMGT	203	Hotel Sales and Marketing*3
HMGT	273	Hospitality Cost Accounting*
		TOTAL CREDIT HOURS15

Fourth Semester

	Humanities Requirement3
HMGT 228	Advanced Hospitality Management*
HMGT	Hospitality Program Elective
HMGT 268	Hospitality Managerial Accounting*
HMGT 207	Hospitality Human Resource Management*
	TOTAL CREDIT HOURS15
	TOTAL PROGRAM CREDIT HOURS64

Hospitality Program Electives

HMEC	151	Nutrition and Meal Planning3
HMGT	126	Food Management*4
HMGT	130	Hospitality Law3
HMGT	221	Design and Facilities Management*3
HMGT	223	Fundamentals of Baking3
HMGT	250	Introduction to Catering
HMGT	256	Casino Management3
HMGT	271	Seminar in Hospitality Management: Purchasing3
HMGT	277	Seminar in Hospitality Management: Menu Planning*3
*Prei	requis	site/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.

(4350 19.0505)

Hospitality Management

Vocational Certificate

Prerequisites for Required Courses

HMGT 120	Food Service Sanitation1
HMGT 123	Professional Cooking I*3
	TOTAL CREDIT HOURS

First Semester

HMPB 155	Pastry Shop Production I*4
HMPB 160	Pastry Shop Principles I*4
HMPB 233	Patisserie*
HMPB 252	Pastry Shop Business Basics I*3
	TOTAL CREDIT HOURS15

Second Semester

	Pastry Shop Production II*4
	Pastry Shop Principles II*4
HMPB 257	Sugar Basics*4
	TOTAL CREDIT HOURS15
	TOTAL PROGRAM CREDIT HOURS
*Prerequi	site/Corequisite required

Pastry/Baking Entrepreneurship Certificate

This certificate is designed to prepare students to open their own pastry/baking business. This certificate is designed to provide the student with basic skills in pastry/baking preparation and small business development and management. Upon completion, the student should be better prepared to develop, grow and sustain their own pastry/baking business venture. All courses in this certificate are existing courses.

Students must complete HMGT 120, Food Service Sanitation, and HMGT 123, Professional Cooking I, before enrolling in the program.

Hospitality Management

Vocational Certificate

Prerequisites for Required Courses

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HMGT 120Food Service Sanitation1HMGT 123Professional Cooking I*3
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Required Courses

HMPB	155	Pastry Shop Production I*4
HMPB	160	Pastry Shop Principles I*4
HMPB	233	Patisserie*4
HMPB	252	Pastry Shop Business Basics I*
ENTR		Introduction to Entrepreneurship2
ENTR	180	Opportunity Analysis2
HMPB	255	Pastry Shop Production II*4
HMPB	260	Pastry Shop Principles II*4
HMPB	257	Sugar Basics*4
HMPB	262	Pastry Shop Business Basics II*3
ENTR	142	Fast Trac Business Plan3
		TOTAL PROGRAM CREDIT HOURS

Additional Suggested Coursework

ENTR 160	Legal Issues for Small Business2
ENTR 195	Franchising3
ENTR 220	Entrepreneurial Marketing2
ENTR 131	Financial Management for Small Business*2

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 Netware, Windows, Unix and Cisco.

(2330 11.0901)

Information Technology

Associate of Applied Science Degree

First Semester

		Implementing Windows Client*
ELEC	126	Microcomputer A+ Preparation4
ENGL	121	Composition I*
		Technical Electives
		Social Science and/or Economics Elective
		Health and/or Physical Education Elective1
		TOTAL CREDIT HOURS17

Second Semester

		Windows Server*3
IT	230	UNIX Fundamentals*3
IT	246	Introduction to Routers*3
MATH	171	College Algebra or higher*3
ENGL	122	Composition II*3
		or
ENGL	123	Technical Writing I*3
		TOTAL CREDIT HOURS15

Third Semester

IT	225	Windows Active Directory Services*
IT	231	UNIX Administration*
IT	247	Introduction to Wide-Area Networks*
		Humanities Elective
		Technical Electives
		TOTAL CREDIT HOURS15

Fourth Semester

IT	251	Network Infrastructure*
SPD	125	Personal Communication
		TOTAL CREDIT HOURS

Technical Electives

CPCA 121	Introduction to Project Management*1
CIS 134	Programming Fundamentals4
ELEC 120	Introduction to Electronics

ELEC ELEC	200	Introduction to Telecommunications
ELEC	200	Microcomputer Maintenance*
TT	200	Networking Technologies
IT	203	Voice over IP Fundamentals*4
IT	210	Netware Administration*3
IT	227	SQL Server Administration*3
IT	228	Exchange Server*
IT	231	UNIX Administration*3
IT	232	UNIX Networking and Security*4
IT	249	Advanced Routing*3
IT	250	Networking Seminar*3
IT	253	Advanced Switching*3
IT	254	Remote Access Networks*3
IT	255	Wireless Security*4
IT	271	Information Technology Internship I*3
IT	272	Information Technology Internship II*3
*Prerequisite/Corequisite required		

Network Administration: UNIX Certificate

This certificate is a 26-credit-hour program that students can complete in four semesters. The certificate will provide students with competencies necessary to install, troubleshoot and administer Unix systems in an enterprise environment. These skills are sought in the industry today, with Unix operating systems claiming the majority of new implementations in the enterprise environment. (7000 11.0901)

Vocational Certificate

Required Courses

		Networking Technologies3
ELEC	126	Microcomputer A+ Preparation4
		UNIX Fundamentals*
		UNIX Administration*3
IT	232	UNIX Networking and Security*4
IT	246	Introduction to Routers*
		Technical Electives
		TOTAL CREDIT HOURS

Technical Electives

IT	205	Implementing Windows Client*3		
IT	210	Netware Administration*3		
IT	221	Windows Server*		
IT	225	Windows Active Directory Services*		
IT	227	SQL Server Administration*3		
IT	245	Network Infrastructure*		
IT	247	Introduction to Wide-Area Networks*		
IT	250	Networking Seminar*		
IT	255	Wireless Security*4		
IT	271	Information Technology Internship I*		
IT	272	Information Technology Internship II*		
ELEC	185	LAN Cabling and Installation		
*Prerequisite/Corequisite required				

Network 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.

Vocational Certificate

Required Courses

		Networking Technologies3
ELEC	126	Microcomputer A+ Preparation4
IT	205	Implementing Windows Client*3
IT	221	Windows Server*
IT	225	Windows Active Directory Services*3
IT	245	Network Infrastructure*3
		Technical Electives9
		TOTAL PROGRAM CREDIT HOURS

Technical Electives

IT	210	Netware Administration*3		
IT	227	SQL Server Administration*3		
IT	228	Exchange Server*		
IT	230	UNIX Fundamentals*3		
IT	231	UNIX Administration*3		
IT	232	UNIX Networking and Security*4		
IT	246	Introduction to Routers*		
IT	247	Introduction to Wide-Area Networks*3		
IT	249	Advanced Routing*3		
IT	250	Networking Seminar*		
IT	251	Network Security Fundamentals*4		
IT	255	Wireless Security*4		
IT	271	Information Technology Internship I*3		
IT	272	Information Technology Internship II*		
*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. Course work parallels the requirements for Cisco Certified Network Associate (CCNA) certification exam.

(7010 11.0901)

Information Technology

Vocational Certificate

Required Courses

		Networking Technologies		
ELEC	126	Microcomputer A+ Preparation4		
IT	246	Introduction to Routers*3		
IT	247	Introduction to Wide-Area Networks*		
		TOTAL PROGRAM CREDIT HOURS		
*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, interface design, and project management. This program is designed to build a common foundation of experience while allowing the student to elect asset and

authoring courses 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

(2410 11.1004)

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
CWEB	130	Introduction to Flash*1

First Semester

ENGL	121	Composition I*
		Interactive Media Concepts2
CIM	140	Interactive Media Assets*4
CIM		Screen Design*4
		Electives
		TOTAL CREDIT HOURS16

Second Semester

ENGL	140	Writing for Interactive Media*
CIM	154	Interactive Authoring I: Director*4
		or
CIM	156	Interactive Authoring I: Web*4
CIM	200	Interactive Communication Form*3
		Humanities Elective
		Interactive Media Elective
		TOTAL CREDIT HOURS16

Third Semester

CIM	230	Interactive Media Development*4
CIM	250	Interface Design*4
		Social Science and/or Economic Elective
		Electives
		TOTAL CREDIT HOURS17

Fourth Semester

		Interactive Media Project*4
CIM	273	Career Preparation*4
		Science and/or Mathematics3
		Health and/or Physical Education1
		Electives
		TOTAL CREDIT HOURS15
		TOTAL PROGRAM CREDIT HOURS64

Interactive Media Elective List

CIM	135	Digital	Imaging	and	Video*3	;
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CIM MUS CIM	235 156 154	Advanced Digital Video*
СТМ	156	or Interactive Authoring I: Web*
CIM	100	Note:Whichever course not already taken as a requirement
CIS	134	Programming Fundamentals4
CIS	162	Database Programming*4
BUS	141	Principles of Management3
CIM	254	Interactive Authoring II: Director*
ANI	120	Conceptual Art for Animation1
ANI	145	Introduction to 3D Animation3
ENGL	150	Digital Narratives*3
SPD	120	Interpersonal Communication3
SPD	121	Public Speaking3
SPD	125	Personal Communication3
*Pre	requi	site/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, animator, 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

(4480 11.1004)

Interactive Media

Vocational 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
CWEB 130	Introduction to Flash*1

Required Courses

CIM	130	Interactive Media Concepts2
CIM	140	Interactive Media Assets*4
CIM	133	Screen Design*4
CIM	154	Interactive Authoring I: Director*4
CIM	200	Interactive Communication Form*
CIM	230	Interactive Media Development*4
CIM	250	Interface Design*4
CIM	270	Interactive Media Project*4
		TOTAL PROGRAM CREDIT HOURS
*Pre	requi	site/Corequisite required

Multimedia Design Entrepreneurship Certificate

This 30 credit-hour certificate is designed to prepare students to realize their entrepreneurial dream of opening 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. Upon successful completion, the student should be prepared to develop, grow and sustain their own multimedia design entrepreneurial business venture.

(4070 11.1004)

Interactive Media

Vocational 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.

	Desktop Photo Manipulation I: Photoshop*1
CDTP 145	5 Desktop Illustration I: Illustrator*1
CWEB 101	Introduction to the Web using Internet Explorer1
CWEB 105	Introduction to Web Pages: Dreamweaver*1
CWEB 130	Introduction to Flash*1
CIM 130	Interactive Media Concepts2
CIM 140	Interactive Media Assets*4

Required Courses

CIM	133	Screen Design*4
CIM	154	Interactive Authoring I: Director*4
ENTR	120	Introduction to Entrepreneurship2
ENTR	180	Opportunity Analysis2
CIM		Interactive Communication Form*3
CIM	230	Interactive Media Development*4
CIM		Interface Design*4
CIM	270	Interactive Media Project*4
ENTR	142	Fast Trac Business Plan3
		TOTAL PROGRAM CREDIT HOURS

Additional Suggested Coursework

Students may choose relevant courses based on skills needed to develop, grow, and sustain their entrepreneurial business concept.

ENTR	220	Entrepreneurial Marketing*2
ENTR	131	Financial Management for Small Business*2
ENTR	160	Legal Issues for Small Business2
ENTR	195	Franchising3
CIM	135	Digital Imaging and Video*3
CIM	156	Interactive Authoring I: Web*4
CIM	235	Advanced Digital Video*3
CIM	254	Interactive Authoring II: Director*4
CIS	162	Database Programming*4
MUS	156	MIDI Music Composition
*Prer	requi	site/Corequisite required

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, animator, 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

(4490 11.1004)

Interactive Media

Vocational 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*
CWEB 105	Introduction to Web Pages: Dreamweaver*1
CWEB 130	Introduction to Flash*1

Required Courses

CIM	130	Interactive Media Concepts2				
CIM	140	Interactive Media Assets*4				
CIM	133	Screen Design*4				
CIM	156	Interactive Authoring I: Web*4				
CIM	200	Interactive Communication Form*3				
CIM	230	Interactive Media Development*4				
CIM	250	Interface Design*4				
		Interactive Media Project*4				
		TOTAL PROGRAM CREDIT HOURS				
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*Prerequisite/Corequisite required

Web Design Entrepreneurship Certificate

This certificate is designed to prepare students to realize their entrepreneurial dream of opening their own business providing Web 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 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. Upon successful completion, the student should be prepared to develop, grow and sustain their own Web design entrepreneurial business venture.

(4200 11.1004)

Interactive Media

Vocational 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 135Desktop Photo Manipulation I: Photoshop*.....1CDTP 145Desktop Illustration I: Illustrator*....1CWEB 101Introduction to the Web using Internet Explorer....1CWEB 105Introduction to Web Pages: Dreamweaver*....1CWEB 130Introduction to Flash*.....1CIM 130Interactive Media Concepts.....2CIM 140Interactive Media Assets*.....4

Required Courses

CIM	133	Screen Design*4
CIM	156	Interactive Authoring I: Web*4
ENTR	120	Introduction to Entrepreneurship2
ENTR	180	Opportunity Analysis2
CIM		Interactive Communication Form*3
CIM	230	Interactive Media Development*4
CIM	250	Interface Design*4
CIM	270	Interactive Media Project*4
ENTR	142	Fast Trac Business Plan3
		TOTAL PROGRAM CREDIT HOURS

Additional Suggested Coursework

Students may choose relevant courses based on skills needed to develop, grow, and sustain their entrepreneurial business concept.

ENTR	220	Entrepreneurial Marketing*2
ENTR	131	Financial Management for Small Business*2
ENTR	160	Legal Issues for Small Business2
ENTR	195	Franchising
CIM	135	Digital Imaging and Video*3
CIM	154	Interactive Authoring I: Director*4
CIM		Advanced Digital Video*3
		Interactive Authoring II: Director*4
CIS	162	Database Programming*4
MUS	156	MIDI Music Composition3
*Prer	requis	site/Corequisite required

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.

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. (2750 50.0408)

Interior Design

Associate of Applied Science Degree

First Semester

ITMD	121	Interior Design
DRAF	164	Architectural Drafting/Residential Interior Design3
ITMD	133	Furniture & Ornamentation/Antiquity to Renaissance3
MATH	120	Business Math or higher*3
ITMD	125	Interior Textiles
ENGL	121	Composition I*
		TOTAL CREDIT HOURS18

Second Semester

ITMD	123	Space Planning*3
ITMD	129	Design Presentation*3
ITMD	132	Materials and Resources3
MKT	134	Professional Selling3
ITMD	231	Furniture & Ornamentation Renaissance to 20th Cent3
BUS	150	Business Communications*3
		TOTAL CREDIT HOURS

Third Semester

		CAD: Interior Design* Budgeting and Estimating*	
		Interiors Internship I*	
ART		See ARTH 180 for Art History: Ancient to Renaissan	
ECON	132	Survey of Economics or	3
		Economics I	
T.I.MD	213	Lighting Design and Planning* TOTAL CREDIT HOURS1	

Fourth Semester

ITMD 221 Residential Design*		 	 .3
ITMD 273 Interiors Seminar: Practices and Procedures*.		 	 .2
ITMD 284 Interiors Internship II*		 	 .1
ITMD 140 Window Treatments*		 	 .1
ITMD 145 Upholstered Furniture*		 	 .1
ITMD 149 Casegoods*		 	 .1
ITMD 148 History of Asian Furniture and Design		 	 .2
ITMD 150 Asian Rugs and Carpets		 	 .1
ITMD 180 Leadership in Design		 	 .1
ITMD 239 Capstone: Interior Design*		 	 .2
Health and/or Physical Education Elective		 	 .1
TOTAL CREDIT HOURS		 	 16
TOTAL PROGRAM CREDIT HOURS	•••	 	 68

Additional Suggested ITMD Electives

ITMD	127	Elements of Floral Design1
ITMD	143	Accessory Fundamentals*1
ITMD	175	Advanced Floral Design*1
ITMD	189	Sustaining Design1
ITMD	250	20th Century Designers1
ITMD	295	Field Study: Design and Merchandising*3
ITMD	296	Interior Design: the Orient
*Prei	requis	site/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 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. Missouri students should refer to Cooperative Program Information.

(4100 50.0408)

Interior Design

Vocational Certificate

Required Courses

		Interior Textiles II*
DRAF	230	or
ART	129	Design Color
ITMD		Commercial Design*3
		Art Electives
ITMD	219	Issues in Interior Design*
		Interior Design Electives
ITMD	234	Kitchen and Bath: Planning and Design*3
		TOTAL PROGRAM CREDIT HOURS

Art electives

		Art History: Renaissance to Modern
		Design 2D
ART	127	Design 3D*3

Interior Design electives

ITMD	127	Elements of Floral Design1
ITMD	143	Accessory Fundamentals*1
ITMD	175	Advanced Floral Design*1
ITMD	250	20th Century Designers1
ITMD	295	Field Study: Design and Merchandising*3
ITMD	296	Interior Design: the Orient
*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 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. Missouri students should refer to Cooperative Program Information.

(6510 50.0408)

Interior Design

Vocational Certificate

First Semester

ITMD 121	Interior Design3
ITMD 125	Interior Textiles3
ITMD 132	Materials and Resources3
MATH 120	Business Math or higher*3
MKT 134	Professional Selling3
FASH 135	Image Management1
ITMD 282	Interiors Internship I*1
	TOTAL CREDIT HOURS17

Second Semester

		Retail Management
ITMD	271	Budgeting and Estimating*3
ITMD	284	Interiors Internship II*1
ITMD		Elective
		TOTAL CREDIT HOURS13
		TOTAL PROGRAM CREDIT HOURS

Recommended Electives

ITMD	127	Elements of Floral Design1
ITMD	140	Window Treatments*1
ITMD	143	Accessory Fundamentals*1
ITMD	145	Upholstered Furniture*1
ITMD	147	Lighting Basics*1
ITMD	149	Casegoods*1
ITMD	213	Lighting Design and Planning*3
ITMD	225	Interior Textiles II
ITMD	231	Furniture & Ornamentation Renaissance to 20th Cent3
ITMD	273	Interiors Seminar: Practices and Procedures*2
*Prerequisite/Corequisite required		

Interior Design & Merchandising Entrep Certificate

The interior design and merchandising entrepreneurship certificate prepares students to realize their entrepreneurial dream of opening 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. Upon successful completion, students should be prepared to develop and sustain their own interior merchandising or design business venture.

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. Missouri students should refer to Cooperative Program Information. (4210 50.0408)

Interior Design

C

Vocational Certificate

Prerequisites for Required Courses

Required Courses

ITMD 121	Interior Design
ITMD 125	Interior Textiles
	Materials and Resources3
ENTR 120	Introduction to Entrepreneurship2
ENTR 180	Opportunity Analysis2

ITMD 123	Space Planning*3
ITMD 271	Budgeting and Estimating*3
ITMD 273	Interiors Seminar: Practices and Procedures*2
ENTR 160	Legal Issues for Small Business2
	Fast Trac Business Plan3
ITMD 282	Interiors Internship I*1

Choose 3 of the 5 one-credit hour courses

ITMD	127	Elements of Floral Design1
ITMD	175	Advanced Floral Design*1
ITMD	140	Window Treatments*1
ITMD	145	Upholstered Furniture*1
ITMD	147	Lighting Basics*1
		TOTAL PROGRAM CREDIT HOURS

Additional Suggested Coursework

ENTR	195	Franchising*	3
ENTR	220	Entrepreneurial Marketing*	2
ENTR	131	Financial Management for Small Business*	2
*Prerequisite/Corequisite required			

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. Missouri students should refer to Cooperative Program Information.

(2770 50.0408) Interior Design

Associate of Applied Science Degree

First Semester

ITMD	121	Interior Design
ITMD	133	Furniture & Ornamentation/Antiquity to Renaissance3
		Architectural Drafting/Residential Interior Design3
MATH	120	Business Math or higher*3
ITMD	125	Interior Textiles
ENGL	121	Composition I*
		TOTAL CREDIT HOURS18

Second Semester

ITMD 123 Space Planning*.....3

	Interiors Elective
ITMD 132	Materials and Resources3
MKT 134	Professional Selling3
	Furniture & Ornamentation Renaissance to 20th Cent3
BUS 150	Business Communications*3
	TOTAL CREDIT HOURS18

Third Semester

		Interiors Elective
ITMD	271	Budgeting and Estimating*3
ITMD	282	Interiors Internship I*1
ART		See ARTH 180 for Art History: Ancient to Renaissan3
ECON	132	Survey of Economics
		or
ECON	230	Economics I
		Business/Marketing/Entrepreneurship
		Electives
		TOTAL CREDIT HOURS16

Fourth Semester

ITMD	273	Interiors Seminar: Practices and Procedures*2
ITMD	284	Interiors Internship II*1
		Business/Marketing/Entrepreneurship
		Electives6
ITMD		Capstone: Merchandising and Entrepreneurship*2
ITMD	180	Leadership in Design1
		Physical Education Elective1
		Interiors Elective3
		TOTAL CREDIT HOURS16
		TOTAL PROGRAM CREDIT HOURS

Interiors Electives

ITMD	127	Elements of Floral Design1
ITMD	140	Window Treatments*1
ITMD	143	Accessory Fundamentals*1
ITMD	145	Upholstered Furniture*1
ITMD	147	Lighting Basics*1
ITMD	148	History of Asian Furniture and Design2
ITMD	149	Casegoods*1
ITMD	150	Asian Rugs and Carpets1
ITMD	175	Advanced Floral Design*1
ITMD	213	Lighting Design and Planning*
ITMD	225	Interior Textiles II*
ITMD	250	20th Century Designers1
ITMD	295	Field Study: Design and Merchandising*
ITMD	296	Interior Design: the Orient

Business/Marketing/Entrepreneurship Electives

ACCT	111	Small Business Accounting3
		or
ACCT	121	Accounting I
BUS	230	Marketing
MKT	121	Retail Management3
ENTR	120	Introduction to Entrepreneurship2
ENTR	131	Financial Management for Small Business*2
ENTR	142	Fast Trac Business Plan3
ENTR	160	Legal Issues for Small Business2
ENTR	180	Opportunity Analysis2
*Prei	requis	site/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. Missouri students should refer to Cooperative Program Information.

(2760 50.0408)

Interior Design

Associate of Applied Science Degree

First Semester

ITMD	121	Interior Design
		Furniture & Ornamentation/Antiquity to Renaissance3
DRAF	164	Architectural Drafting/Residential Interior Design3
MATH	120	Business Math or higher*3
ITMD	125	Interior Textiles
ENGL	121	Composition I*
		TOTAL CREDIT HOURS

Second Semester

ITMD	123	Space Planning*
ITMD	132	Materials and Resources3
MKT	134	Professional Selling
ITMD	231	Furniture & Ornamentation Renaissance to 20th Cent3
BUS	150	Business Communications*3
		TOTAL CREDIT HOURS18

Third Semester

		Interiors Elective
ITMD		Budgeting and Estimating*3
ITMD	282	Interiors Internship I*1
ART	180	See ARTH 180 for Art History: Ancient to Renaissan3
ECON	132	Survey of Economics3
ECON		Economics I

Fourth Semester

		Interiors Elective	3
ITMD	273	Interiors Seminar: Practices and Procedures*	2
ITMD	284	Interiors Internship II*	1
		Business/Marketing Elective	3
FASH	125	Visual Merchandising	3
FASH	135	Image Management	1

	or
	Leadership in Design1
ITMD 237	Capstone: Merchandising and Entrepreneurship*2
	Physical Education Elective1
	TOTAL CREDIT HOURS16
	TOTAL PROGRAM CREDIT HOURS68

Interior Electives

ITMD	127	Elements of Floral Design1
ITMD	140	Window Treatments*1
ITMD	143	Accessory Fundamentals*1
ITMD	145	Upholstered Furniture*1
ITMD	147	Lighting Basics*1
ITMD	148	History of Asian Furniture and Design2
ITMD	149	Casegoods*1
ITMD	150	Asian Rugs and Carpets1
ITMD	175	Advanced Floral Design*1
ITMD	213	Lighting Design and Planning*3
ITMD	225	Interior Textiles II*
ITMD	250	20th Century Designers1
ITMD	295	Field Study: Design and Merchandising*3
ITMD	296	Interior Design: the Orient

Business/Marketing Electives

BUS	145	Small Business Management3
BUS	230	Marketing
MKT	121	Retail Management3
		Sales Management*
*Prer	equis	site/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. Missouri students should refer to Cooperative Program Information. (6500 50.0408)

Interior Design

Vocational Certificate

Required Courses

	Interior Design	
TTMD 132	Materials and Resources	
111D 152		
MATH 120	Business Math or higher*3	
MKT 134	Professional Selling3	
	Image Management1	
ITMD 282	Interiors Internship I*1	
	TOTAL PROGRAM CREDIT HOURS17	
*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 in the spring. If you are interested, contact the Admissions office for an application packet, which includes prerequisites, deadlines, admission requirements and academic criteria.

(259A 16.1603)

Interpreter Training

Associate of Applied Science Degree

Prerequisites

INTR 1	120	Elementary American Sign Language I	
INTR 1	121	Elementary American Sign Language II*	
ENGL 3	121	Composition I*	
		TOTAL CREDIT HOURS9	
Note:	ENGI	121 must be passed with a 'B' or higher.	
Note:	INTF	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.

	Health and/or Physical Educ Elect1
SPD 121	Public Speaking3
ENGL 122	Composition II*3
	Science and/or Math Elective3
	Humanities Elective3
	TOTAL CREDIT HOURS19

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

	Intermediate American Sign Language I*
INTR 126	Classifiers in American Sign Language*2
	Survey of the Interpreting Profession*
INTR 147	Fingerspelling I*2
INTR 145	Introduction to the Deaf Community*
	TOTAL CREDIT HOURS13

Second Semester

INTR 123	Intermediate American Sign Language II*
INTR 131	Interpreting Preparation Skills*2
	Intro to American Sign Language Linguistics*3
INTR 242	Fingerspelling II*2
INTR 248	Deaf Community Ethnography*3
	TOTAL CREDIT HOURS

Third Semester

INTR	181	Interpreting Practicum I*1
		Advanced American Sign Language*
INTR	226	Specialized and Technical Vocabulary*2
INTR	250	Interpreting I*6
		TOTAL CREDIT HOURS12

Fourth Semester

INTR	251	Interpreting II*2
		Seminar on Interpreting*3
INTR	282	Interpreting Practicum II*6
AAC	150	Job Search Skills1
		TOTAL CREDIT HOURS12
		TOTAL PROGRAM CREDIT HOURS
*Prer	requis	site/Corequisite required

American Sign Language Studies Certificate

The American Sign Language (ASL)studies postsecondary certificate has been developed based on the need for professional people in the community to be skilled in ASL. 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. Please note: INTR 145, INTR 122 and INTR 147 are only offered in the fall semester; INTR 123, INTR 135 and INTR 150 are only offered in the spring semester.

(6800 16.1603)

Interpreter Training

Postsecondary Certificate

First Semester

INTR 120	Elementary American Sign Language I	.3
INTR 145	Introduction to the Deaf Community*	
	Health/Physical Education Elective	.1
ENGL 121	Composition I*	

Second Semester

INTR		Elementary American Sign Language II*3
		Social Science or Economics Elective
ENGL	122	Composition II*
		TOTAL CREDIT HOURS9

Third Semester

INTR	122	Intermediate American Sign Language I*	3
INTR	147	Fingerspelling I*	2
		Math Elective*	3
		TOTAL CREDIT HOURS	9

Fourth Semester

INTR 123	Intermediate American Sign Language II*
	Intro to American Sign Language Linguistics*3
INTR 150	American Sign Language Literature*
	TOTAL CREDIT HOURS
	TOTAL PROGRAM CREDIT HOURS

Math Elective

MATH	115	Introduction to Algebra*3	
MATH	116	Intermediate Algebra*3	
MATH	118	Geometry*	
MATH	120	Business Mathematics*3	
MATH	122	Mathematics in Our Culture*3	
MATH	133	Technical Mathematics I*4	
MATH	134	Technical Mathematics II*5	
MATH	165	Finite Mathematics*3	
MATH	172	Trigonometry*3	
MATH	173	Precalculus*	
MATH	175	Discrete Mathematics and its Applications*3	
MATH	181	Statistics*	
MATH	225	Mathematics as a Decision Making Tool*	
MATH	231	Business and Applied Calculus I*	
MATH	232	Business and Applied Calculus II*	
MATH	241	Calculus I*	
MATH	242	Calculus II*5	
MATH	243	Calculus III*5	
MATH	244	Differential Equations*3	
*Prei	*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 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.

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.

(4390 16.1603)

Interpreter Training

Vocational Certificate

Fall Semester

HCI	110	Introduction	to Interpreting*	.3
			Skills I*	

Spring Semester

HCI	130	Interpreting Skills II*
		Spanish Medical Interpreting*3
AAC	130	Medical Terminology3

Fall Semester

HCI	180	Medical Interpreting Practicum*	.2
HC	101	Introduction to Health Care Delivery	.3
		TOTAL PROGRAM CREDIT HOURS	20

Land Surveying, A.A.S.

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.

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 ENGL ENGL SPD MATH	122 123 121	Composition I*
MATH	172	Trigonometry*
MATH	173	Precalculus*5
HIST	140	U.S. History to 1877
HIST	141	U.S. History Since 1877
		AND
ECON	132	Survey of Economics
ECON	230	Economics I
		the following:
POLS POLS		Political Science

Specific Program Requirements-may be taken at JCCC

		Physical Geography3
GEOS	141	Physical Geography Lab*2
		OR
ASTR	122	Astronomy
MATH	181	Statistics*
ENGR	180	Engineering Land Surveying I*
ENTR	142	Fast Trac Business Plan

Specific Program Requirements-taken at MCC-Longview

KSS	300	Affiliate Social Science	3
KSS	112	Technical Physics*	5
KSRV	152	Engineering Graphics & CADD I*	5
KSRV	137	Subdivision Planning and Layout*	3
KSRV	235	Advanced Surveying*	3
KSRV	236	Legal Aspects of Surveying*	3
KSRV	237	Land Surveying*	3
KSRV	240	Analysis of Survey Measurements I*	3
KSRV	242	Analysis of Survey Measurements II*	3
		TOTAL PROGRAM CREDIT HOURS	4
*Droz	comit	site/Coroquigite required	

*Prerequisite/Corequisite required

Land Surveying Certificate

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.

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

Vocational Certificate

Certificate granted by Metropolitan Community College

Specific Program Requirements-must be taken at JCCC

MATH 171	College Algebra*3
	AND
MATH 172	Trigonometry*3
	OR
	Precalculus*
ENGR 180	Engineering Land Surveying I*3

Specific Program Requirements-taken at MCC-Longview

		Engineering Graphics & CADD I*5	
KSRV	137	Subdivision Planning and Layout*3	
KSRV	235	Advanced Surveying*3	
KSRV	236	Legal Aspects of Surveying*	
KSRV	237	Land Surveying*3	
		TOTAL PROGRAM CREDIT HOURS	
*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.

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

(264A 22.0302)

Paralegal

Associate of Arts Degree

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*
LAW	121	Introduction to Law
LAW	123	Paralegal Professional Studies1

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

SPD	120	Humanities Elective
SPD	121	Public Speaking
SPD	125	Personal Communication

Second Semester

Following admission to the paralegal program:

ENGL 122 LAW 131 LAW 132	Composition II*
CPCA 128	PC Applications: Office 20033 or
CIS 124	Introduction to Computer Concepts and Applications3 or the following three:
CPCA 108	Word Processing I: MS Word*1 and
CPCA 110	Spreadsheets I: MS Excel*1 and
CPCA 114	Databases I: MS Access*1

Social Science	e and/or	Economics	Electives	3
TOTAL CREDIT	HOURS			

Third Semester

LAW	205	Legal Writing*3
		Paralegal Electives
		Health and/or Physical Education Elective1
		Humanities Elective
		Science and Mathematics Elective
		TOTAL CREDIT HOURS16

Fourth Semester

LAW	271	Legal Ethics, Interviewing and Investigation*3
		Paralegal Electives8
		Science and Mathematics Electives3
		Social Science and/or Economics Electives3
		TOTAL CREDIT HOURS17
		TOTAL PROGRAM CREDIT HOURS64

Paralegal Electives

LAW	140	Alternative Dispute Resolution*
LAW	142	Torts*
LAW	148	Criminal Litigation*3
LAW	152	Real Estate Law*
LAW	162	Family Law*
LAW	171	Law Office Management*3
LAW	173	Judicial Academy*1
LAW	212	Business Organizations*3
LAW	220	Computer-Assisted Legal Research*2
LAW	223	Computer Applications in the Law Office*
LAW	241	Wills, Trusts and Probate Administration*3
LAW	245	Elder Law*3
LAW	247	Intellectual Property Law*
LAW	266	Employment Law*3
LAW	268	Bankruptcy*2
LAW	270	Administrative Law*3
LAW	275	Paralegal Internship I*1
LAW	276	Paralegal Internship II*1
*Prer	requis	ite/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.

(5450 22.0302)

Legal Nurse Consulting

Vocational Certificate

LAW	225	Legal Nurse Consultant Profession*1
LAW	121	Introduction to Law
LAW	131	Legal Research*

LAW or 205 LAW Legal Writing*.....3 LAW 260 LAW 271 Legal Ethics, Interviewing and Investigation*.....3 Note: Students must take one of the following courses: LAW 148 Criminal Litigation*.....3 LAW LAW 268 Bankruptcy*.....2

*Prerequisite/Corequisite required

Legal Nurse Consultant Entrepreneurship Certificate

This 28 credit-hour certificate is designed to prepare students to realize their entrepreneurial dream of opening their own legal nurse consultant (LNC) service business providing two services to their clients: consulting expertise and a testifying expert. 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. Upon successful completion, the student should be prepared to develop, grow and sustain their own legal nurse consultant service business.

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.

(4060 22.0302)

Paralegal

Vocational Certificate

Prerequisites for Required Courses

LAW	121	Introduction to Law	
BUS	230	Marketing	

		Legal Nurse Consultant Profession1
		Legal Research*3
ENTR	120	Introduction to Entrepreneurship2
		Opportunity Analysis2
LAW	250	Medicolegal Research and Writing*3
LAW	205	Legal Writing*3

LAW	260	Personal Injury Law*3
		or
LAW	132	Civil Litigation*3
LAW	270	Administrative Law*3
LAW	271	Legal Ethics, Interviewing and Investigation*3
		LAW electives
ENTR	142	Fast Trac Business Plan3
ENTR	220	Entrepreneurial Marketing*2
		TOTAL PROGRAM CREDIT HOURS

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*
LAW	142	Torts*
LAW	148	Criminal Litigation*3
LAW	152	Real Estate Law*
LAW	162	Family Law*
LAW	171	Law Office Management*3
LAW	212	Business Organizations*3
LAW	241	Wills, Trusts and Probate Administration*
LAW	245	Elder Law*
LAW	247	Intellectual Property Law*
LAW	266	Employment Law*
LAW	268	Bankruptcy*2

Additional Suggested Coursework

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ENTR 160 Legal Issues for Small Business......2
ENTR 195 Franchising......3
*Prerequisite/Corequisite required
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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. (489A 22.0302)

Paralegal

Postsecondary Certificate

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: Office 2003
	or
CIS 124	Introduction to Computer Concepts and Applications3
	or the following three:
CPCA 108	Word Processing I: MS Word*1

CPCA 110	and Spreadsheets I: MS Excel*1	
	and	
CPCA 114	Databases I: MS Access*1	
	TOTAL CREDIT HOURS7	

Second Semester

Follo	wing	admission to the paralegal program
LAW	131	Legal Research*
LAW	132	Civil Litigation*
		Paralegal Electives7
		TOTAL CREDIT HOURS

Third Semester

		Legal Writing*3
LAW	271	Legal Ethics, Interviewing and Investigation*3
		Paralegal Electives

Paralegal Electives

LAW	140	Alternative Dispute Resolution*
LAW	142	Torts*
LAW	148	Criminal Litigation*3
LAW	152	Real Estate Law*
LAW	162	Family Law*
LAW	171	Law Office Management*3
LAW	173	Judicial Academy*1
LAW	212	Business Organizations*3
LAW	220	Computer-Assisted Legal Research*2
LAW	223	Computer Applications in the Law Office*
LAW	241	Wills, Trusts and Probate Administration*
LAW	245	Elder Law*
LAW	247	Intellectual Property Law*
LAW	266	Employment Law*3
LAW	268	Bankruptcy*2
LAW	270	Administrative Law*
LAW	275	Paralegal Internship I*1
LAW	276	Paralegal Internship II*1
*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.

Associate of Applied Science Degree

First Semester

		Professional Selling3
ENGL	121	Composition I*
MATH	120	Business Math or higher*3
BUS	121	Introduction to Business3
BUS	230	Marketing
MKT	284	Marketing and Management Internship I1
		TOTAL CREDIT HOURS16

Second Semester

ACCT	111	Small Business Accounting3
		or
ACCT	121	Accounting I
MKT	121	Retail Management3
MKT	202	Consumer Behavior3
BUS	150	Business Communications*3
BUS	141	Principles of Management3
MKT	286	Marketing and Management Internship II*1
		TOTAL CREDIT HOURS16

Third Semester

	234 240	Services Marketing*
ECON	132	Survey of Economics3
		or
ECON	230	Economics I
HUM	122	Introduction to Humanities
CIS	124	Introduction to Computer Concepts and Applications3
		and
		CPCA/CDTP elective1
Note	: CPC	A 105/106 will not meet this one hour requirement.

		or
		CPCA/CDTP electives4
MKT	288	Marketing and Management Internship III*1
		TOTAL CREDIT HOURS17

Fourth Semester

MKT	221	Sales Management*3
MKT	290	Capstone: Marketing and Management Case Studies*3
BUS	261	Business Law I
HIST	141	U.S. History Since 18773
		Health and/or Physical Education Elective1
PHIL	138	Business Ethics1
MKT	289	Marketing and Management Internship IV*1
		TOTAL CREDIT HOURS15
		TOTAL PROGRAM
		CREDIT HOURS64
*Prer	requis	site/Corequisite required

Marketing Specialist Entrepreneurship Certificate

The marketing specialist entrepreneurship certificate prepares students to realize their entrepreneurial dream of opening 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. Upon successful completion, students should be prepared to develop and sustain their own marketing services business. (4250 52.1803)

Marketing and Management

Vocational Certificate

Required Courses

BUS	230	Marketing
MKT	134	Professional Selling
MKT	121	Retail Management3
ACCT	111	Small Business Accounting3
		or
ACCT	121	Accounting I
ENTR	120	Introduction to Entrepreneurship2
ENTR	180	Opportunity Analysis2
MKT	202	Consumer Behavior3
MKT	240	Advertising and Promotion3
ENTR	131	Financial Management for Small Business*2
ENTR	220	Entrepreneurial Marketing*2
ENTR	142	Fast Trac Business Plan
MKT	284	Marketing and Management Internship I1
		TOTAL PROGRAM CREDIT HOURS
*Prerequisite/Corequisite required		

Additional Suggested Coursework

ENTR 195	Franchising*3
ENTR 160	Legal Issues for Small Business2
MKT 234	Services Marketing*3

Retail Sales Representative Certificate

This retail sales representative certificate is designed for students seeking positions in the growing retail industry in Johnson County. (5260 52.1803)

Marketing and Management

Vocational Certificate

Required Courses

FASH 135 Image Management		
	3	
MKT 121 Retail Management		
MKT 134 Professional Selling	3	
MKT 202 Consumer Behavior		
MKT 234 Services Marketing*	3	
MKT 284 Marketing and Management Internship I		
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.

(4920 52.1803)

Marketing and Management

Vocational Certificate

Prerequisite for Required Course

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ENGL 121 Composition I*.....3
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Required Courses

MKT BUS BUS FASH MKT MKT MKT MKT CIS	134 121 150 230 135 284 202 221 234 240 124	Professional Selling.3Retail Management.3Business Communications*.3Marketing.3Image Management.1Marketing and Management Internship I.1Consumer Behavior.3Sales Management*.3Services Marketing*.3Advertising and Promotion.3Introduction to Computer Concepts and Applications.3
		or

		CPCA/CDTP electives	3
MKT	286	Marketing and Management Internship II*	1
		TOTAL PROGRAM CREDIT HOURS	0
*Pre	requi	site/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. (5280 52.1803)

Marketing and Management

Vocational Certificate

BUS	121	Introduction to Business
BUS	140	Principles of Supervision3
BUS	141	Principles of Management3
BUS	150	Business Communications*3
BUS	230	Marketing
MKT	202	Consumer Behavior3
BUS	120	Management Attitudes and Motivation3
		01
BUS	225	Human Relations3
MKT	234	Services Marketing*3
MKT	284	Marketing and Management Internship I1 TOTAL PROGRAM CREDIT HOURS25

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. (5250 52.1803)

Marketing and Management

Vocational Certificate

First Semester

BUS	121	Introduction to Business3
BUS	150	Business Communications*3
BUS	230	Marketing
MKT	140	Teleservice Communication Skills3
MATH	120	Business Mathematics*3
MKT	284	Marketing and Management Internship I1
		TOTAL CREDIT HOURS16

Second Semester

BUS	123	Personal Finance3
MKT	202	Consumer Behavior
MKT	234	Services Marketing*3
BOT	130	Office Systems Concepts3
CIS	124	Introduction to Computer Concepts and Applications [^] 3
		and
		CPCA/CDTP elective1
		or
		CPCA/CDTP electives4
Note	: CPC	A 105 and 106 do not meet requirements.

MKT	286	Marketing and Management Internship II*1
		TOTAL CREDIT HOURS17
		TOTAL PROGRAM CREDIT HOURS
*Pre	requi	site/Corequisite required
NOTE	: ^Re	commended for students who intend to transfer to a
bacc	alaur	eate 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. (5270 52.1803)

Marketing and Management

Vocational Certificate

121	Introduction to Business3
140	Teleservice Communication Skills3
202	Consumer Behavior
120	Business Mathematics*3
101	Computerized Keyboarding**1
	140 202 120

MKT	284	Marketing and Management Internship I1	
		TOTAL PROGRAM CREDIT HOURS14	
		site/Corequisite required	
**As	sessm	ent 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 2010. 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 four welding instructors and two machine tool instructors. Two 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.

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. 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.

A series of welder related certificates are offered, all leading toward the associate of applied science degree.

(2460 48.0501)

Metal Fabrication (Welding) Technology

Associate of Applied Science Degree

First Semester

INDT	125	Industrial Safety3
MFAB	121	Introduction to Welding4
ENGL	121	Composition I*
		Technical Mathematics I*4
CPCA	105	Introduction to Personal Computers: Windows1
MFAB	180	Blueprint and Symbols Reading for Welders2
		TOTAL CREDIT HOURS17

Second Semester

MFAB	125	Advanced Gas and Arc Welding*4
		or
MFAB	140	Maintenance Repair Welding*3
ENGL	123	Technical Writing I*3
PHYS	133	Applied Physics*5
MFAB		Manufacturing Materials and Processes
HPER	200	First Aid and CPR2
INDT	155	Workplace Skills1

Third Semester

		Gas Metal Arc Welding I4
MFAB	170	Basic Machine Tool Processes4
BUS		Principles of Supervision
		Social Science Elective
		Related Elective3
		TOTAL CREDIT HOURS17

Fourth Semester

		Gas Tungsten Arc Welding*4
MFAB	240	Metallurgy2
		Humanities Elective
		Related Electives6
		TOTAL CREDIT HOURS15
		TOTAL PROGRAM CREDIT HOURS

Related Electives

AUTO	121	Small Engine Service3
BUS	120	Management Attitudes and Motivation3
BUS	145	Small Business Management3
ENTR	142	Fast Trac Business Plan3
CET	105	Construction Methods3
CIS	124	Introduction to Computer Concepts and Applications3
ELEC	131	Introduction to Sensors and Actuators
ELEC	133	Programmable Controllers
ENGL	210	Technical Writing II*3
HVAC	167	Sheet Metal Layout and Fabrication3
INDT	140	Quality Improvement Using SPC2
MATH	134	Technical Mathematics II*5
MFAB	127	Welding Processes2
MFAB	230	Gas Metal Arc Welding II*4
MFAB	271	Metal Fabrication Internship*3
RRT	165	Railroad Safety, Quality and Environment3
*Prer	requis	site/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), flux cored arc welding (FCAW), 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.

(4790 48.0501)

Metal Fabrication (Welding) Technology

Vocational Certificate

INDT	125	Industrial Safety	3
MFAB	180	Blueprint and Symbols Reading for Welders	2
MFAB	121	Introduction to Welding	4
MFAB	125	Advanced Gas and Arc Welding*	4
		or	
MFAB	140	Maintenance Repair Welding*	3
MFAB	130	Gas Metal Arc Welding I	4
MFAB	160	Gas Tungsten Arc Welding*	4
MFAB	230	Gas Metal Arc Welding II*	4

INDT 155	Workplace Skills	1
	TOTAL PROGRAM CREDIT HOURS25-2	6
*Prerequi	site/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.

(4600 48.0501)

Metal Fabrication (Welding) Technology

Vocational Certificate

Required Courses

MFAB	121	Introduction to Welding4
MFAB	130	Gas Metal Arc Welding I4
MFAB	240	Metallurgy
		Workplace Skills1
		TOTAL PROGRAM CREDIT HOURS11

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. The student should have successfully completed work place skills. Blue print and symbol reading for welders and/or metallurgy.

(4610 48.0501)

Metal Fabrication (Welding) Technology

Vocational Certificate

MFAB 125	Advanced Gas and Arc Welding*4
MFAB 160	Gas Tungsten Arc Welding*4
MFAB 180	Blueprint and Symbols Reading for Welders2
	or
MFAB 240	Metallurgy2
MFAB 230	Gas Metal Arc Welding II*4
	das metar Are werding ir

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 certificate. 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.

(4620 48.0501)

Metal Fabrication (Welding) Technology

Vocational Certificate

Required Courses

MFAB	121	Introduction to Welding4
		or
		Gas Metal Arc Welding I4
MFAB	140	Maintenance Repair Welding*3
MFAB	152	Manufacturing Materials and Processes3
MFAB	170	Basic Machine Tool Processes4
INDT	155	Workplace Skills1
		TOTAL PROGRAM CREDIT HOURS15

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.

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(4590 48.0501)
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Metal Fabrication (Welding) Technology

Vocational Certificate

	Welding Processes2Introduction to Welding4
	or
MFAB 130	Gas Metal Arc Welding I4
MFAB 180	Blueprint and Symbols Reading for Welders2
	or
MFAB 240	Metallurgy2
INDT 155	
	TOTAL PROGRAM CREDIT HOURS

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. (235A 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 o	f Chemistry5
MATH 116	5 Intermediate	Algebra or Higher*3
	TOTAL CREDIT	HOURS

First Semester

BIOL	144	Human Anatomy and Physiology	. 5
		or	
BIOL	140	Human Anatomy	.4
		AND	
		Human Physiology*	
PSYC	130	Introduction to Psychology	. 3
NURS	124	Foundations of Nursing*	. 9
		TOTAL CREDIT HOURS	20

Second Semester

	Communications Elective	
	Human Development*	
NURS 126	Nursing Care of the Adult: Health Alterations*	.9
	TOTAL CREDIT HOURS	15

Summer

ENGL	121	Composition I*	3
		TOTAL CREDIT HOURS	3

Third Semester

		Nursing Care of the Childbearing Family*	
NURS	230	Nursing Care of Children*	5
SOC	122	Introduction to Sociology	3
		or	
SOC	125	Social Problems	3
BIOL	230	Microbiology*	3
		TOTAL CREDIT HOURS1	б

Fourth Semester

NURS 232	Complex Patient Care Management*
	Health and/or Physical Education Elective1
	TOTAL CREDIT HOURS13
	TOTAL PROGRAM CREDIT HOURS72-75
*Prerequi	site/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.

(235A 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 Physiology5
CHEM 122	Principles of Chemistry5
ENGL 121	Composition I*
PSYC 130	Introduction to Psychology3
PSYC 218	Human Development*3
	Communications Elective3
MATH 116	Intermediate Algebra or Higher*
	TOTAL CREDIT HOURS25

Summer

NURS 136 LPN-RN Transition Course*......6 Note: NURS 136 is not added into the total program hours.

Third Semester

NURS 228	Nursing Care of the Childbearing Family*	.5
	Nursing Care of Children*	
SOC 122	Introduction to Sociology	.3
	or	
SOC 125	Social Problems	.3
BIOL 230	Microbiology*	.3
	TOTAL CREDIT HOURS	16

Fourth Semester

NURS 232	Complex Patient Care Management*	.9
	Humanities Elective	.3

Health and/or Physical Education Elective1
TOTAL CREDIT HOURS
TOTAL PROGRAM CREDIT HOURS
*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 take the Practical Nursing Licensing exam. After completing the practical nursing program, you may continue your education in to become a registered nurse.

The program, which can be completed in 10 months, provides 1,100 hours of instruction. This includes classroom and clinical laboratory experiences in many areas of nursing. The application deadline is March 15, 2007 for the August, 2007, start date and March 15, 2008 for the August, 2008, start date. Admission to this program requires successful completion of several prerequisites.

(3660 51.1613)

Health Occupations

Area Vocational School Certificate

Prerequisite for Required Courses

BIOL 144 PSYC 130	A certificate & admission to PN program Human Anatomy and Physiology
Fall	
AVPN 115	Nursing I*550
Spring	
AVPN 117	Nursing II*

Note: TOTAL PROGRAM CONTACT HOURS.....1100 *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 take the Practical Nursing Licensing exam. After completing the practical nursing program, you may continue your education to become a registered nurse.

The program, which can be completed in 18 months, provides 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: October 1, 2007 for January, 2008, start date and March 15, 2009 for July, 2009, start date. Admission to this program requires successful completion of several prerequisites. (3680 51.1613)

Health Occupations

Area Vocational School Certificate

Prerequisites for Required Courses

Fall

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AVPN 115 Nursing I*.....550
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Spring

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. (2390 13.1501)

Associate of Arts

First Semester

ENGL 121	Composition I*	.3
	Introduction to Teaching*	
PSYC 130	Introduction to Psychology	.3
	Humanities Elective	.3
	Science course with Lab4	- 5
	TOTAL CREDIT HOURS16-	17

Second Semester

ENGL	122	Composition II*
EDUC	220	Survey of the Exceptional Child
PSYC	218	Human Development*3
MATH	171	College Algebra or higher*3
		Social Science/Economics Elective3
		PSYC Elective
		program.) TOTAL CREDIT HOURS

Third Semester

EDUC 243	Issues and Skills	for Paraeducators	3
PSYC 225	Educational Psycho	ology*	3

Education Elective3
Humanities Elective3
Science and/or Mathematics Elective*
TOTAL CREDIT HOURS15

Fourth Semester

EDUC	235	Parenting*2
PSYC	215	Child Development*3
		Multicultural Issues in Education2
		Communications Elective
		Social Science/Economics Elective
		Health and/or Physical Education Elective2
		(Recommend HPER 200-First Aid and CPR)
		TOTAL CREDIT HOURS15
		TOTAL PROGRAM CREDIT HOURS

Education Electives

EDUC	210	Creative Experiences for Young Children*3
EDUC	240	School-Age Programs and Curriculum I*3
EDUC	245	School-Age Programs and Curriculum II*3
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.

(2820 49.0299)

Railroad Operations

Associate of Applied Science Degree

First Semester

RREL 180 Introduction to Railroad Electronics*.....1

	Circuit Analysis DC/AC*6	
ENGL 121	Composition I*	
	Science and/or Mathematics Elective*3	
	Elective	
	TOTAL CREDIT HOURS16	

Second Semester

	Semiconductor Devices and Circuits*	
RREL 183	Digital Techniques*	6
	Humanities Elective	3
	TOTAL CREDIT HOURS	.15

Third Semester

RREL 284	Electronic Communications*	.6
	Social Science/Economics Elective	.3
	Technical Electives	.6
	TOTAL CREDIT HOURS	15

Fourth Semester

RREL	285	Microprocessor Techniques*6
RREL	286	Applied Microprocessors*2
		Health and/or Physical Education Elective1
		Communications Elective3
		Technical Electives6
		TOTAL CREDIT HOURS
		TOTAL PROGRAM CREDIT HOURS64

Note: MATH 111 and MATH 115 will not meet math requirements.

Technical Electives

ASTR	120	Fundamentals of Astronomy
AUTO	121	Small Engine Service
AUTO	122	Introduction to Automotive Glass
AUTO	125	Introduction to Automotive Shop Practices3
BOT	101	Computerized Keyboarding1
BOT	103	Business English3
BOT	105	Keyboarding and Formatting I
BOT	115	Electronic Calculators1
BOT	150	Records Management3
BOT	175	Conflict in the Workplace1
CET	105	Construction Methods3
CET	120	Engineered Plumbing Systems I3
CET	122	Engineered Plumbing Systems II3
CET	129	Construction Management3
CPCA	105	Introduction to Personal Computers: Windows1
CPCA	106	Introduction to Personal Computers: MacIntosh1
CPCA		PC Applications: Office 20033
CIS	124	Introduction to Computer Concepts and Applications3
CIS	134	Programming Fundamentals4
DRAF		Introduction to Drafting2
DRAF	123	Interpreting Machine Drawings*2
DRAF		Interpreting Architectural Drawings2
DRAF	132	Introduction to AutoCAD LT
DRAF		Topics in CAD I2
DRAF		Architectural Drafting*3
ELEC		Introduction to Electronics
ELEC		Microcomputer A+ Preparation4
ELEC	125	Digital Electronics I4
ELEC		Introduction to Sensors and Actuators3
ELEC		Programmable Controllers3
ELEC		Introduction to Telecommunications3
ELEC		LAN Cabling and Installation3
ENGR		Engineering Orientation2
GEOS	130	General Geology

GEOS 140 GEOS 145	Physical Geography3 World Regional Geography3
HVAC 125	Energy Alternatives
HVAC 143	Reading Blueprints and Ladder Diagrams2
HVAC 146	Plumbing Systems Applications3
HVAC 150	Refrigerant Management and Certification1
HVAC 155	Workplace Skills1
HVAC 167	Sheet Metal Layout and Fabrication3
INDT 125	Industrial Safety3
INDT 140	Quality Improvement Using SPC2
INDT 155	Workplace Skills1
IT 200	Networking Technologies
IT 205	Implementing Windows Client*3
MFAB 121	Introduction to Welding4
MFAB 152	Manufacturing Materials and Processes3
MFAB 170	Basic Machine Tool Processes4
MFAB 180	Blueprint and Symbols Reading for Welders2
MFAB 240	Metallurgy2
RRT 120	History of Railroading3
RRT 121	Railroad Technical Careers
RRT 150	Railroad Operations3
RRT 165	Railroad Safety, Quality and Environment3
*Prerequi	site/Corequisite required

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.

(4540 49.0299)

Railroad Operations

Vocational Certificate

	Introduction to Railroad Electronics*1
RREL 181	Circuit Analysis DC/AC*6
RREL 182	Semiconductor Devices and Circuits*6
RREL 183	Digital Techniques*6
rrel 284	Electronic Communications*6
RREL 285	Microprocessor Techniques*6
RREL 286	Applied Microprocessors*2
	TOTAL PROGRAM CREDIT HOURS
*Prerequi	site/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

Vocational Certificate

RRIT 127	Welding Processes*2
	Structural Quality SMAW*3
RRIT 141	Structural Quality GMAW*3
	TOTAL PROGRAM CREDIT HOURS8
*Prerequi	site/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.

(4570 49.0299)

Railroad Welder Training Program

Vocational Certificate

RRIT 127	Welding Processes*2
RRIT 140	Structural Quality SMAW*3
	TOTAL PROGRAM CREDIT HOURS
*Prerequi	site/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.

(4530 49.0299)

Railroad Welder Training Program

Vocational Certificate

	Elements of Welding*3
RRIT 123	Basic Welding*3
RRIT 137	Structural Welding SMAW*3
RRIT 138	Structural Welding FCAW*3
RRIT 139	Structural Welding Pipe*3
	TOTAL CREDIT HOURS15
*Prerequi	site/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.

(4520 49.0299)

Railroad Welder Training Program

Vocational Certificate

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.

 $(2810\ 49.0299)$

Railroad Operations

Associate of Applied Science Degree

First Semester

CPCA	105	Introduction to Personal Computers: Windows1
CPCA	108	Word Processing I: MS Word*1
CPCA	110	Spreadsheets I: MS Excel*1
ENGL	121	Composition I*
MATH	133	Technical Mathematics I*4
PHIL	124	Logic and Critical Thinking
RRT	120	History of Railroading3
		TOTAL CREDIT HOURS16

Second Semester

ENGL	123	Technical Writing I*3
MATH	134	Technical Mathematics II*5
PHYS	133	Applied Physics*5
		Railroad Technical Careers
		Health and/or Physical Education Elective1
		TOTAL CREDIT HOURS17

Third Semester

	Introduction to Business
ECON 132	Survey of Economics3
ECON 230	Economics I

PHIL	138	Business Ethics1
RRT	150	Railroad Operations3
RRT	165	Railroad Safety, Quality and Environment3
SPD	125	Personal Communication3
		TOTAL CREDIT HOURS16

Fourth Semester

RRTC 123	Introduction to Conductor Service*4
RRTC 175	Conductor Mechanical Operation*2
RRTC 261	Conductor Service*2
RRTC 263	General Code of Operating Rules*4
RRTC 267	Conductor Field Application*4
	TOTAL CREDIT HOURS16
	TOTAL PROGRAM CREDIT HOURS65
*Prerequi	site/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.

(4410 49.0299)

Railroad Operations

Vocational Certificate

Required Courses

RRTC	123	Introduction to Conductor Service*4
RRTC	175	Conductor Mechanical Operation*2
RRTC	261	Conductor Service*2
RRTC	263	General Code of Operating Rules*4
RRTC	267	Conductor Field Application*4
		TOTAL PROGRAM CREDIT HOURS

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.

(2800 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
CPCA 110	Spreadsheets I: MS Excel*1
ENGL 121	Composition I*
MATH 133	Technical Mathematics I*4
PHIL 124	Logic and Critical Thinking3
RRT 120	History of Railroading3
	TOTAL CREDIT HOURS16

Second Semester

ENGL	123	Technical Writing I*3
MATH	134	Technical Mathematics II*5
PHYS	133	Applied Physics*5
RRT	121	Railroad Technical Careers3
		Health and/or Physical Education Elective1
		TOTAL CREDIT HOURS17

Third Semester

		Introduction to Business
		or
ECON	230	Economics I
PHIL	138	Business Ethics1
RRT	150	Railroad Operations3
RRT	165	Railroad Safety, Quality and Environment
SPD	125	Personal Communication
		TOTAL CREDIT HOURS16

Fourth Semester

INDT 140	Quality Improvement Using SPC	
	Business/Related Electives	6
	Technical/Related Electives	9
	TOTAL CREDIT HOURS	.17
	TOTAL PROGRAM CREDIT HOURS	.66

Business/Related Electives

ACCT	121	Accounting I
BUS	123	Personal Finance
BUS	140	Principles of Supervision
BUS	141	Principles of Management3
BUS	225	Human Relations
BUS	230	Marketing
BUS	243	Human Resource Management
BUS	261	Business Law I
ENGL	210	Technical Writing II*3
BOT	101	Computerized Keyboarding1

Technical/Related Electives

AUTO	125	Introduction to Automotive Shop Practices
AUTO	165	Automotive Engine Repair*4
CET	105	Construction Methods
CET	127	Construction Estimating*3
CET	129	Construction Management3
CPCA	138	Windows for Microcomputers*1
DRAF	123	Interpreting Machine Drawings*2
DRAF	129	Interpreting Architectural Drawings2
ELEC	120	Introduction to Electronics
ELEC	126	Microcomputer A+ Preparation4
ELEC	133	Programmable Controllers
ELEC	150	Introduction to Telecommunications
ENGR	180	Engineering Land Surveying I*
GEOS	140	Physical Geography3
GEOS	141	Physical Geography Lab*2
HVAC	123	Electromechanical Systems4

INDT 125	Industrial Safety3
MFAB 121	Introduction to Welding4
MFAB 130	Gas Metal Arc Welding I4
MFAB 152	Manufacturing Materials and Processes
	Metallurgy
*Prerequ	isite/Corequisite required

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. (2840 49.0299)

Railroad Operations

Associate of Applied Science Degree

First Semester

CPCA	105	Introduction to Personal Computers: Windows1
CPCA	108	Word Processing I: MS Word*1
CPCA	110	Spreadsheets I: MS Excel*1
ENGL	121	Composition I*
MATH	133	Technical Mathematics I*4
PHIL	124	Logic and Critical Thinking
RRT	120	History of Railroading
		TOTAL CREDIT HOURS16
		TOTAL CREDIT HOURS1

Second Semester

ENGL	123	Technical Writing I*3
MATH	134	Technical Mathematics II*5
PHYS	133	Applied Physics*5
RRT	121	Railroad Technical Careers
		Health and/or Physical Education Elective1
		TOTAL CREDIT HOURS17

Third Semester

BUS	121	Introduction to Business3
ECON	132	Survey of Economics3
		or
ECON	230	Economics I
PHIL	138	Business Ethics1
RRT	150	Railroad Operations3
RRT	165	Railroad Safety, Quality and Environment
SPD	125	Personal Communication
		TOTAL CREDIT HOURS16

Fourth Semester

RRIT	122	Elements of Welding*	3
		or	
MFAB	121	Introduction to Welding	1
RRIT		Basic Welding*	
RRTM	124	Orientation to the Railroad Mechanical Craft*	2
RRTM	170	Railroad Mechanical Safety and Health*	2
RRTM	251	Locomotive Diesel Engine Fundamentals*	2
RRTM	253	Freight Car Fundamentals*	2
RRTM	254	Basic Locomotive Electricity and Electronics*	2
		TOTAL CREDIT HOURS	5

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.

(2850 49.0299)

Associate of Applied Science Degree

First Semester

CPCA	105	Introduction to Personal Computers: Windows1
ENGL	121	Composition I*
MATH	133	Technical Mathematics I*4
		Logic and Critical Thinking3
RRT	120	History of Railroading3
		TOTAL CREDIT HOURS14

Second Semester

		Technical Writing I*3
INDT	125	Industrial Safety3
PHYS	133	Applied Physics*5
RRT	121	Railroad Technical Careers
		Health and/or Physical Education Elective1
		TOTAL CREDIT HOURS15

Third Semester

ECON	132	Technical/Related Elective
		Economics I
		Railroad Safety, Quality and Environment3 Personal Communication3 TOTAL CREDIT HOURS15

Fourth Semester

RRIT	122	Elements of Welding*3
RRIT	123	Basic Welding*3
RRIT	132	Thermite Welding*3
RRIT	136	Rail and Switch Point Repair Welding*3
RRIT	145	Frog Welding*3
RRIT	271	Railroad Welding Internship*6
		TOTAL CREDIT HOURS
		TOTAL PROGRAM CREDIT HOURS65
*Prer	requis	site/Corequisite required

Technical/Related Electives

		Introduction to Automotive Shop Practices	
AUTO	165	Automotive Engine Repair*4	ł
CET	105	Construction Methods	5
CET	127	Construction Estimating*3	5
CET	129	Construction Management	5
CPCA	138	Windows for Microcomputers*1	-
DRAF	123	Interpreting Machine Drawings*2)
DRAF	129	Interpreting Architectural Drawings2)

ELEC	120	Introduction to Electronics
ELEC	126	Microcomputer A+ Preparation4
ELEC	133	Programmable Controllers
ELEC	150	Introduction to Telecommunications
GEOS	140	Physical Geography3
GEOS	141	Physical Geography Lab*2
HVAC	123	Electromechanical Systems4
MFAB	130	Gas Metal Arc Welding I4
MFAB	152	Manufacturing Materials and Processes3
MFAB	240	Metallurgy2

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) in collaboration with the Committee on Accreditation for Respiratory Care (CoARC). 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/home/depts.php/001256 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.

(237A 51.0908)

Associate of Applied Science Degree

Summer

		Social Science/Economics Elective
ENGL 1	.21	Composition I**
		TOTAL CREDIT HOURS6

First Semester

BIOL 140 Human Anatomy [^] 4
MATH 116 Intermediate Algebra*^
Note: MATH 116 or MATH 171 or higher

CHEM 122	Principles of Chemistry [^]	5
	Humanities/Art Elective	3
	TOTAL CREDIT HOURS	.15

Second Semester

BIOL 225	Human Physiology**4
	Microbiology**3
	Microbiology Lab2
Note: BIO	L 231 is strongly suggested.

EMS	121	CPR I - Basic Life Support for Healthcare Provider1
HC	101	Introduction to Health Care Delivery**3
		Communications Elective
		TOTAL CREDIT HOURS11-16

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
		Respiratory Care Equipment*4
RC	135	Cardiopulmonary Medicine I*1
		(Current BCLS for Health Care Provider required)
		TOTAL CREDIT HOURS9

Third Semester

RC	220	Cardiopulmonary Physiology*2
		Clinical Topics and Procedures I*4
		Cardiopulmonary Medicine II*2
RC	240	Cardiopulmonary Pharmacology*2
RC	271	Clinical Practice I*6
		TOTAL CREDIT HOURS16

Fourth Semester

RC		Clinical Topics and Procedures II*4
RC		Respiratory Care of Children*2
RC	236	Cardiopulmonary Medicine III*2
RC	272	Clinical Practice II*6
		TOTAL CREDIT HOURS14
		TOTAL PROGRAM CREDIT HOURS
		WITH HC ELECTIVE COURSE
*Pre	requi	site/Corequisite required

Veterinary Technology, A.A.S.

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 http://www.jccc.net/cooperative

Associate of Applied Science Degree

Degree granted by Metropolitan Community College

General Education Requirements-must be taken at JCCC

ENGL 121	Composition I*
SPD 121	Public Speaking3
	General Education Electives
	Note: ENGL 122-Composition II is highly recommended.

American Institutions

HIST 140) U.S. History to 1877 or	3
HIST 141	l U.S. History Since 1877or	3
POLS 122	2 Political Scienceor	3
POLS 124	4 American National Governmentor	3
POLS 126	5 State and Local Government	3

Specific Program Requirements-must be taken at JCCC

BIOL	127	General Zoology5
		Microbiology*3
		Microbiology Lab*2
CHEM	122	Principles of Chemistry5
		PC Applications: Office 20033

Specific Program Requirements-taken at MCC-Maplewoods

KSS	300	Affiliate Social Science1-3
KSAH	108	Clinical Math1
KSAH	100	Introduction to Veterinary Technology2
KSAH	101	Principles of Animal Science I
KSAH	110	Principles of Animal Science II*
KSAH	111	Sanitation and Animal Care2
KSAH	200	Veterinary Hospital Technology I*3
KSAH	201	Clinical Pathology Techniques I4
KSAH	202	Veterinary Anatomy*5
KSAH	203	Laboratory Animal Technology*2
KSAH	209	Equine Medicine and Management*3
KSAH	210	Veterinary Hospital Technology II*3
KSAH	211	Clinical Pathology Techniques II*5
KSAH	212	Large Animal Technology*4
KSAH	213	Radiology and Electronic Procedures2
KSAH	214	Veterinary Technician Internship*6
		TOTAL PROGRAM CREDIT HOURS
*Prei	requis	site/Corequisite required

General Education Electives

ART 180	See ARTH 180 for Art History: Ancient to Renaissan3
ART 182	Art History: Renaissance to Modern3
ART 184	Art History: Twentieth Century3
ANTH 125	Cultural Anthropology3
ANTH 126	Physical Anthropology3
ANTH 130	World Cultures
ECON 132	Survey of Economics3
ECON 230	Economics I
ECON 231	Economics II
ENGL 130	Introduction to Literature*3
ENGL 230	Introduction to Fiction*3
FL 130	Elementary Spanish I5
FL 131	Elementary Spanish II*5
FL 140	Elementary French I5
FL 141	Elementary French II*5
FL 180	Elementary American Sign Language I3
FL 181	Elementary American Sign Language II*3
HIST 125	Western Civilization: Readings and Discussion I3

HIST 126 HUM 122 MUS 121 PHIL 121 PHIL 124	Western Civilization: Readings and Discussion II3 Introduction to Humanities
PHIL 143	Ethics
PHIL 154	History of Ancient Philosophy3
PHIL 176	Philosophy of Religion3
POLS 132	Introduction to Comparative Government
POLS 135	International Relations3
PSYC 121	Applied Psychology3
PSYC 130	Introduction to Psychology
SOC 122	Introduction to Sociology
SOC 125	Social Problems
SOC 131	Marriage and the Family3
SPD 120	Interpersonal Communication

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) Animation (ANI) Anthropology (ANTH) Architecture (ARCH) Art (ART) 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 Forensics (CFOR) Computer Information Systems (CIS) Computer Personal Computer App (CPCA) Computer Science (CS) Computer Web (CWEB) Cosmetology (AVCO) - D -

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) 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)

- | -

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)

- 0 -

Occupational Therapy Assistant (KOT)

- P -

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Philosophy (PHIL)
Photography (PHOT)
Physical Ed, Health & Rec (HPER)
Physical Science (PSCI)
Physical Therapist Assistant (KPT)
Physics (PHYS)
Political Science (POLS)
Power Plant Technology (PPT)
Practical Nursing (AVPN)
Psychology (PSYC)
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- 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)

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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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: In addition to the course tuition, fees, and textbooks, this

course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. Associated Costs: In addition to the course tuition, fees, and textbooks, this

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$2 to 5.

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. Associated Costs: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

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 278 Accounting Internship (1 CR)

Prerequisite: ACCT 121 plus 12 additional ACCT hours beyond ACCT 121 and assistant dean's approval or career program facilitator'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)

Prerequisite: 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 120

Writing in the Disciplines (1 CR)

Writing in the Disciplines (TCR) Writing in the Disciplines is designed to complement and/or support the Administration of Justice program by emphasizing the type of writing required in a law enforcement career. Students will review the rules of grammar, especially verb tense, pronoun usage, spelling, sentence correctness, and punctuation, and then they will practice writing a variety of report narratives representative of a career in law enforcement. 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 is a required course in the Administration of Justice degree program. 1 hr. lecture/wk.

ADMJ 121

Introduction to Administration of Justice (3 CR)

The student will be required to participate in field and classroom experiences designed to explore the career opportunities within the criminal justice system. The student will demonstrate through examinations, assigned papers and reports his or her knowledge of law enforcement processes; minimum requirements at entry level for local, state, and federal law enforcement; the minimum training standards of each; and the training and education programs available and required in Kansas. This course will provide a detailed description of the

components of the American criminal justice system: police, courts and corrections. 3 hrs. lecture/wk. 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 is a detailed exploration of the subsystems of the criminal justice system. It will begin with the history and evolution of the penal system. The law, legal system and criminal justice process will be reviewed. This focus includes a detailed examination of jails, detention facilities, probation, prisons and parole. An overview of the state, local and federal correctional systems will provide a systemic view of society's response to criminal behavior. 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 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 Delinguency (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)

Students will study Supreme Court decisions that have had significant effect on law enforcement techniques and procedures. 3 hrs. lecture/wk.

ADMJ 141 Criminal Law (3 CR)

Prerequisite: ADMJ 124 or LAW 121 or PL 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 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 mood-altering substance use and abuse, including these substances' history and evolution. The course will focus on the models of abuse, addiction and treatment. The current local and federal laws governing substance use and abuse will be examined. Students will gain a comprehensive grasp of the current facts, focuses, and methods of dealing with mood-altering substances. 3 hrs. lecture/wk.

ADMJ 201 Police Interrogation (3 CR)

Prerequisite: Suggested course: ENGL 121

This class will help students develop their verbal and written communications in the criminal justice area. The concepts necessary to develop the verbal and written technical communications skills in the area of criminal justice is one of the most important aspects needed when considering future criminal justice employment. Emphasis will be placed on the development of skills in interviewing, interrogation, and report writing. The major emphasis will be placed upon the development of basic skills used in verbalizing information and reducing it to technical writing necessary in the criminal justice field. Students will leave the class with the knowledge and ability to interview victims, witnesses and suspects, and to use the information gained to write an accurate complete narrative police report. A component of this course is spent in the Writing Center developing the writing skills necessary for a career in criminal justice. 3 hrs. 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 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 is a detailed survey of the various psychological pathologies displayed by citizens when coming into contact with the police, as well as the sources of those pathologies. Various strategies of handling and dealing with troubled persons will be discussed. Student will learn about psychological profiling and mental status examination. Factors contributing to individual behavior will be explored. Students will receive an overview of common treatment procedures. 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 140 clock hours of law enforcement training provided in addition to the 400 hours required by the Kansas Minimum Standards Training Act for recruits attending the Police Academy. While the required 400-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. Major Code 4880, CIP Code 43.0107

ADMJ 280 Criminal Justice and the Public (3 CR)

Prerequisite: ADMJ 120 and ADMJ 121 and ADMJ 124 and ADMJ 127 and at least five (5) additional credit hours of Administration of Justice course work

This capstone course for Administration of Justice majors will identify and analyze conflict that arises between various parts of the criminal justice system and the communities they serve. The student will study needs and interests of various citizen populations as well as appropriate methods of serving those populations. The student will also study concepts of ethics and professionalism and will apply those concepts in an administration of justice field. 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)

Prerequisite: Fifteen credit hours in ADMJ courses or program facilitator approval and a grade point average of 2.0 or higher

The student will gain experience in settings that reflect the application of knowledge and skills acquired in the Administration of Justice program. The student is expected to interact in a structured format with a professional agency, in a role related to study and career interests, and to develop insight and information that will help refine career directions and focus further study.

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. 1 hr. integrated lecture lab/wk. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 20.

ANI 145 Introduction to 3D Animation (3 CR)

Prerequisite: CDTP 135 and either ANI 120 or CIM 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 20.

ANI 245

Character Animation (3 CR)

Prerequisite: ANI 145 or CIM 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 20.

ANI 255

Advanced Animation and Effects (3 CR)

Prerequisite: ANI 245 or CIM 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, lab/wk.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 20.

ANI 260

Animation Capstone (3 CR)

Prerequisite: ANI 255 or CIM 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, lab/wk.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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 140 Archaeology (3 CR) This course is an introduction to the basic concepts, methods, and findings in archaeology. Awareness of the variety and continuity of the human past will be achieved by examining the processes that form and transform the archaeological record, basic dating techniques, and approaches to understanding the 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./wk.

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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this

course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$200 to

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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this

course has additional expense considerations that are estimated to be \$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.

course has additional expense considerations that are estimated to be \$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: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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: In addition to the course tuition, fees, and textbooks, this

course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$100 to 200.

ART 180 See ARTH 180 for 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.

ART 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.

ART 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.

ART 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.

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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$100 to 250.

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, duasars, 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$40 to 300.

AUTO 163

Automotive Steering and Suspension (3 CR)

Prerequisite or corequisite: AUTO 125 or approval of division administrator

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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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, calculating compression ratio, piston displacement, horsepower and torque, and correcting internal engine malfunctions. 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$40 to 300.

AUTO 167

Automotive Brake System (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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$40 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$40 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, the Advanced Engine Performance Specialist (L1) test or the three ASE Engine Machinist 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,

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$40 to 300.

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.

Associated Costs: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$40 to 300.

AUTO 234

Automotive Electrical System (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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$40 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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$40 to 300.

AUTO 254

Automotive Engine Performance (5 CR)

Prerequisite or corequisite: AUTO 165 and AUTO 234

Upon successful completion of this course, the student should be able to describe the operation and construction of automotive fuel system components such as carburetors, fuel pumps, injectors and controlling devices. The student should also be able to describe the operation and construction of ignition circuits to include computer controlled and DIS systems. Finally, students should be able to service all performance systems on the automobile. 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, 6 hrs. lab/wk.

Associated Costs: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$40 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.

Associated Costs: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$40 to 300.

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 work loads. 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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 <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$40 to 300.

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.

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 consent of the Assistant Dean

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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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

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 or BIOL 146

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)

Prerequisites: 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$35.

BIOL 235 General Nutrition (3 CR)

Prerequisite: BIOL 144 or Prerequisite or corequisite: 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. 3hrs. 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

This course will teach continuing science students basic ecological theories that are accepted and used by the professional ecological community. Laboratory exercises will test ecological theories by having students develop hypotheses, design experiments, collect and analyze data by using statistics that include T-tests and Kruskal-Wallis tests, and write scientifically formatted reports. 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 260

Biotechnology Methods (5 CR)

Prerequisite: 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

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, wholesale 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 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)

Prerequisite: 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

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 Operation 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

Warehouse 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.

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.

BOT 120 Machine Transcription (1 CR)

Prerequisite: BOT 105 or equivalent

Upon successful completion of this course, the student should be proficient in transcribing a variety of business documents from machine transcription. Emphasis is placed on operation of transcription equipment; development of speed and accuracy in transcription; and developing English, proofreading and formatting skills. 1 hr./wk.

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 hrš./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. hrs./wk.

BOT 155 Word Processing Application I (2 CR) Prerequisite: 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 175

Conflict in the Workplace (1 CR)

Upon successful completion of this course, the student should be able to develop the knowledge, skills, process and understanding of good working relationships in an office environment. The student will also be able to recognize and understand behavior patterns and what work-related events might trigger workplace conflict. Strategies will be developed for dealing with conflict and difficult people. 1 hr. 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. 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 PageMaker 7.0 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: Both CPCA 110 and CPCA 114 or 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. 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$60.

CHEM 131

General Chemistry II Lecture (4 CR)

Prerequisite: CHEM 124 and CHEM 125 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)

Prerequisite: CHEM 124 and CHEM 125 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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$60.

CHEM 140

Principles of Organic & Biological Chemistry (5 CR)

Prerequisite: BIOL 135 or permission of the assistant dean 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$80.

CHEM 220 Organic Chemistry I (5 CR)

Prerequisite: 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>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$80.

CHEM 250

Biochemistry (4 CR)

Prerequisite: 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)

Prerequisite: 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>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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

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: 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. This course is typically offered in the fall semester. This course is typically offered the second half of the fall semester. 2 hrs. lecture/wk.

CET 127 Construction Estimating (3 CR)

Prerequisite: DRAF 129 or competence in reading building drawings

This course introduces the student to the basic principles of construction estimating. Topics covered include estimating quantities of material from drawings and using reference books, tables and the C.S.I. format. Students will use industry-standard software for construction estimating. This course is typically offered in the fall semester. 2 hrs. lecture and 3 hrs. lab/ 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. This course is typically offered in the spring semester. This course is typically offered in the spring semester. 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. This course is typically offered in the spring semester. 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. 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 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)

Prerequisite: CPCA 105 or CPCA 106 or CIS 124 or DP 124 or CPCA 128 or an appropriate score on an assessment test

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>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$15 to 90.

CDTP 135

Desktop Photo Manipulation I: Photoshop (1 CR)

Prerequisites: CPCA 105 or CPCA 106 or CIS 124 or DP 124 or CPCA 128 or an appropriate score on an assessment test

This course is designed to explore the manipulation of digital photographs using a variety of techniques and tools. The application of painting and editing tools to digital images; the manipulation of selections, layers and resolution; and analyzing scanned images will be covered. 1 hr. lecture/wk.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$15 to 90.

CDTP 140

Desktop Publishing I: InDesign (1 CR)

Prerequisites: CPCA 105 or CPCA 106 or CIS 124 or DP 124 or CPCA 128 or an appropriate score on an assessment test

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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$15 to 90.

CDTP 145

Desktop Illustration I: Illustrator (1 CR)

Prerequisite: CPCA 105 or CPCA 106 or CIS 124 or DP 124 or CPCA 128 or an appropriate score on an assessment test

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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$15 to 90.

CDTP 155 Desktop Photo Manipulation II: Photoshop (1 CR)

Prerequisite: CDTP 135

This course presents advanced techniques of Photoshop. Topics covered include creating and manipulating text, importing existing images and creating new images. Other topics will include applying filter effects, correcting color, retouching and repairing images, adding special effects and preparing art for the

Web. Students will explore solutions to specific Photoshop problems and will plan and create individual projects. 1 hr. lecture-demonstration/wk. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$15 to 90.

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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$15 to 90.

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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$15 to 90.

CDTP 175 Desktop Photo Manipulation III: Photoshop (1 CR)

Prerequisite: CDTP 155

This course presents advanced techniques for using Photoshop. Advanced topics include painting techniques, photographic techniques, image manipulation techniques, and composing techniques. Airbrushing, blending modes, channels, clipping groups, colorizing, filters, gradients, layer effects, masks and modes, levels, lighting effects, masking, perspective and depth, posterizing, restoration, retouching, texturizing and tiling are techniques that will be covered. Students will explore and apply solutions to specific Photoshop problems by creating individual projects. 1 hr. lecture/wk.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$15 to 90.

CDTP 180 Photoshop for the Web: Photoshop and Image Ready (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, designing Web pages using multiple Adobe programs (Adobe Acrobat and Adobe GoLive), and creating animated images for the Web will be covered. 1 hr. lecture/wk. Associated Costs: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$15 to 90.

Computer Forensics (CFOR)

CFOR 150 Introduction to Computer Forensics (3 CR)

Prerequisite: CIS 134 and CPCA 139

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 or Lori Betten Ibetten@jccc.edu with "Background Check" as the subject. 3 hrs. lecture/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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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 140 Editor for COBOL (1 CR)

Prerequisite: CIS 134

In this introductory course, students will focus on using an editor to create and manipulate files on a computer. They also will submit computer programs for execution. 1 hr. lecture, lab/wk.

CIS 145

Assembler Language for Microcomputers (4 CR)

Prerequisite: CIS 134 or ENGR 171 or the equivalent experience. It is recommended that this course be taken after completion of CS200 or an equivalent programming course beyond Programming Fundamentals or Programming for ENGR & Science.

Students will study and use assembler language for the microcomputer in order to understand the basic concepts of the personal computer and its use in problem solving. Topics include the microcomputer CPU, registers and memory segmentation. Practical applications include DOS and BIOS systems services, array and bit processing, and library calls. 3 hrs. lecture, 2 hrs. lab by arrangement/wk.

CIS 148 COBOL I (4 CR)

Prerequisite: CIS 134 Corequisite: CIS 140

Students will study the use of the COBOL programming language by writing programs in COBOL in a mainframe environment. Emphasis will be on function and use of statements in the four divisions of ANSI COBOL. 3 hrs. lecture, 2 hrs. lab by arrangement/wk.

CIS 150

Assembler Language I (4 CR)

Prerequisite: CIS 134 Corequisite: CIS 140. It is recommended that this class be taken after CIS 148.

Students will write programs using assembler language in order to understand the basic concepts of the IBM mainframe. Topics include CPU, registers and memory fetching. Practical applications include I/O, array processing and bit manipulation. 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 204 UNIX Operating System (3 CR)

Prerequisite: 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)

Prerequisite: 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 215

OS/VS Job Control Language (3 CR)

Prerequisite: CIS 148 or CIS 150

Students will study the use of OS/VS JCL and typical applications. Emphasis will be on rules of coding JCL, optimizing resources, use of symbolic parameters and overriding statements. An IBM mainframe will be used in the application of JCL and utilities. 3 hrs. lecture/wk.

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 DP 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 248 COBOL II (4 CR)

Prerequisite: CIS 148

In this advanced COBOL programming class, students will use ANSI COBOL to solve problems with data on a direct access device. They will work on methods for building, maintaining and using files in a sequential, random and indexed manner. They also will study the sort feature of COBOL. 3 hrs. lecture, 2 hrs. lab by arrangement/wk.

CIS 253 CICS (4 CR)

Prerequisite: CIS 248

This is an introduction to command-level CICS using the COBOL language. The class will cover basic CICS commands and their uses as well as CICS management modules and their functions, including program control, terminal control, basic mapping support, file control and temporary storage. Debugging on the transaction level will be discussed. 3 hrs. lecture, 2 hrs. lab by arrangement/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 145 or CIS 148 or CIS 150 or CS 200

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) *Prerequisite: CIS 242 and either CIS 260 or CIS 162 Prerequisite or Corequisite:*

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)

Prerequisite: 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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 20.

CPCA 107 Distance Learning (1 CR)

This course provides an introduction to the basic usage of Distance Learning software. Students will send and receive e-mail; post and organize discussion group messages; manage calendars, appointments and to-do lists; and use contact management features. 1 hr. lecture/wk.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 20.

CPCA 108 Word Processing I: MS Word (1 CR)

Prerequisites: CPCA 105 or CPCA 106 or CIS 124 or DP 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 20.

CPCA 110

Spreadsheets I: MS Excel (1 CR)

Prerequisite: CPCA 105 or CPCA 106 or CIS 124 or DP 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 20.

CPCA 114

Databases I: MS Access (1 CR)

Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124 or DP 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 20.

CPCA 116 Database:Filemaker Pro (1 CR)

Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124 or DP 124

In this career-related course, students will be introduced to the essential concepts of data management so they can store, organize and synthesize information for effective use in the day-to-day business needs of even a medium-sized organization. Students will create a database file with fields, records, calculations, summaries, auto entries and pop-up lists. Several layouts will be created with links between them. Sorts and finds will be created and saved as scripts with buttons. 1 hr. lecture/wk.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. Student will be introduced to Data Access Objects and ActiveX Data Objects. 1 hr. lecture /wk. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 20.

CPCA 118

Groupware (1 CR)

Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124 or DP 124 or an appropriate score on a waiver test

This course provides an introduction to the concepts and applications of today's robust groupware applications. Students will use groupware to compose, send and receive e-mail; post and organize discussion group messages; manage calendars, appointments and to-do lists; and use contact management features. 1 hr. lecture/wk.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 20.

CPCA 121 Introduction to Project Management (1 CR)

Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124 or DP 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 20.

CPCA 123

E-Presentation: MS PowerPoint (1 CR)

Prerequisite: CPCA 105 or CPCA 106 or DP 124 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: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 20.

CPCA 128

PC Applications: Office 2003 (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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 20.

CPCA 138

Windows for Microcomputers (1 CR)

Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124 or DP 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 20.

CPCA 139

UNIX (1 CR)

Prerequisite: CPCA 105 or CPCA 106 or CPCA 128 or CIS 124 or DP 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 DP 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 covered. 1 hr. lecture/wk.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 20.

Computer Science (CS)

CS 180

Introduction to Artificial Intelligence (3 CR)

Prerequisite: CIS 145 or DP 145 or CIS 148 or DP 148 or CIS 150 or DP 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$20 to 50.

CS 210

Discrete Structures I (3 CR)

Prerequisites: MATH 171 or both MATH 116 and CIS 134 or appropriate test 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 DP 124 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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 20.

CWEB 108

GoLive I (1 CR)

Prerequisite: CPCA 105 or CPCA 106 or an appropriate score on an assessment test

This short course provides instruction in the creation, production and management of Web pages and Web sites. The course covers introductory concepts and techniques in Web page creation, from the initial preplanning and page layout through the actual publishing of Web pages to a Web site. The emphasis is on introductory, practical experience in Web page creation and management using Adobe GoLive. 1 hr. lecture/wk.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 20.

CWEB 118

GoLive II (1 CR)

Prerequisite: CWEB 108

This intermediate course is designed to explore the relation, production and management of Web pages and Web sites using a variety of techniques and tools within Adobe GoLive. Creating animations, using actions and JavaScript, creating forms, using cascading style sheets, and management of Web sites will be covered. 1 hr. lecture/wk.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 20.

CWEB 125

Internet Applications: Dreamweaver & Databases (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: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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 electronics 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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 20. This course will use software tools such as Internet Explorer and Netscape

Cosmetology (AVCO)

AVCO 102 Nail Technology

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.

course has additional expense considerations that are estimated to be \$145 to 150.

AVCO 110 Introduction to Cosmetology

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 \$970 total. Out-of-state tuition and fees \$4,070 total. 500 contact hrs. For enrollment and tuition information, call 913-469-8500 ext. 2390. The credit reflected in this course is for transcent reporting. transcript reporting, recording and transfer only.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$28 to 38.

AVCO 112 Clinical Cosmetology

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 \$893 total. Out-of-state tuition and fees \$4,060 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

Prerequisite: AVCO 110 with a min grade of "C" or better 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 \$893 total. Out-of-state tuition and fees \$4,060 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$159.

AVCO 118 Esthetics

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 \$1,240 total. Out-of-state tuition and fees \$5,270 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$174 to 190.

AVCO 212 Cosmetology Instructor Training

Prerequisite: 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$75.

AVCO 218 Advanced Esthetics Training

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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$15.

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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$3300 to 3350.

DHYG 125

Developmental Dentistry (2 CR)

Prerequisite: Admission to Dental Hygiene Program and CHEM 122 and ENGL 121 and BIOL 140 and PSYC 130 and BIOL 230 and Corequisite: DHYG 121 and DHYG 138 and Prerequisite or corequisite: 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)

Prerequisite: BIOL 230 and CHEM 122 and ENGL 121 and PSYC 130 and BIOL 140 and admission to the Dental Hygiene Program and Prerequisite or corequisite: 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 prerequisite or corequisite: 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.

Associated Costs: In addition to the course tuition, fees, and textbooks, this

course has additional expense considerations that are estimated to be \$25 to 35.

DHYG 142 Dental Radiology (2 CR)

Prerequisites: DHYG 121 Corequisites: DHYG 140 and DHYG 146 and DHYG 148 and Prerequisite or corequisite: 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)

Prerequisites: DHYG 121 and Corequisites: DHYG 140 and DHYG 142 and DHYG 148 Prerequisite or Corequisite: 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)

Prerequisites: DHYG 121 and Corequisites: DHYG 140 and DHYG 142 and DHYG 146 Prerequisite or Corequisite: 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 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$250 to 275.

DHYG 225 Pathology (3 CR)

Prerequisites: DHYG 140 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 and 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)

Prerequisites: DHYG 221 and 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>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$5 to 10.

DRAF 130 Introduction to CAD Concepts: AutoCAD 2007 (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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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)

Prerequisite: 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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

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

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$140 to 160.

DRAF 222 Mechanical Drafting (3 CR)

Prerequisite: 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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$50 to 75.

DRAF 230 Intermediate CAD: AutoCAD (3 CR)

Prerequisites: 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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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 floorplans, 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)

Prerequisites: 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 (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 (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 (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) Prerequisites: 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)

Prerequisite: ITMD 122 or ITMD 123 and ITMD 129 both with a grade of C or higher, or approval of the program assistant dean 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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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: Program director 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)

Prerequisite: 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)

Prerequisite - Note: For elementary and secondary education only

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)

Prerequisite: 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 be 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 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 284 Seminar: Early Childhood Education (3 CR)

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 recommendation 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 Leardership 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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$125 to 300.

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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. 3 hrs. lecture/wk.

ELTE 215 Generators, Transformers and Motors (4 CR)

Prerequisite: 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/wk.

Associated Costs: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 20.

ELEC 122 Circuit Analysis I (3 CR)

Prereguisites: 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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this

course has additional expense considerations that are estimated to be \$5 to 10.

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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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 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. Attendance at one Saturday session is required. Saturday date and time 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)

Prerequisite: 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. clinical/field experience/wk.

EMS 206 Training Officer I (1 CR)

Prerequisite: 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)

Prerequisite: 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$700 to 1,000.

EMS 225

MICT II (10 CR)

Prerequisite: EMS 220 with a minimum grade of "C"

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 minimum grade of "C"

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 minimum grade of "C"

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 and total station. 2 hrs. lecture, 3 hrs. lab/wk.

ENGR 251 Statics (3 CR)

Prerequisite: MATH 242 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) Prerequisites: 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 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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. 3 hrs. lecture/wk. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. 3 hrs./wk.

ENGL 241 British Writers (3 CR)

Prerequisite: ENGL 122

This course emphasizes reading and discussion of works by selected major British writers and includes related writing projects. Students will identify important biographical details; explore the historical, cultural and artistic context of major writers and their works; and identify and evaluate the use of significant literary devices. The course emphasizes the relationships among influential writers, their lives and times and their works important to our cultural heritage. 3 hrs./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. 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 Learners (ELL) with an integrated communicative experience on the 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)

Prerequisite: Appropriate score on an assessment test or (EAP 091 and EAP 105) or (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 Learners (ELL) with an integrated communicative experience on the beginning 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 COMPASS ESL score or (EAP 092 and EAP 107) or (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 high intermediate level. Students will further develop their skills in reading and writing fluency comprehension, vocabulary and grammar. Writing activities will focus on paragraph and multi-paragraph writing.

EAP 101 Writing and Grammar I (3 CR)

Prerequisite: Appropriate COMPASS ESL score and 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)

Prerequisite: (EAP 091 and EAP 105) or (EAP 101 and EAP 120 and EAP 105) or appropriate text score and 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 score on an assessment test.

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)

Prerequisite: (EAP 101 and EAP 120 and EAP 105) or (EAP 091 and EAP 105) or appropriate test score

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)

Prerequisite: Either (EAP 092 and EAP 107) or EAP 103 and EAP 121 and EAP 107) or appropriate COMPASS ESL score and 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. 3 hrs. lecture/wk.

EAP 113

Writing and Grammar IV (3 CR)

Prerequisite: Either (EAP 111 and EAP 122 and EAP 115) or (EAP 093 and EAP 115) or appropriate COMPASS ESL score

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. 3 hrs. lecture/wk.

EAP 115

Speaking and Pronunciation III (3 CR)

Prerequisite: Either (EAP 092 and EAP 107) or (EAP 103 and EAP 121 and EAP 107) or appropriate COMPASS ESL score

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. 3 hrs. lecture/wk.

EAP 117

Speaking and Pronunciation IV (3 CR)

Prerequisite: 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. 3 hrs. lecture/wk.

EAP 120 Reading/Vocabulary I (3 CR)

Prerequisite: Appropriate COMPASS ESL score and Corequisite: EAP 101 This course (EAP 120/RDG 120), which is paired with EAP 101 Writing and Grammar I, provides English as a Second Language students an integrated communication experience on the 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)

Prerequisite: Either (EAP 091 and EAP 105) or (EAP 101 and EAP 120 and EAP 105) or appropriate COMPASS ESL score and Corequisite: EAP 103

This course (EAP 121/RDG 121), which is paired with EAP Writing and Grammar II, provides English as a Second Language students the opportunity to 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 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 121 and RDG 121 are the same course; do not enroll in both.

EAP 122

Reading and Vocabulary III (3 CR)

Prerequisite: Either (EAP 092 and EAP 107) or (EAP 103 and EAP 121 and EAP 107) or appropriate COMPASS ESL score and Corequisite: EAP 111

This course (EAP 122/RDG 122), which is paired with EAP Writing and Grammar III, provides English as Second Language students an integrated communicative experience at the intermediate 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. 3 hrs. lecture/wk.

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)

Prerequisite: BUSE 131 or ENTR 131 and BUSE 160 or ENTR 160 and BUS 230 or assistant dean's approval

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)

Prerequisite: 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$100 to 300.

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: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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)

Prerequisite: FASH 121 and FASH 124 and FASH 127 and FASH 130 and FASH 150 and FASH 220 Prerequisite or corequisite: 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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$3000.

Fire Services Administration (FIRE)

FIRE 110

Essentials of Fire Fighting (9 CR)

Prerequisite or corequisite: HPER 240 and Program Facilitator Approval

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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$200.

FIRE 130 Fire Investigation (1 CR)

Prerequisite: FIRE 110 or FIRE 175

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 or FIRE 175

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 or FIRE 175

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 or FIRE 175

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 or FIRE 175

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 or FIRE 175

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 or FIRE 175

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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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 or one year of high school Spanish

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. 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 40.

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. 5 hrs./wk.

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 anguage. 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.

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. 5 hrs./wk.

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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. 5hrs./wk.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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 better or one year of high school Chinese with a grade of "D" or better

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. The emphasis 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. 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 vecabulary development and more adv

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

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 190 Intermediate Japanese I (3 CR)

Prerequisite: FL 171 or two years of high school Japanese

This course is a continuation of the study of Japanese language and culture, emphasizing the sounds, vocabulary, grammar, usage and readings of the Japanese language. Emphasis will be 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. 3 hrs/wk.

FL 191 Intermediate Japanese II (3 CR)

Prerequisite: FL 190 or three years of high school Japanese

This course is a continuation of the study of Japanese language and culture, emphasizing the sounds, vocabulary, grammar, usage and readings of the Japanese language. Emphasis will be 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 spring semester. 3 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)

Prerequisites: 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 and current events. 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. 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. 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. 2 hrs./wk.

FL 230 Intermediate Spanish I (3 CR)

Prerequisite: FL 131 or two years of high school Spanish

This is a reading course designed to build vocabulary, increase understanding of Hispanic culture and increase speaking fluency. The course will include composition and conversation. 3 hrs./wk.

FL 231

Intermediate Spanish II (3 CR)

Prerequisite: FL 230 or three years of high school Spanish Extensive study of Hispanic literature will be included in this class, along with advanced reading and grammar review. 3 hrs./wk.

FL 234

Conversational Spanish (2 CR)

Prerequisite: FL 131 or two years of high school Spanish

This course is designed to enhance students' ability to express themselves orally in Spanish through vocabulary building and reiteration of essential grammatical structures. The vocabulary will stress everyday life situations and current events. 2 hrs./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. 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. 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. 2 hrs./wk.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

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. FL 270 and INTR 122 are the same course; do not enroll in both. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. FL 271 and INTR 123 are the same course; do not enroll in both.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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 150

Game Programming II - 2D (4 CR)

Prerequisite: GAME 140 and either CIS 235 or CS 250

This course is designed to present the skills and provide the hands-on experience required to create more complex two-dimensional games utilizing C++ and the Windows environment. Typical game topics will include algorithms, multithreading, artificial intelligence (AI) and physics modeling. Typical tasks will include creating several games, using advanced data structures and AI and exercises that will highlight important game programming concepts. 3 hrs. lecture, 1.5 hrs. lab/wk. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$20 to 50.

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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$20 to 50.

GAME 230

Game Programming III -3D (4 CR)

Prerequisite or corequisite: GAME 150

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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$20 to 50.

GAME 250

Game Programming IV - Capstone (4 CR)

Prerequisite: GAME 200 and GAME 150 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: In addition to the course tuition, fees, and textbooks, this

course has additional expense considerations that are estimated to be \$20 to 50.

GAME 255 Mobile Game Programming (4 CR)

Prerequisite: GAME 150 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: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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

GIS Database and Design (3 CR)

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)

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 GIS (1 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 A-C (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, 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$40 to 50.

GDES 130

Drawing and Media Methods 1 (3 CR)

Prerequisite: ART 124 and GDES 120 or CD 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$200 to 400.

GDES 131

Drawing and Media Methods 2 (3 CR)

Prerequisite: GDES 130 or CD 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$200 to 400.

GDES 132

Typography (3 CR)

Prerequisite: ART 124 and either GDES 120 or CD 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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$200 to 400.

GDES 134 Layout Design (3 CR)

Prerequisite: GDES 132 or CD 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. Proper usage of peripheral equipment will be emphasized. 6 hrs. lecture and studio/wk.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$200 to 400.

GDES 230

Drawing and Media Methods 3 (3 CR)

Prerequisite: GDES 131 or CD 131 and GDES 132 or CD 132 and GDES 134 or CD 134

This course will provide an understanding of the application of illustration to graphic design. Visual problem-solving processes 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$200 to 400.

GDES 231 Advanced Typography (3 CR)

Prerequisite: GDES 134 or CD 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$200 to 400.

GDES 235 Production Methods (3 CR)

Prerequisites: GDES 134 or CD 134 and GDES 140 or CD 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$200 to 400.

GDES 236

Electronic Production (3 CR)

Prerequisites: GDES 230 or CD 230 and GDES 231 or CD 231 and GDES 235 or CD 235 and either PHOT 123 or CIM 135

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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$200 to 400.

GDES 244

Communication Systems (3 CR)

Prerequisites: GDES 230 or CD 230 GDES 231 or CD 231 and GDES 235 or CD 235 and either CIM 135 or PHOT 123

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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$200 to 400.

GDES 245

Advanced Design Practice (3 CR)

Prerequisites: GDES 230 or CD 230 and GDES 231 or CD 231 and GDES 235 or CD 235 and either CIM 135 or PHOT 123

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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$200 to 400.

GDES 272 Professional Preparation (3 CR)

Prerequisites: GDES 231 or CD 231 and GDES 235 or CD 235 and GDES 230 or CD 230 and PHOT 123 or CIM 135 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$0 to 450.

Health Care Interpreting (HCI)

HCI 110

Introduction to Interpreting (3 CR)

Prerequisite: 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.

Associated Costs: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 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.

HCI 130 Interpreting Skills II (3 CR)

Prerequisite: 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.

HCI 140

Spanish Medical Interpreting (3 CR)

Prerequisite: HCI 120 with a grade of "C" or higher and Prerequisite or corequisite: HCI 130 with a grade of "C" or higher and AAC 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 20.

HCI 180

Medical Interpreting Practicum (2 CR)

Prerequisite: 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 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 medical record 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 medical 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 or approval of instructor.

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 or approval of the instructor

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)

Prerequisite: 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 or approval of instructor 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)

Prerequisite: 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)

Prerequisite: BIOL 144 and KMRT 202

Nomenclatures and classification system for coding and indexing diagnoses and procedures with emphasis on specialized health care record systems. 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 in Health Informat (3 CR)

Prerequisite: KMRT 201, 202, and 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 CR)

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

Prerequisite: ENGL 121 with a grade of "C" or better 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 \$228 total. Out-of-state tuition and fees \$823 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

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

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$20 to 50.

AVHO 103 Certified Nurse Aide Refresher Course

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 and transfer only. For more information, go to http://www.jccc.net/home/depts/5104/site/newstudent/types/adm_avs/CMA_Updat

e Info-Requirements

AVHO 104 Certified Medication Aide

Prerequisite: 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 \$199 total. Out-of-state tuition and fees \$695 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 trapscript reporting. 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_Infor mation-Requirements

Associated Costs: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$20 to 50.

AVHO 106 Home Health Aide

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 tamilies needing health care assistance at home. Students will be scheduled to take the Kansas HHA certification examination. In-state tuition and fees \$93 total. Out-of-state tuition and fees \$223 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_Inform ation-Requirements

ation-Requirements

AVHO 108 Certified Medication Aide Update

Prerequisite: 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 \$37 total. Out-of-state tuition and fees \$130 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

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

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$20.

AVHO 112 Rehabilitative Aide

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_Informa tion_-_Requirements

AVHO 115 I V Therapy For LPNs

Prerequisite: 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 1.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

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

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$30 to 150.

HVAC 137

Residential Systems: Air Conditioning (4 CR)

Prerequisite: HVAC 121 and HVAC 123

Upon successful completion of this course, the student should be able to identify Opon 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: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$30 to 150.

HVAC 229

Advanced Control Systems (4 CR)

Prerequisite: 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

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$30 to 150.

HVAC 271 HVAC 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 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 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 three centuries of the social, political, economic and cultural forces shaping 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.

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.

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 to make a hand drawing to scale as well as being introduced to computer-aided design. 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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10.

HORT 140

Turfgrass (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 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

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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$100 to 150.

HORT 214

Woody Plants I, Deciduous (3 CR)

This course will assist the grounds maintenance employee, landscaper, garden center employee and home hobbyist in identifying plant materials used in the landscape. This class places emphasis on deciduous trees sold in garden centers and used in climatic zones 5 and 6. Plant uses, specific characteristics, cultivation, seasonal effects and influences that affect plant choices will be taught. 2 hrs. lecture, 3 hrs. lab/wk.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10.

HORT 215 Woody Plants II, Evergreens (3 CR) This course will assist the grounds maintenance employee, landscaper, garden center employee and home hobbyist in identifying evergreen trees and shrubs and flowering shrubs sold in garden centers used in climatic zones 5 and 6. The plant uses, specific characteristics, plant cultivation, seasonal effects, influences that affect plant choices and customer service attributes will be taught. 2 hrs. lecture, 3 hrs. lab/wk.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10.

HORT 220 Herbaceous Plants (3 CR)

This course will focus on the identification and uses of perennials, annuals, bulbs, ground covers and vines. The course will assist the grounds maintenance employee, landscaper, garden center employee and home hobbyist in identifying and selecting herbaceous plant materials used in the landscape. Culture and care will be covered, with additional emphasis on uses and maintenance. The student will also cover the more creative aspects of landscape enhancement and uses of herbaceous plants in garden design. 2 hrs. lecture, 3 hrs. lab/wk. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$30.

HORT 240 Turfgrass Management II (3 CR)

Prerequisite: HORT 140

More specific information is provided on turfgrass management. 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. 3 hrs. lecture/wk.

HORT 255 Landscape Pest Control (3 CR)

This course will explore the general concepts of turf and ornamental 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$100 to 235.

Hospitality Management (HMGT)

HMGT 120 Food Service

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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$25 to 50.

HMGT 230

Professional Cooking II (3 CR)

Prerequisite: HMGT 120 and HMGT 123

This is the second of two courses in professional cooking methods for students enrolled in hospitality management programs. This course is designed to help the student continue to develop professional cooking skills in the savory kitchen, the pastry shop and the cold kitchen. Upon successful completion of this course, the student should be able to demonstrate the skills necessary to prepare standard menu items, to prepare basic convenience baked products, and to prepare basic garde manger items. The class will include menu planning for plated and buffet meals. In addition, the student will learn how to make frozen desserts and intermezzo ices, identify different cheeses and other specialty items. 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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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)

Prerequisite: 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)

Prerequisite: HMGT 120 and HMGT 123 and Corequisite: 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)

Prerequisite: HMGT 120 and HMGT 123 and Corequisite: 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)

Prerequisite: HMGT 120 and HMGT 123 and Corequisite: 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)

Prerequisite: HMGT 120 and HMGT 123 Corequisite: 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)

Prerequisite: HMPB 155 and HMPB 160 and HMPB 233 and HMPB 252 and Corequisite: 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)

Prerequisite: HMPB 155 and HMPB 160 and HMPB 233 and HMPB 252 and Corequisite: 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)

Prerequisite: HMPB 155 and HMPB 160 and HMPB 233 and HMPB 252 and Corequisite: 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)

Prerequisite: HMPB 155 and HMPB 160 and HMPB 233 and HMPB 252 and Corequisite: 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 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 210 Netware Administration (3 CR)

Prerequisites: IT 200 and ELEC 126 and IT 205

This course is designed to provide students with the necessary knowledge and skills to perform competently in the role of a NetWare network administrator. Students completing this course will be able to accomplish basic network management tasks. Topics covered include managing user accounts; planning and managing the network file system; managing NetWare Directory Services (NDS); implementing login, file system and NDS security; and implementing network printing. 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)

Prerequisites: IT 200 and ELEC 126

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 plan server roles and subsequent requirements; 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, advanced routing services 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)

Prerequisites: IT 230 and IT 221 and 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 (5 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 assistant dean's approval

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 Assistant Dean's Approval and approval of the program 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)

Prerequisites: 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, lab/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.

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. 3 hrs. lecture, 2 hrs. lab/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.

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.

CIM 272

Interactive Media Internship (1 CR)

Prerequisite: Program 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)

Prerequisite: 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.

Interior Design (ITMD)

ITMD 121

Interior Design (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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

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.

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.

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.

ITMD 148 History of Asian Furniture and Design (2 CR)

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.

ITMD 150 Asian Rugs and Carpets (

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.

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.

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.

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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$50.

ITMD 223 Commercial Design (3 CR)

Prerequisites: 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$75 to 100.

ITMD 239

Capstone: Interior Design (2 CR)

Prerequisite: Approval of program facilitator

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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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)

Prerequisite: 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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

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.

ITMD 284 Interiors Internship II (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.

ITMD 295 Field Study: Design and Merchandising (3 CR)

Prerequisite: 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 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. 6 hrs. integrated lecture-lab/wk. INTR 120 and FL 180 are the same course. Do not enroll in both. Associated Costs: In addition to the course tuition, fees, and textbooks, this

course has additional expense considerations that are estimated to be \$0 to 10.

INTR 121

Elementary American Sign Language II (3 CR)

Prerequisite: INTR 120 or FL 180

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. INTR 121 and FL 181 are the same course; do not enroll in both. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$250.

INTR 122

Intermediate American Sign Language I (3 CR)

Prerequisite: INTR 121 or FL 181 with a grade of "C" or higher and Corequisite: For students accepted in the interpreter training program: INTR 130 and INTR 126 and INTR 147 and INTR 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 and FL 270 are the same course; do not enroll in both. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 20.

INTR 123

Intermediate American Sign Language II (3 CR)

Prerequisite: INTR 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 and FL 271 are the same course; do not enroll in both.

INTR 123 and FL 271 are the same course; do not enroll in both. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 20.

INTR 126

Classifiers in American Sign Language (2 CR)

Prerequisite: INTR 121 with a grade of "C" or better and acceptance in the interpreter training program and Corequisites: INTR 122 and INTR 130 and INTR 147 and INTR 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: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$400 to 500.

INTR 130

Survey of the Interpreting Profession (3 CR)

Prerequisite: INTR 121 or FL 181 with a grade of "C" or higher and acceptance in the interpreter training program and Corequisite: INTR 122 and INTR 126 and INTR 147 and INTR 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 50.

INTR 131

Interpreting Preparation Skills (2 CR)

Prerequisite: INTR 130 with a grade of "C" or higher and acceptance into the interpreter training program and Corequisite: 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 50.

INTR 135

Intro to American Sign Language Linguistics (3 CR)

Prerequisite: INTR 122 or FL 270 with a grade of "C" or higher and Corequisite: 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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 and Corequisite 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 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 50.

INTR 147

Fingerspelling I (2 CR)

Prerequisite: INTR 121 or FL 181 with a grade of "C" or higher and Corequisites: For students accepted in the interpreter training program, enroll in: INTR 122 and INTR 126 and INTR 130 and INTR 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 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.

INTR 181

Interpreting Practicum I (1 CR)

Prerequisite: INTR 130 with a grade of "C" or higher and Corequisite: INTR 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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 50.

INTR 223

Advanced American Sign Language (3 CR)

Prerequisite: INTR 123 or FL 271 with a grade of "C" or higher and Corequisite: INTR 250 and INTR 226 and INTR 181 all with a grade of "C" or better

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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 25.

INTR 226

Specialized and Technical Vocabulary (2 CR)

Prerequisite: INTR 123 with a grade of "C" or higher and Corequisite: 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: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 50.

INTR 242 Fingerspelling II (2 CR)

Prerequisite: INTR 142 with a grade of "C" or higher and Corerequisite: 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 with a grade of "C" or better Corequisite: INTR 123 and INTR 131 and INTR 135 and INTR 242 all with grade of "C" or better

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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$80 to 100.

INTR 250

Interpreting I (6 CR)

Prerequisite: INTR 131 with a grade of "C" or higher and Corequisite: 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 50.

INTR 251

Interpreting II (2 CR)

Prerequisite: INTR 250 with a grade of "C" or higher and Corequisite: INTR 262 and INTR 282 and AAC 150 all with a grade of "C" or higher

A description is not available for this course.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 50.

INTR 262

Seminar on Interpreting (3 CR)

Prerequisite: INTR 250 with a grade of "C" or higher and Corequisite: 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 and Corequisite: 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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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 Television Production (3 CR)

This course provides students with the fundamentals of television 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 Television Services studio. 3 hrs. lecture/wk.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$10 to 15.

JOUR 271

Journalism Internship (3 CR)

Prerequisite: 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 135

Elementary Surveying (3 CR)

Prerequisite: MCC - MATH 104

Introduction to the care and use of optical surveying instruments; Transits, Total Stations and Auto Levels. Use of cloth tapes, steel tapes and electronic distance machines. Reduction of slope measurements to horizontal and vertical components. Measurement, field data reduction and adjustment of a closed

traverse. Horizontal and Vertical Curves, earthwork, and coordinates. Extensive field work, field notes and electronic data collection. Introduction to systematic and random errors. MCC-Longview Community College, 500 SW Longview Road, Lee's Summit, Missouri 64081. Call 816-672-2510

KSRV 137

Subdivision Planning and Layout (3 CR)

Prerequisite: ENGR 180 MCC's and DRAF 152

Physical elements of designing land subdivisions including traffic circulation, sewer and drainage systems, soils and earthworks, 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. classés. 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, projections, drawing layout, drafting standards and conventions, dimensioning, sectioning, 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 and plotting. plotting. 3 hrs. lecture, 4 hrs lab.

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

Legal Aspects of Surveying (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

Land Surveying (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. Further, standard business practice will be discussed. 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 240

Analysis of Survey Measurements I (3 CR)

Prerequisite: KSRV 135

Introduction to the nature of surveying instruments and their use. Analysis of the effect that instruments and observers have on measurements. Explanation of random error propagation and estimates of uncertainty. Introduction to adjustment of data. MCC-Longview Community College, 500 SW Longview Road, Lee's Summit, Missouri 64081. Call 816-672-2510

KSRV 242

Analysis of Survey Measurements II (3 CR)

Prerequisite: KSRV 240

This course is a continuation of analytical skills introduced in KSRV 240, Analysis of Survey Measurements I as they apply to adjustments of horizontal. GPS and level networks. Emphasis will also be placed on Coordinate transformation, advanced curve fitting and blunder detection in survey networks. MCC-Longview Community College, 500 SW Longview Road, Lee's Summit, Missouri 64081. Call 816-672-2510

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.

Learning Communities (LCOM)

LCOM 125 Comp II/College Algebra - You MUST enroll in both 84126-MATH 171 400 and 83394-ENGL 122 402 (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 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 12915-ENGL 122 037 and 13374-HIST 140 007 $(6\ \text{CR})$

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 ART 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, 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 - You MUST enroll in both 12766-ITMD 132 001 and 10330-MKT 134 002 (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 - You MUST enroll in Engl 121 044, Cweb 105 700, Cweb 115 700 & Cweb 130 702 (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

CPCA 161 of CWEB 105 of 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 - You MUST enroll in both 14985 Soc 122 022 & 14984 Psyc 130 032 (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 10656-HIST 126 003 and 10599-SOC 122 017 (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)

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 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 13305-ENGL 130 006 and 11619-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 10428-MATH 115 013 and 13791-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 Strategy 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 10415-MATH 111 004 and 13790-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 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 stratgies 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 13747-ENGL 122 061 and 10402-BIOL 130 008 (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.

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,

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 121 and BUS 122 are the same course; do not enroll in both.

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 or BUS 122 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)

Prerequisite: 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)

Prerequisites: 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)

Prerequisite: 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)

Prerequisite: 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)

Prerequisite: 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 173 Judicial Academy (1 CR) Prerequisite: Admission to the paralegal program. Legal nurse consultant students - LAW 225 and LAW 121

Upon successful completion of this course, the students should possess an in-depth understanding of the trial courts of Kansas. In order to achieve this goal, students will learn the main components of the Johnson County District Court, including discussion of the court structure, judicial qualifications, jury service, the criminal justice system, the juvenile court system and family matters. 1 hr. lecture/wk.

LAW 205 Legal Writing (3 CR)

Paralegal prerequisite: LAW 131 or division administrator approval. Legal nurse consultant prerequisite: 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)

Prerequisite: 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)

Prerequisites: Legal nurse consultant students - LAW 131, Paralegal program 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 Computer Applications in the Law Office (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 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

LAW 241

Wills, Trusts and Probate Administration (3 CR)

Prerequisite: 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)

Prerequisite: 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)

Prerequisite: 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 260 Personal Injury Law (3 CR)

Prerequisites: Admission to the legal nurse consultant program and LAW 131

Upon successful completion of the course, the student should be able to explain and apply substantive and procedural principles of personal injury claims. The course will concentrate on the role of a legal nurse consultant in analyzing and applying legal theories and defenses relevant to intentional torts, negligence, product liability, strict liability and medical malpractice. 3 hrs. lecture/wk.

LAW 266 Employment Law (3 CR)

Prerequisite: 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: LAW 132 and Corequisite paralegal: LAW 205 Prerequisite legal nurse consultant: LAW 132 or LAW 260 Corequisite legal nurse consultant: LAW 205 or 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 Paralogal Intern

Paralegal Internship I (1 CR)

Prerequisite: Admission to the paralegal program or assistant dean's approval Upon successful completion of this course, the student should be able to explain how a law office or legal-related office operates from practical on-the-job experience. The student must work 120 hours a semester in law-related activities. By arrangement.

LAW 276

Paralegal Internship II (1 CR)

Prerequisite: Admission to the paralegal program or assistant dean's approval Upon successful completion of this course, the student should be able to explain

how a law office or legal-related office operates from practical on-the-job experience. The student must work 120 hours a semester in law-related activities. By arrangement.

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 Rotail Manage

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 099

Introduction to Algebra and Intermediate Algebra (6 CR)

Prerequisite: MATH 111 with a grade of "C" or better or an appropriate score on an assessment test.

This 16-week course is an integration of the content of both Introduction to Algebra and Intermediate Algebra and graded as if taken as two separate courses. You will earn 3 credit hours in Introduction to 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 does not fulfill degree requirements.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$0 to 100.

MATH 115

Introduction to Algebra (3 CR)

Prerequisite: MATH 111 with a minimum grade of "C" 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. This course does not fulfill degree requirements. NOTE: The prerequisite of MATH 111 requires a grade of "C" or greater. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$0 to 100.

MATH 116 Intermediate Algebra (3 CR)

Prerequisite: MATH 115 with a minimum grade of "C" 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 greater.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$0 to 100.

MATH 118 Geometry (3 CR)

Prerequisite: MATH 115 with a minimum grade of "C" 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 greater.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$0 to 100.

MATH 120

Business Mathematics (3 CR)

Prerequisite: MATH 111 with a minimum grade of "C" 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 retailing, payroll, financial analysis, interest, and money management. 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 greater.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$0 to 25.

MATH 122

Mathematics in Our Culture (3 CR)

Prerequisite: MATH 111 with a minimum grade of "C" 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 greater.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$0 to 100.

MATH 133 Technical Mathematics I (4 CR)

Prerequisite: MATH 111 with a minimum grade of "C" or appropriate score on the math assessment test

This course is the first of a two-semester sequence that will introduce the 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 greater. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$0 to 100.

MATH 134

Technical Mathematics II (5 CR)

Prerequisite: MATH 133 or an equivalent course with a minimum grade of "C"

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 greater. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$0 to 100.

MATH 165

Finite Mathematics (3 CR)

Prerequisite: MATH 116 with a grade of "C" or better 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 greater. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$0 to 100.

MATH 171 College Algebra (3 CR)

Prerequisite: MATH 116 with a minimum grade of "C" or MATH 134 with a minimum grade of "C" 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, 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 greater. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$0 to 100.

MATH 172 Trigonometry (3 CR)

Prerequisite: MATH 171 with a minimum grade of "C" 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 greater.

Associated Costs: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$0 to 100.

MATH 173 Precalculus (5 CR)

Prerequisite: MATH 116 with a minimum grade of "C" 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 greater.

Associated Costs: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$0 to 100.

MATH 175

Discrete Mathematics and its Applications (3 CR)

Prerequisite: MATH 171 or MATH 173 with a minimum grade of "C" 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 greater.

Associated Costs: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$0 to 100.

MATH 181

Statistics (3 CR)

Prerequisite: MATH 171 or MATH 173 or an equivalent course with a minimum grade of "C" 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. A statistical package using the computer is a required part of instruction. No computer skills are necessary. NOTE: the prerequisites of MATH 171 or MATH 173 require a grade of "C" or greater.

Associated Costs: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$0 to 100.

MATH 191 Math & Physics for Games I (4 CR)

Prerequisite: 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 greater.

Associated Costs: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$0 to 100.

MATH 210

Mathematics for Elementary Teachers I (3 CR)

Prerequisite: Minimum grade of "C" or higher in MATH 171 or MATH 173 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 greater.

Associated Costs: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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, 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 greater. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$0 to 100.

MATH 225

Mathematics as a Decision Making Tool (3 CR)

Prerequisite: MATH 171 or MATH 173 with a minimum grade of "C" 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 greater.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$0 to 100.

MATH 231

Business and Applied Calculus I (3 CR)

Prerequisite: MATH 171 or MATH 173 with a minimum grade of "C" 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 greater.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$0 to \$100.

MATH 232

Business and Applied Calculus II (3 CR)

Prerequisites: MATH 231 and either MATH 172 or MATH 173 or an equivalent course with a minimum grade of "C"

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 greater. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$0 to 100.

MATH 237

Calculus for Biology and Medicine (5 CR)

Prerequisite: MATH 172 or MATH 173 or an equivalent course with a minimum grade of "C"

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 greater.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$0 to 100.

MATH 241

Calculus I (5 CR)

Prerequisite: MATH 172 or MATH 173 or an equivalent course with a minimum grade of "C"

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 greater.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$0 to 100.

MATH 242 Calculus II (5 CR)

Prerequisite: MATH 237 or MATH 241 or an equivalent course with a minimum grade of "C"

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 greater.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$0 to 100.

MATH 243

Calculus III (5 CR)

Prerequisite: MATH 242 or an equivalent course with a minimum grade of "C"

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 greater.

Associated Costs: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$0 to 100.

MATH 244 Differential Equations (3 CR)

Prerequisite: MATH 243 or an equivalent course with a minimum grade of "C"

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 greater.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$0 to 100.

MATH 246

Elementary Linear Algebra (3 CR)

Prerequisite: MATH 242 or an equivalent course with a minimum grade of "C"

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 greater.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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 better Note: Students transferring MATH 285 to the University of Kansas must have CIS 124 or CIS 134 as a corequisite. Or corequisite CIS 124 or CIS 134

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 124 or CIS 134 as a corequisite. NOTE: the prerequisites of MATH 232 or MATH 242 require a grade of "C" or greater. grade of "C" or greater.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$0 to 100.

Metal Fabrication and Welding (MFAB)

MFAB 121

Introduction to Welding (4 CR)

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) and gas metal arc welding (GMAW) equipment. The SMAW portion of the course will cover positions but will be limited to 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: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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 This course is a continuation of introduction to Welding. The course will cover more advanced projects in oxyacetylene welding, cutting, brazing, 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 U-bend test being performed on the welds made in the vertical position. 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: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$30 to 150.

MFAB 127 Welding Processes (2 CR)

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. 1 hr. lecture, 1.5 hrs. lab/wk.

Associated Costs: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$30 to 150.

MFAB 130

Gas Metal Arc Welding I (4 CR)

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. The FCAW process will be used to weld some fillet and groove welds on mild steel in selected weld positions. 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 vertical

up GMAW weld test coupons. 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$30 to 150.

MFAB 140 Maintenance Repair Welding (3 CR)

Prerequisites: 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 welding symbols will be introduced, and selected welds and assignments will be tested according to industry 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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 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 U-bend test being performed on mild steel. 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. Lab will include the use of lathes, mills, drills, cut-off and other types of equipment. 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 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) and flux-cored arc welding (FCAW). The student will weld with the GMAW and FCAW processes in the flat, horizontal, vertical up and overhead positions on both fillet and groove welds. The GMAW welds will be made on aluminum, and the FCAW welds will be on 1-inch mild steel with side bend test being made on the overhead and horizontal weldments. 1 hr. lecture, 6 hrs. lab/wk.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. 2 hrs. lecture-demonstration/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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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)

Prerequisite: 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)

Prerequisite: 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)

Prerequisite: 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

Introduction to the Recording Studio (4 CR)

Prerequisite or corequisite: MUS 156

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. 3 hrs. lecture, 2 hrs. lab/wk.

MUS 159

Recording Studio Skills II (4 CR)

Prerequisite: MUS 156 and MUS 158

This course is an in-depth study of the modern multi-track recording studio and a continuation of Intro to the Recording Studio. Emphasis is 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.

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)

Prerequisite: 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)

Prerequisite: 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)

Prerequisite: 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)

Prerequisite: 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)

Prerequisite: 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)

Prerequisite: 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)

Prerequisite: 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)

Prerequisite: 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)

Prerequisite: 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)

Prerequisite: 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)

Prerequisite: 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)

Prerequisite: 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)

Prerequisite: 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)

Prerequisite: 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)

Prerequisite: 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$540 to 565.

NURS 126 Nursing Care of the Adult: Health Alterations (9 CR)

Prerequisite: BIOL 144 and PSYC 130 and NURS 124 and 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)

Prerequisite: 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: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$320.

NURS 228

Nursing Care of the Childbearing Family (5 CR)

Prerequisite: ENGL 121 and PSYC 218 and NURS 126 and corequisite: 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: In addition to the course tuition, fees, and textbooks, this

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$160.

NURS 230

Nursing Care of Children (5 CR)

Prerequisite: ENGL 121 and PSYC 218 and NURS 126 and corequisite: 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$160.

NURS 232

Complex Patient Care Management (9 CR)

Prerequisite: 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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 <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$2010 to 2100.

NURS 236

Registered Nurse Perioperative Nursing (3 CR)

Prerequisite: Currently licensed as a Registered Nurse an 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)

Currently licensed as a Registered Nurse and current CPR certification for health care providers and 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)

Prerequisite: 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

Prerequisite: 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: KOT 112, BIOL 144 and BIOL 145, KOT 100, KOT 102, KOT 103, KOT 106 and KOT 116

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) Prerequisites: 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)

Prerequisite: 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)

Prequisite: 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)

Prerequisite: 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)

Prerequisite: 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: In addition to the course tuition, fees, and textbooks, this

course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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: In addition to the course tuition, fees, and textbooks, this

Associated Costs: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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 127 Color Photography (3 CR)

Prerequisite: PHOT 121

This course provides an introduction to the materials, techniques, tools, processes and theories of color photography. Students will use various color film emulsions, chemicals, filters for color-balance corrections, enlargers with integral color-heads with dial filtration, a pro-lab quality processor, color printing papers, and quality controls and manipulations to produce professional-quality color enlargements and transparencies. Students will use the above to make color 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. 6 hrs. lecture, lab/wk. Associated Costs: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$75 to 150.

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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$75 to 150.

PHOT 140 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.

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

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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$45 to 200.

HPER 115

Soccer (1 CR) The fundamentals of soccer will be int

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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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 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 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

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)

Corequisite: HPER 200 or BIOL 140

This introduction to athletic training techniques is for student athletic trainers and coaches and athletes at all levels. The course will cover prevention of sports injuries, rehabilitation and taping techniques, and proper nutrition. 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 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. This outdoor recreation class will plan activity projects such as camping, hiking, nature observation, alpine skiing, Nordic skiing 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.

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, BIOL 145, KPT 152, and KPT 160,* 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)

Prerequisite: 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: BIOL 122, BIOL 140, AAC 130 and KPT 151 and formal acceptance into the program

Medical diseases commonly seen in physical therapy practice; diagnosis, signs and symptoms, physiologic 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 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 Completion of pre-clinical examination with a score of 80 percent or better. Demonstrated competency in pre-clinical checkouts.

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 with a minimum grade of "C". 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)

Prerequisites: KPT 162

This course contains current professional and patient patient-care issues regarding the practice of physical therapy, such as ethics, departmental organization, reimbursement, safety and research. 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)

Prerequisite: 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 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.

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. This course is

typically offered only once each academic year.

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.

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

Prerequisites: CNA certification and BIOL 144 and PSYC 130 and MATH 111 and selective admission approval required

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 \$1,040 total. Out-of-state tuition and fees \$4,450 total. 550 contact hrs. The credit reflected in this course is for transcript reporting, recording and transfer only.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$250 to 550.

AVPN 117 Nursing II

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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$250 to 900.

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. PSYC 130 students may enroll in Learning Strategies LS 176, PSYC sections as an optional course.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. Do not enroll in both. 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 various 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

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. 1 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)

Prerequisite: 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)

Prerequisite: 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 KRAD 285, 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)

Prerequisite: 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 each with a minimum grade of "C"

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, each with a minimum grade of "C", 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 278 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)

Prerequisite: Admission to the JCCC's railroad operations program, conductor option, and successful completion of RRTC 123 with a grade of "C" or better

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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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 minimum grade of "C"

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 minimum grade of "C"

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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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 minimum grade of "C"

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>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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)

Prerequisite: Admission to the JCCC's railroad operations program, dispatcher option, and successful completion of RRTD 275 with a minimum grade of "C"

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)

Prerequisite: Admission to the JCCC railroad operations program, dispatcher option, and successful completion of RRTD 271 with a minimum grade of "C"

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)

Prerequisite: Admission to the JCCC railroad operations program, dispatcher option, and RRTD 122 with a minimum grade of "C"

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)

Prerequisite: Admission to the JCCC's railroad operations program, dispatcher option, and RRTD 272 with a minimum grade of "C"

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 144 Introduction to Programmable Logic Controllers (2 CR)

Prerequisite: 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)

Prerequisite: 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)

Prerequisite: 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)

Prerequisite: 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 engineering and maintenance training and the JCCC program assistant dean

Upon successful completion of this course, the student should be able to cut and weld using oxyacetylene welding (OAW) and oxyfuel (OFC) and shielded metal arc welding (SMAW). The OAW portion will cover puddling with and without filler metal; 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$180 to 400.

RRIT 127 Wolding Brocos

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. 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 student should also be able to clean a used crucible, assemble a crucible and temper new and used crucibles. 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 (3G) and overhead (4G) 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) and fluxed-cored arc (FCAW) welding, 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. The student will also weld in selected positions on mild steel plate with the FCAW process. 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)

Prerequisite: 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)

Prerequisite: 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 minimum grade of "C"

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)

Prerequisite: 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)

Prerequisite: 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 170 Railroad Mechanical Safety and Health (2 CR)

Prerequisite: Admission to the JCCC's railroad operations program, mechanical option, and completion of RRTM 124 with a minimum grade of "C"

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)

Prerequisite: Admission to the JCCC railroad operations program, mechanical option, and completion of RRTM 124 and RRTM 170 with a minimum grade of "C"

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)

Prerequisite: Admission to the JCCC's railroad operations program, mechanical option, and completion of RRTM 124 and RRTM 170 with a minimum grade of "C"

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)

Prerequisite: Admission to the JCCC's railroad operations program, mechanical option and completion of RRTM 124 and RRTM 170 with a minimum grade of "C"

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)

Prerequisite: 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)

Prerequisite: 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)

Prerequisite: 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)

Prerequisite: 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. 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$2 to 5.

RDG 126

Reading Skills Improvement (3 CR)

Prerequisite: Appropriate test score or either RDG 125 or EAP 093 and EAP 115

This is the final mandatory reading course based on JCCC assessment scores. 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$2 to 5.

RDG 127 College Reading Skills (3 CR)

Prerequisite: RDG 126 or LC 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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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, Taoism, 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.

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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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 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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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 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 and culture as they relate to specific interpersonal relationships. 3 hrs./wk. This course may be offered as a Learning Communities (LCOM) section, see current credit schedule for LCOM details.

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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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.

<u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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 across cultures. 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. The intercultural communication course is concerned with communication theory as it relates to cross-culture interactions. 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

Fundamentals of Operating Room Technique (11 CR)

Prerequisite: 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 technology 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 104

Body Structure and Function (2 CR)

Prerequisite: 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

Aseptic Technique for the Surgical Technologist (2 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. 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 109

Principles/Surgial Procedure 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

Principles/Of Surgical Proc II (7 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. 3 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

Principles/Surgical Proced III (7 CR)

Focus is on diagnosis, pathology and surgical sequence with complex surgical specialties: neurosurgery, cardiovascular and peripheral vascular, thoracic, pediatric, geriatric, trauma and surgery. Included is discussion of postoperative care and complications. 4 hrs. lecture, 9 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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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. <u>Associated Costs</u>: In addition to the course tuition, fees, and textbooks, this course has additional expense considerations that are estimated to be \$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)

Prerequisite: THEA 138

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.

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 Math (1 CR)

The metric system and conversion of units; apothecaries' equivalents and vocabulary; preparation of solutions -- strengths, procedures and computations; and drug administration -- calculating and measuring dosages -- will be covered. 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)

Prerequisite: 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.

Continuing Education Certificate Programs

Continuing education class schedules are available from the continuing education class search open and closed class list.

A+, Certificate in

Access Specialist Certificate

Adobe Graphics and Design

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

Macromedia Web Design, Certificate in

Medical Coding Certification

Microsoft Certified Desktop Support Technician

Microsoft Certified Systems Administrator

Microsoft Certified Technical Specialist: SQL 2005

Network+, Certificate in

Oracle DBA Associate, Certificate in

Oracle DBA Professional, Certificate in

Powerpoint Specialist Certificate

Project Management Certificate

Security+ Certificate

Spirituality, Health, Healing

Therapeutic Massage Certificate

A+, Certificate in

Start your IT training off in the right direction, from the ground up. Build a solid foundation with our A+ Operating Systems and A+ Hardware classes, then receive all the materials supplied in our A+ Operating Systems and A+ Hardware Test Prep classes for complete A+ exam preparation. 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. 56 contact hours. See individual classes for detailed descriptions and outlines.

Required Courses

XCM 8252 A+ Hardware XCM 8255 A+ Operating System XCM 8254 A+ Hardware Test Prep XCM 8253 A+ Operating System Test Prep

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

Adobe Graphics and Design

Receive comprehensive instruction in a vast array of Adobe products. The series provides instruction in: PhotoShop Fundamentals, PhotoShop Advanced, PhotoShop Web Production, GoLive Fundamentals and Intermediate, InDesign Fundamentals and Intermediate, Acrobat Fundamentals, and Illustrator Fundamentals and Intermediate. 105 classroom hours. See individual classes for detailed descriptions and outlines.

Required Courses:

XCM 1584 Adobe Graphics and Design Series
XCM 4000 Adobe PhotoShop Fundamentals
XCM 4002 Adobe PhotoShop Advanced
XCM 1586 Adobe GoLive Fundamentals
XCM 1587 Adobe GoLive 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

Audio Recording Engineering, Certificate in

If you are interested in a studio career, JCCC's Audio Recording EngineeringCertificate Program provides a focused two-year education. All recordingclasses are taught by experienced, working audio professionals. A superioraudio teaching environment includes a professional recording studio, andstate-of-the-art facilities on the JCCC campus.

The certificate program encompasses a two-year sequence with 800+contact hours of required work in recording and music. Curriculum isdesigned 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 completingthe program, you will be prepared for audio work in recording and/or video studios, radio/TV stations, corporate audio/video departments, andsound reinforcement/recording for theater, conventions, music concerts, andother live performance situations.

Semester 1

		Introduction to the Recording Studio128*	
MUS	156	MIDI Music Composition	3
MUS	221	Piano Class I	2
MUS	121	Introduction to Music Listening	5
MUS	125	or Introduction to Jazz Listening	3

Semester 2

XRE	1003	Recording Studio Skills II128*	
XRE	1001	Chamber Recording Ensemble I	
MUS	222	Piano Class II	2
MUS	121	Introduction to Music Listening	3
		or	
MUS	125	Introduction to Jazz Listening	3

Summer

XRE 1	1005	Chamber	Recording	Ensemble	II	.32*
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Semester 3

XRE 100 XRE 100 XRE 100	6 Chamber Recording Ensemble III
XRE 101	
MUS 16	
MUS 17	6 Jazz Band I1 or
MUS 19	1 Concert Band I1 or
MUS 19	5 Vocal Jazz Ensemble I1
MUS 21	1 Orchestra I1
MUS 22	2 Piano Class II2
MUS 22	or 6 Applied Guitar I (Class)1 or
MUS 22	7 Applied Guitar II (Class)1

Semester 4

XRE 1009 XRE 1007 XRE 1004	Advanced Recording Engineering II
XRE 1010	The Studio Business64*
MUS 161	Chamber Choir I1
MUS 176	Jazz Band Il
MUS 191	Concert Band Il or
MUS 195	Vocal Jazz Ensemble I1
MUS 211	Orchestra I1
MUS 222	Piano Class II2 or
MUS 226	Applied Guitar I (Class)l
MUS 227	Applied Guitar II (Class)1

Summer

XRE 1011 Capstone Course: recording Portfolio Review.....32*

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

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 and Excel Customization and Data Analysis. Once completed, either take the MOS exam at participating Prometric testing centers or use your Center for Business Excel Specialist Certificate to verify your competency. 28 classroom hours.

See individual classes for detailed descriptions and outlines.

Required Courses:

XCM 3405 Excel Fundamentals XCM 3406 Excel Intermediate XCM 3407 Excel Advanced

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 and vocabulary skills courses.
- A minimum of 18 hours of instruction a week for full-time students during the fall and spring.

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 1142 Pronunciation 1142

XGI XGI	1310 1320 1330	Writing 1310 Writing 1320 Writing 1330
	1340	Writing and Structure 1340
	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

Macromedia Web Design, Certificate in

Combine instruction in HTML and Web Page Design, Cascading Style Sheets, Dreamweaver: Designing and Developing Websites, Flash Fundamentals, Flash: Designing and Developing Media, and Fireworks: Web Graphics and Interactivity for complete instruction in the Macromedia suite of applications. 77 classroom hours. Prerequisite: Working knowledge of computers 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 9469 Dreamweaver: Database Connections XCM 9478 Flash: Advanced Techniques

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:

Microsoft Certified Desktop Support Technician

Combine both parts of the MCDST certification into one affordable price. If you are looking to gain entry into the IT arena, this is the perfect follow-up to your A+Certification. Exam vouchers included. Prerequisite: A+Certification, detailed knowledge of the MS Office application suite, MOS Certification highly recommended.

See individual classes for detailed descriptions and outlines.

Required Courses

XCM 8372 MS Certified Desktop Support: Windows OS XCM 8373 MC70-272 Certified Desktop Support: Applications

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

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 8291 Security + Certification Series

Network+, Certificate in

Start with instructor led training in our Networking Fundamentals class, continue your education with two security classes: Security Audits, Attacks and Threats, and Security Networks and Firewalls. In addition to the classroom instruction, receive all the materials supplied in our Network+ Test Prep class for complete

Network+ exam preparation. Mapped toward CompTIA's Network+ exam, this series will help prepare you for the industry recognized Network+ certification. The exam voucher alone has a \$199 value. 56 contact hours.

Prerequisites: A+ Hardware, A+ Operating Systems, or previous experience with computer hardware and networks.

See individual classes for detailed descriptions and outlines.

Required Courses:

XCM 8305 Networking Fundamentals

Oracle DBA Associate, Certificate in

Receive the Oracle PL/SQL Fundamentals and Advanced courses with the Oracle DBA I Fundamentals and Advanced courses at a significant discount. For the student who wants a complete package of Oracle Database instruction. 56 classroom hours.

See individual classes for detailed descriptions and outlines.

Required Courses

XCM 8501 Oracle PL/SQL Fundamentals XCM 8502 Oracle PL/SQL Advanced XCM 8512 Oracle DBA I Fundamentals XCM 8514 Oracle DBA I Advanced

Oracle DBA Professional, Certificate in

Receive instruction in Oracle DBA II Fundamentals and Advanced, mapped toward Oracle exam #1Z0-032, and Oracle DBA Performance Tuning Fundamentals and Advanced, mapped toward Oracle exam #1Z0-033 at a significant discount. For the student looking to delve deeper into Oracle or seeking the Oracle DBA Professional certification. 56 classroom hours.

See individual classes for detailed descriptions and outlines.

Required Courses

XCM 8515 Oracle Performance Tuning Fundamentals XCM 8516 Oracle Performance Tuning Advanced XCM 8517 Oracle DBA II Fundamentals XCM 8518 Oracle DBA II Advanced

Powerpoint Specialist Certificate

Receive instruction in our complete lineup of PowerPoint classes. Build a solid foundation with PowerPoint Fundamentals before moving on to more advanced topics in PowerPoint Advanced and PowerPoint with Producer. Once completed, either take the MOS exam at our Prometric testing center or use your Center for Business PowerPoint Certificate to verify your competency. Prerequisite: Proficiency with Windows, keyboard and mouse.

See individual classes for detailed descriptions and outlines.

Required Courses

XCM 5505 Powerpoint Fundamentals XCM 5510 Powerpoint Advanced XCM 5507 Powerpoint with Producer

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

Security+ Certificate

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. See individual classes for detailed descriptions and outlines.

Required Courses:

XCM 8291 Security+ Certification Series

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

Therapeutic Massage Certificate

The Therapeutic Massage Certification Program offers quality instruction and clinical experiences to prepare students to become skilled and ethical massage practitioners.

This program was developed to meet the 500-hour Massage Therapist II licensure requirement set by the City of Overland Park, Kansas ordinances. It is administered through the Center for Business and Technology, a division of the Continuing Education/Community Services branch of Johnson County Community College.

Clinics and most classes are held at West Park Center, one of JCCC's satellite locations, at 9780 West 87th Street (87th and Farley) in Overland Park, Kansas.

Required Courses:

Prerequisite Course:

BIOL 144 Anatomy and Physiology.....5

Courses:

	5000 5010	Introduction to Bodywork (Module I) Kinesiology
XNM	5050	Pathology
XNM	5021	First Aid/CPR
XNM	5075	Professional Business Practices I
XNM	5030	Communicable Diseases
XNM	5040	Clinical Bodywork (Module II)
XNM	5060	Hydroptherapy
XNM	5091	Bodywork Clinics I
XNM	5070	Clinical Bodywork (Module II)
XNM	5080	Professional Business Practices II
XNM	5092	Bodywork Clinics II

Continuing Education Course Descriptions

- A -

ABE/GED (XGE) Academic Achievement Center (XGH) Administrative Skills (XBF) Arts and Crafts (XPA) Aviation (XPV)

- B -

Business Skills (XBD)

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- C -
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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)

- | -

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 -

Railroad Training (XBR)

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)

- 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. (1 session)

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

Academic Achievement Center (XGH)

XGH 1100

Study Skills

Spelling, reading, study skills, math and preparatory chemistry are among the areas of study offered in the center. Students who enroll in the center are given a diagnostic pre-test that places them at the appropriate level in their individualized program. Students progress at their own rate to meet their goals. Instructors are available for assistance. Free tutoring in specified areas is available. For more information, call 469-8500, ext. 3320. Center hours: 8 a.m.-8 p.m., M-R 8 a.m.-2 p.m., F 9 a.m.-1 p.m., Sa

\$63.00

XGH 1103

Advanced Spelling

A description is not available for this course.

\$63.00

XGH 1104

Reading Comprehension

(B&G \$30)

\$63.00

XGH 1105

Reading Rate (B&G \$30)

\$63.00

XGH 1106

Vocabulary Development (B&G \$30)

\$63.00

XGH 1112

Basic Math Review (B&G \$30)

\$63.00 XGH 1113

Algebra Preparation (B&G \$30)

\$63.00

XGH 1114

Chemistry Preparation (B&G \$30)

Administrative Skills (XBF)

XBF 0305

Customer Service Phone Skills

Your telephone skills can often make or break your personal or company image. In this seminar, you'll expand your awareness of telephone customer service and techniques for dealing with customers, situations and telephone stress. You'll learn to develop an awareness of a customer's perception and recognize the role quality customer service plays in the success of your company.

\$114.00

XBF 1000

NCCET Midwest Spring Alliance

National Council of Continuing Education and Training Midwest Spring Alliance

\$99.00

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 utility, 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

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. For beginning to intermediate students. A supply list will be distributed before the first class.

\$79.00

XPA 1024

Drawing, Beginning to Intermediate

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.

\$89.00

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 1030

Opaque Painting Beginning

Learn different methods of painting (toned grounds, value painting, base colors, wet-in-wet and textural grounds. Course will include choosing paints, brushes, supports, and equipment. Each week should result in a small sample painting or

reference chart. A supply list will be mailed before first class meeting. Supplies approximately \$80 - \$120.

\$89.00

XPA 1031

Red Hat Coasters

Get together with your Red Hat sisters and paint flouncy red hats with purple flowers on coasters. 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 1032

Portrait Art

Explore all aspects of portraiture as you study form, lighting forms and how the human head is comprised of forms. Work from live models for six of the eight sessions. You will use both drawing materials and colored pastels. Bring to first class compressed, soft charcoal sticks; a set of soft pastels (about 24 colors, white drawing tablet, one kneaded and on pencil eraser; soft lead pencils HB-6B; soft charcoal pencils. Supplies approximately \$40.

\$79.00

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.

\$39.00

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 for their project.

\$99.00

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.

\$110.00

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 Sweater Workshop

Get ready for summer with short sleeves and tank tops! Choose two patterns to complete in the class for the warmer weather. Learn more knitting techniques and basic crochet. Prerequisite: must know how to knit and purl.

\$39.00

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.

\$39.00

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.

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 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 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.

\$65.00

XPA 1105

Beginning Landscape Drawing

For beginning to intermediate artists wanting to learn how to approach landscape drawing. We will work on choosing the motif, linear and aerial perspective and other related aspects of drawing. Colored pencils, pastels or monochrome media (such as charcoal, ink or pencil) may be used.

\$60.00

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.

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.

\$69.00

XPA 1130

Watercolor

Express your creativity and gain valuable technical knowledge through learning the art of watercolor. Using photographs or paintings by recognized artists, you will explore subjects such as floral arrangement, texture (using ordinary household and garden items), landscape and portraiture. Bring only a pen and notebook to the first class, which will meet from 6:30-8:30 p.m. A list of supplies (approximately \$70 to \$100) will be provided at that time.

\$66.00

XPA 1145

Stone Carving Workshop

In this two-session 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).

\$99.00

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 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 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.

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)

\$25.00

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 Beading Techniques (Jewelry)

Learn to design and make your own jewelry as gifts for yourself or someone special. You will make one bracelet with matching earrings. Materials include a

beading kit and basic bead-stringing reference book for making more unique gifts. Supplies for this class will cost \$20 and may be purchased from the instructor.

\$11.00

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

Now you can learn how the professionals do it. Learn basic faux finishing techniques for those who are new to this style of painting. This is an introduction to the method of color selection, mixing of paint and glazes, and the various application processes. Supplies for this class (\$25) may be purchased directly from the instructor.

\$25.00

XPA 1242

Faux Finishes II

More materials will be added to create unique faux treatment such as, stripping, metallics and sponging. Note: Faux Finishes I is a prerequisite to this class or permission to enroll from the instructor. Supplies for this class (\$25) may be purchased directly from the instructor.

\$25.00

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

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.

\$99.00

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.

\$121.00

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.

\$121.00

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. Note: This class was formerly titled "Intermediate/ Advanced Oil Painting".

\$121.00

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 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!

\$82.00

Aviation (XPV)

XPV 1000

Private Pilot Ground School

Share the synergy of learning to fly with other student pilots as you prepare for the FAA 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 an exam.

\$179.00

XPV 1010

Instrument Pilot Ground School

Are low clouds keeping you on the ground? If so, then increase your freedom to fly by adding an Instrument rating to your private pilot certificate! While you prepare for the FAA Knowledge exam, dynamic PowerPoint visuals guide you through "real world" IFR operations -- from chart interpretation and ATC procedures to weather and physiological factors related to the IMC enviroment. Note: Class sessions do not run continuous in order to accommodate a weekend study break.

\$189.00

XPV 1035

Flight Review Refresher

This course prepares the private pilot for the FAA required Flight Review needed in order to continue exercising Pilot-in-Command privileges. Refresh updated regulations, chart symbology, weather interpretation, airspace, communications phraseology, traffic pattern protocol and emergency procedures before you schedule your next flight review and breeze through it with confidence. This class satisfies the ground requirement for your next flight review. Note: An optional logbook endorsement is offered, fee to be paid on day of class; bring your logbooks.

\$49.00

XPV 1040

Partners of Pilots "Pinch Hitter" Course

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 nonpilot on essential information and make flying more enjoyable for both pilot and guests.

\$49.00

Business Skills (XBD)

XBD 0103

Accounting Basics

You will learn the essential language, concepts and processes of accounting. This course is presented in a practical, hands-on, non-technical fashion.

\$199.00

XBD 0104

Managerial Accounting

Today's manager should know accounting basics. In this seminar, you will acquire a better understanding of the concepts and objectives of managerial accounting and how to apply them daily on the job. This program includes fundamentals of accounting, how to interpret and analyze financial statements and management reports.

\$179.00

XBD 0107

Better Business Writing

This course focuses on effective ways to organize and convey ideas to a variety of audiences, for a variety of purposes, through a variety of communication modes. You will learn easy and successful models to compose clear and concise e-mail messages, common letters, summaries, and meeting minutes. Please bring a working document to review. You will complete your day with revising and proofreading practice.

\$159.00

XBD 0108

Grammar, Punctuation and Word Usage

You must know more than your computers grammar and spell check to project a professional image. During this course you will review effective sentences for grammar, readability and results. You will learn punctuation functions that simplify comma, semicolon, colon and apostrophe rules. Finally, you will resolve common confusion with misused words to make clear choices.

\$159.00

XBD 0110

Legendary Customer Service

When you treat your customers like VIPs, they return to purchase your goods and use your services. In this seminar, you'll examine the link between the customer and your business and the importance of first impressions in customer relations.

\$159.00

XBD 0114

Budgeting Fundamentals

There's no doubt -- budgeting is critical to bottom-line performance. This seminar covers the basics of budgeting in simple, nontechnical language. Topics begin with budget concepts and terms; move on to planning, building and implementing

a budget; and end with budgetary management and control.

\$179.00

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.

\$159.00

XBD 0137

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.

\$159.00

XBD 0139

Human Resource Laws

In this session, participants will learn the basics of employment law, including Title VII of the Civil Rights Act, the Pregnancy Discrimination Act, the Age Discrimination in Employment Act, the Americans with Disabilities Act, the Immigration Reform and Control Act, the Family Medical Leave Act, Employment-At-Will and the Equal Pay Act.

\$169.00

XBD 0140

Avoiding Workplace Violence

In this 4-hour session, you will learn to recognize the warning signs of possible violent behavior, gain a better understanding of anger escalation, learn how to prevent or defuse volatile situations or aggressive behavior, and learn how to confront problems before they escalate. In addition, you will learn when to intervene, how to recognize potential psychological problems, and how to correctly terminate threatening or violent employees.

\$114.00

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 0142

Note Taking for Professionals

Have you ever been asked to take notes in a meeting or conference and the end result was a rough outline or jumbled messages on the back of an envelope? This program will teach you a variety of notetaking techniques for reading documents, interviewing, meetings, classes, telephone conversations, recordings, and adverse situations. Learn how to select the best blend of notetaking for your style and situation.

\$109.00

XBD 0143

Report Writing to Inform and Persuade

We write reports for documenting events and incidents; describing accomplishments, obstacles, and goals; assessing problems and concerns; designing action plans; and evaluating performance. This hands-on workshop focuses on the process of effective report writing so that you can concentrate on the finished product when you get back to work. Learn what to write and how to write it so you get the results you and your readers want.

\$149.00

XBD 0144

Problem Solving from Both Sides of the Brain

This course helps people learn how to solve problems from "both sides of their brains." You will first learn the steps in the logical problem solving process, as well as specific techniques for analyzing issues and problems. The program includes learning how to expand your thinking to consider creative alternatives, to view problems and possible solutions from new angles, and to combine creativity with the logic of implementation.

\$159.00

XBD 0146

Decision Making for Team Leaders, Managers

In this dynamic seminar, learn how to manage accountability and anxiety in the decision-making process. Whether you are dictating or delegating a decision, or you are building a consensus, this interactive program will ground your values and guide your choices as you make better decisions.

\$169.00

XBD 0149

Selling the Value of Human Resources

Participants will learn why measuring HR aspects are essential to selling the value of HR! You will learn the four levels of evaluation and how to apply them to all HR areas, five basic measurements to consider, and techniques for determining what to measure. In addition, participants will learn the four questions to ask in relation to measurements and strategies for evaluating HR functions, and will receive formulas for measurements.

\$109.00

XBD 0150

Retaining Valuable Staff

Participants will learn the reasons employees leave their employers, what makes employees want to stay with their employers, and what top performers want from an organization. Also included in this session are some of Peter Drucker's ideas on management and ways and methods to energize your organization to increase both retention and profitability.

\$109.00

XBD 0151

The Prevention of Harassment in the Workplace

Participants will learn that harassment of any kind-- race, national origin, religion, age, and sex (gender) violates the Civil Rights Act. Participants will learn to distinguish between two kinds of sexual harassment-- "quid pro quo" and "hostile environment" and how each of these affects the productivity and profitability of the organization. Participants will also learn the critical aspects of an anti-harassment policy and the steps to conducting an investigation of a harassment claim.

\$109.00

XBD 0152

Selling to the Generations

It is probably the most difficult aspect of the selling process. Ones ability to span the generational differences and sell to customers of another generation. The language barriers, values, and needs are discussed. Solutions are provided as to how to sell to the other generation. Learn how to tap into the high-profit potential of the Generation X and Y market segments.

\$159.00

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 0156

Introduction to Government Accounting

Learn the accounting rules, concepts, definitions and terms used by state and local government entities. Governmental, proprietary and fiduciary fund accounting is presented as well as fund and government-wide financial statements and required supplementary information.

\$199.00

XBD 0158

Business Fundamentals: How It Really Works!

In this one-day workshop, you will learn the language of finance and accounting, how to read balance sheets and income statements, how to analyze retained earnings and cash flow statements, how to calculate key financial ratios, and more. This program is for all participants in all types of business and industries who need a quick overview of the key elements financial managers address in order to achieve the business goals of their department or company.

\$189.00

XBD 0159

Delivering Presentations That Deliver Results

This interactive workshop will help you learn and practice skills that will dramatically improve your presentations. You will learn how to select and organize your content so your audience stays engaged and interested. You will also discover techniques that will reduce your nervousness and help you identify any distracting nonverbal behaviors.

XBD 0160

Negotiating for Win/Win Situations

In this seminar, you will learn the importance of having a win/win situation and how to recognize when to use negotiation skills. You'll learn skills and techniques to use during this process and how to create an environment in which the parties feel the resolution they come to is appropriate.

\$159.00

XBD 0164

Writing Refresher for the Professional

This practical workshop is ideal for professionals whose jobs require periodic article or report writing. Whether you dread writing or simply want to create a polished product in less time, this seminar is for you. Loaded with tips to help you jump-start the writing process, write what you mean and win the respect of your readers.

\$169.00

XBD 0165

How to Connect in Business in 90 Seconds - or Less

Think about it. We all know someone who can walk into a room full of strangers and work it. Why is it that some people seem to connect with ease and others don't? The truth is, you don't need to be a naturally gregarious person to immediately connect in business. Join us for this fast-paced session and learn the three key steps for creating an instant connection with your business colleagues.

\$114.00

XBD 0166

Business Meetings that Work!

Corporate America is throwing away billions of dollars every year. How? Through ineffective and wasteful meetings. Request this workshop and learn how the right timing, strategies and planning can cut wasted time to a minimum while dramatically increasing effectiveness. We'll talk about saving valuable time by actively participating in meetings and how essential skills can make all meetings work. By the end of the day, you'll know how to make your meetings shorter, come to group decisions more quickly, and better deal with difficult participants.

\$169.00

XBD 0167

Call Center Success!

Who speaks most often for your company: your CEO, COO or your CSR? We're guessing your CSR does. Give your CSRs the skills and competencies they need to face the challenges of their valuable positions. Call Center Success is a series of brief sessions guaranteed to create top-notch CSRs. Teach your CSRs to effectively handle customers and you may have a customer for life.

\$169.00

XBD 0168

Public Speaking: Conquering the Ultimate "Fear Factor"

You have been asked to give a presentation to a group of people. Just thinking about it makes your heart pound. In this course, you will learn techniques that will significantly reduce your speech apprehension. A calm, relaxed speaker is much more capable of delivering outstanding results.

\$169.00

XBD 0169

Fundamentals of Finance and Accounting for

Non-financial Managers From accruals to write-offs, from accounts receivable to working capital, this seminar shows you the concepts, techniques and tools that can help you make each decision pay off - on the job and on the bottom line! No matter how effective your management method or how innovative your ideas, the results are going to be measured in numbers: dollars and cents.

\$1,695.00

XBD 0170

Essentials of Budgeting: From Creation Through

Application Like it or not, the budget is the yardstick top management uses to measure your actual performance. And in today's tight economy, the manager who knows how to plan and use the budget effectively wins hands down over the one who doesn't. Who should attend this seminar? Every manager with budget responsibilities.

\$1,695.00

XBD 0171

Debits and Credits: How Accounting Really Works

The language of business in every industry around the globe is rooted in the "accounting equation". So keep your accountants on their toes and make sure your books are sound. Uncover and correct problems quickly by double-checking how sales, expenses, equity and debt are recorded. Developed for business professionals who have no work experience in accounting, this seminar walks you through the basics and gives you the skills and confidence to speak the language of business like a pro.

\$1,695.00

XBD 0172

Intermediate Finance and Accounting for Non-financial

Managers With today's income shortfalls and unmet forecasts, correctly interpreting financial information is critical to your success. At this seminar, you'll learn how to establish financial policy and report on the performance of your department in financial terms. If you have attended AMA's Fundamentals of Finance and Accounting for Non-financial Managers or you have a basic understanding of financial statements, this class is for you.

\$1,795.00

XBD 0173

Building Better Work Relationships

"New Techniques for Results-oriented Communication" This seminar will prepare you to become a "conscious communicator" who depends on consistent, respectful and credible relationships to achieve results. This seminar is designed for people who want to use effective communication and relationship management to maximize impact, productivity and results.

\$1,595.00

XBD 0174

Getting Results Without Authority

Whether you're dealing with a boss, colleagues, staff members or senior management, building good relationships, winning respect and cultivating influence and cooperation are absolutely essential to get the results you want. Through the seminar leader's expertise, diagnostic instruments and actual practice sessions in influencing, communication, feedback, persuasion, listening, conflict resolution and negotiation, you'll discover how to assess your own influencing style and make it more effective.

\$1,695.00

XBD 0175

Interpersonal Skills

Through the course leader's expertise, diagnostic instruments and actual practice sessions, this course will teach you how to communicate across teams and functions. You'll learn how to develop and nurture strong alliances so you can successfully draw upon the resources of your organization.

\$1,595.00

XBD 0176

Projecting a Positive Professional Image

Discover a self-image that feels right to you and looks great to clients, colleagues and peers. Look, act and dress for your current position, as well as for career advancement; Read the body language of others; Use eye contact, gestures, stance and voice tone to send the right message; Convey poise and confidence; And polish your professional speech

\$1,395.00

XBD 0177

Winning Through Customer Service: New Addition

Demonstrate professionalism on the job while building a problem-solving culture. Use essential communication skills in dealing with customers. Recognize characteristics of human behavioral style and opportunities to adapt to their personal style. Identify and utilize a structured process/model for conducting customer service transactions.

\$199.00

XBD 0178

Winning Through Customer Service: Managers Program

Managers and tema leaders will be able to: Understand their role as a successful coach. Use coaching strategies for different styles and adapt their styles for improved communication. Learn the steps for effective coaching. And monitor how service representatives can use their skills in the customer service transaction and provide effective feedback.

\$249.00

XBD 0179

Delivering Presentations That Deliver Results 2: The Next Step

Learn how to improve your effectiveness as a speaker/presenter. Class size is limited to six, to ensure that each person receives extensive individual feedback and support. There is no pre-requisite for this course. Prepare a 10 to 12 minute presentation and bring it to the first class.

\$269.00

XBD 0180

Listening as if Your Job Depends on It

This workshop offers you effective listening techniques and a safe environment to practice. You will identify fact from myth, complete a listening profile, investigate the obstacles to listening, uncover ways to listen better, and discover ways to help others listen to you. You will learn the nine kinds of listening and when each is appropriate. This course will increase your comfort with observing, questioning and responding techniques.

XBD 0650

Management vs Leadership

This course will look at management vs. leadership and the components of each. A model will be utilized which gives managers/leaders a tool which will help them identify specific actions they can take in developing direct reports. The Parker Team Player Survey and the Life Styles Inventory assessments are also used.

\$199.00

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 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 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.

\$75.00

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

Are you thinking about changing careers? Do you need some help deciding what it is you would like to do? 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 (All are paper and pencil assessments).

\$94.00

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.)

\$114.00

XVR 1102

Women In Career/Work Transition

Are you a stay at home mom who wants to re-enter the workforce? Are you going through a divorce and need to reevaluate your career path? This workshop will assist women in defining their career options. In addition to the assessments given and principles shared in the Career Transitions workshop, this workshop will emphasize women's issues as it relates to balancing a career, family and personal life.

\$89.00

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.

\$79.00

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 an adult who is still trying to figure out what you want to do when you grow up? If this is the case, this workshop is for you! Participants will take the newly revised Strong Interest Inventory and Meyers Briggs Type Indicator (Q) assessment online (completed 48 hours prior to the workshop), as well as additional career related inventories. The assessments, along with workshop activities, will lay the foundation in which to identify potential career options. In addition, external and internal barriers that may sabotage your ability to identify a career path or to take the necessary steps to make it reality will be addressed. Participants will schedule a one hour follow-up session for individualized career counseling. (Session to be scheduled within 60 days of workshop completion.)

\$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 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 5011

Job Search Strategies

This course will teach you how to bring your skills to a potential employer's attention before they advertise a job, totally eliminating competition. Find out how to set up an interview, how to dress, how to behave, and how to control an interview. You'll learn what to do when asked common trap questions. You'll even get tools you can use to convert a turn-down into a new referral.

\$98.00

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 5013

Web-based Secrets of Success and Achievement

Ready to improve your life? Then this course-packed full of practical tips, tools,

and techniques distilled from decades of ground-breaking research into peak effectiveness-will be perfect for you. Find out the best ways to reach fulfillment and exceed desired levels of success. Create physical, mental and emotional resiliency and the ability to meet any professional or personal challenge. This is an intense and action-oriented course that will make a dramatic difference in your life.

\$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 1006

Senior Series

Combine all four of our Senior classes into one pre-scheduled 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, mouse, plus finding tutorials inside the computer and on the Internet that will help you learn how to do various jobs on the computer. Leave class with plenty of work to do.

\$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 premiere 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.

\$189.00

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 1021

Teen Game Development--2D Games

Explore 2D video game development in a variety of genres, simple point and click games, 2D Shooters, Maze Games and Platform Games. It makes use of Game Maker, a freely available software package with a large, active community of users and developers. Prerequisite: Familiarity with Windows applications -- ages 13-18.

\$299.00

XCM 1022

Teen Game Development--3D Games

Receive an introduction to the development of 3D Video Games. Make use of 3D Game Studio, a low cost software package with a large, active community of users and developers. The course will take you through an extended tutorial creating a single 3D level and adding simple shooter capability to the finished product. Prerequisite: Game Development-2D Games -- ages 13-18.

\$299.00

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

Blogging: Publishing a Web Log

Writing in a journal is all well and good, but when you're ready to share your musings with the world (and you think the world is ready to receive them!), a blog is the way to go. As the latest phenomenon to grow out of the Web, the blog (or

Web log) is a diary with a difference. Rather than speaking to yourself, you're speaking to the world--and, best of all, the world can talk back! Prerequisite: Familiarity with Windows, Internet navigation and a subject to share with the world.

\$129.00

XCM 1025

Flash Game Design-Teens

If you're familiar with Macromedia's Flash then take the next step and begin developing your own games in Flash. Assuming no previous programming knowledge, you will learn how to create and design your own programs quickly and easily.

\$649.00

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.

\$40.00

XCM 1051

Introduction to Word Processing for Seniors

This class will use existing word processing programs within the XP plus Microsoft Word to complete projects that include tables, inserting graphics, creating greeting cards, creating labels, and mail merge.

\$40.00

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 1450

Windows 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.

\$139.00

XCM 1455

Windows Advanced

Explore advanced features that stream-line the use of Windows 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.

\$139.00

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.

\$189.00

XCM 1585

Adobe Acrobat Fundamentals

Use Adobe Acrobat 7 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.

\$189.00

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.

\$289.00

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.

\$289.00

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.

\$289.00

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.

\$289.00

XCM 1605

Macromedia Web Design Certificate

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. Please call 913-469-3891 for information about this option. Prerequisite: Knowledge and experience with Windows OS and the internet.

\$1,800.00

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.

\$149.00

XCM 2305

Word Fundamentals

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.

\$159.00

XCM 2306

Word Intermediate

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 or comparable knowledge.

\$159.00

XCM 2310

Word Advanced

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 or comparable knowledge.

\$159.00

XCM 2315

Word VBA Programming

Gain proficiency in the Visual Basic Editor (VBE), Word objects, basic VBA programming, control structures, debugging tools, advanced VBA programming, and event handling. Prerequisite: Word Advanced or comparable knowledge.

\$159.00

XCM 2321

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. Prerequisite: Familiarity with Windows, keyboard and mouse.

\$399.00

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.

\$104.00

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 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 CoreIDRAW. 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.

\$104.00

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.

\$104.00

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.

\$104.00

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.

\$104.00

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 3404

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.

\$469.00

XCM 3405

Excel Fundamentals

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.

\$169.00

XCM 3406

Excel Intermediate

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 or comparable knowledge.

\$169.00

XCM 3407

Excel Advanced

Perform advanced tasks, such as creating nested functions and using advanced formulas. Work with data tables, PivotTables and PivotCharts. Export/import data, performing what-if analyses, record macros, and publishing worksheets as Web pages. Prerequisite: Excel Intermediate or comparable knowledge.

\$169.00

XCM 3411

Excel VBA Programming

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 or comparable knowledge.

\$169.00

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 image editing using Photoshop. Examine the tools and features available to you as you edit images using Photoshop CS2. Work with tools for painting, retouching, and enhancing images, In addition, you will work with layers and layer selections. Maps to the ACE. Prerequisite: Familiarity with Windows, keyboard and mouse.

\$289.00

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

Learn to manage images for optimal web and print display. Work with advanced image handling tools and features available in Photoshop CS2. Create images for use on the web, prepare images for viewing across different platforms, and manage color in images. Use advanced image andvideo support features and automate PhotoShop tasks. Maps to ACE. Prerequisite: PhotoShop Fundamentals or comparable knowledge

\$289.00

XCM 4003

QuarkXpress Fundamentals

Create high-quality single- and multiple-page documents for professional publication. Use QuarkXPress to lay out professional quality documents that include text and graphics, and are designed for professional printing and publication. Prerequisite: Familiarity with Windows and basic word processing functions.

\$289.00

XCM 4004

QuarkXpress Intermediate

Build on your existing skills to learn some of the more advanced features of QuarkXPress. Explore some techniques that will allow you to improve your workflow and take existing layouts and use efficient techniques to make them more professional-looking. Prerequisite: QuarkXPress Fundamentals.

\$289.00

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.

\$189.00

XCM 4100

Adobe Illustrator Fundamentals

Adobe Illustrator is a sophisticated graphics program capable of creating complex and attractive illustrations and type effects for use in logos, advertisments, and other illustrations. In this course you will start by drawing and manipulating simple shapes to create logos, then combine text and graphics to create advertisments. Prerequisites: Knowledge of Windows, keyboard and mouse.

\$189.00

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.

\$189.00

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.

\$289.00

XCM 4219

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 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

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.

\$179.00

XCM 4225

Access Intermediate

Work with concepts such as relating tables, referential integrity, joins, complex gueries, advanced form design, advanced reports, charts, PivotTables, PivotCharts, and Internet integration. Prerequisite: Access Fundamentals or comparable knowledge.

\$179.00

XCM 4230

Access Advanced

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 or comparable knowledge.

\$179.00

XCM 4233

Access VBA Programming

Learn about ActiveX data objects, control structures, and the basics of VBA programming. No programming knowledge required. Prerequisite: Access Advanced, Access Application Development strongly recommended.

\$179.00

XCM 4236

Access Application Development

Create complex queries, create advanced forms and reports, create and use macros, and create and use data access pages. Prerequisite: Access Advanced

\$179.00

XCM 5102

Publisher Fundamentals

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 5505

PowerPoint Fundamentals

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.

\$159.00

XCM 5507

PowerPoint with Producer

Work with Microsoft Producer for PowerPoint 2003, the ideal tool for creating engaging presentations, training, and business communications. Explore how to synchronize audio, video, slides, and images to create engaging and effective rich media presentations. Bring your communications to life. Prerequisite: PowerPoint Advanced.

\$159.00

XCM 5508

PowerPoint Specialist Certificate

Receive instruction in our complete lineup of PowerPoint classes. Build a solid foundation with PowerPoint Fundamentals before moving on to more advanced topics in PowerPoint Advanced and PowerPoint with Producer. Once completed, either take the MOS exam at our Prometric testing center or use your Center for Business PowerPoint Certificate to verify your competency. Prerequisite: Proficiency with Windows, keyboard and mouse.

\$399.00

XCM 5510

PowerPoint Advanced

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 or comparable knowledge.

\$159.00

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.

\$439.00

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.

\$449.00

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.

\$449.00

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. Collaborate using Microsoft Project Server and Microsoft Project Web Access. Prerequisite: Knowledge of project management terms and functions, experience working with Windows, keyboard and mouse.

\$349.00

XCM 7250

Visio 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 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 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.

\$119.00

XCM 8251

A+ Certificate 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.

\$1,199.00

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.

\$599.00

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.

\$599.00

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.

\$799.00

XCM 8275

MCSA Certification Series

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. This course series is eligible for a payment plan. Please call 913-469-3891 for information about this option. Prerequisite: A+ Certification, Network+ Certification, or equivalent knowledge.

\$3,000.00

XCM 8280

Internet and PCSecurity

Make your personal computer secure by protecting the equipment and data stored on it as well as preventing viruses and spyware. Discover how attacks through the Internet can occur and what steps can be taken to reduce the risk of Internet attacks and e-mail vulnerability. Prerequisite: Windows Introduction or comparable knowledge.

\$119.00

XCM 8290

Security+

Address real-world business challenges and use hands-on exercises to ease into CompTIA's Security+ exam. Designed as an introductory network security course, included are practices for working with cryptography, common attackers, and business communications in a real-world situation. Prerequisite: A+ certification, Network+ certification or equivalent knowledge.

\$849.00

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.

XCM 8309

Word 2003--MOS 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. The Prometric Testing Center is located at West Park Center, at 87th and Farley in Overland Park.

\$60.00

XCM 8310

MOS 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. The Prometric Testing Center is located at West Park Center at 87th & Farley in Overland Park.

\$60.00

XCM 8311

Excel 2003--MOS 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. The Prometric Testing Center is located at West Park Center at 87th and Farley in Overland Park.

\$60.00

XCM 8312

Access 2003--MOS 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. The Prometric Testing Center is located at West Park Center at 87th and Farley in Overland Park.

\$60.00

XCM 8313

PowerPoint 2003--MOS 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. The Prometric Testing Center is located at West Park Center at 87th and Farley in Overland Park.

\$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 youcher, 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 8371

MS Certified Desktop Support Technician Certification Series

Combine both parts of the MCDST certification into one affordable price. If you are looking to gain entry into the IT arena, this is the perfect follow-up to your A+Certification. Exam vouchers included. Prerequisite: A+Certification, detailed knowledge of the MS Office application suite, MOS Certification highly recommended.

\$1,199.00

XCM 8372

MS70-271 MS Certified Desktop Support Technician: Windows OS

Mapped to exam 70-271, become a Microsoft Certified Desktop Support Technician (MCDST). Focus is on supporting users and troubleshooting the Windows XP operating system in a home or corporate environment. An entry level IT position. Prerequisite: A+ Certification or comparable knowledge.

\$699.00

XCM 8373

MS70-272 MS Certified Desktop Support Technician: Desktop Applications

Mapped to exam 70-272, become a Microsoft Certified Desktop Support Technicians (MCDST). Focus is on Microsoft Office 2003 applications, Internet Explorer and Outlook Express operating on a Windows XP desktop. An entry level IT position. Prerequisite: A+ Certification, detailed knowledge of the MS Office application suite, MOS Certification highly recommended.

\$699.00

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 requirements. 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

\$349.00

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.

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 PL/SQL Fundamentals

Part of Oracle's 9i SQL exam. Start with an overview of Oracle databases, then move on to working with data. Limit, sort and manipulate Return Data, work with advanced data selection and subqueries. Prerequisite: Oracle SQL or comparable knowledge

\$349.00

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 8506

Oracle DBA Associate Certification Series

Receive the Oracle PL/SQL Fundamentals and Advanced courses, mapped toward Oracle exam #1Z0-001, and the Oracle DBA I Fundamentals and Advanced courses, mapped toward Oracle exam #1Z0-031, at a significant discount. For the student who wants a complete package of Oracle Database instruction. Prerequisite: Experience with Windows OS and database software.

\$1,199.00

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 for Administrators

An overview of the manageability features and enhancements included in Oracle Database 10g. Although not an exhaustive overview of all new features of the Oracle Database 10g, manageability is definitely the most important focus area of this new release, and probably the most interesting one for database administrators. Prerequisite: Oracle DBA certification or comparable knowledge.

\$799.00

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 DBA I Fundamentals

Part of Oracle's Database Administrator Certified Associate program. This course covers the beginning components of Oracle's architecture. Work with Oracle Server; create an Oracle database; and manage physical database structures, tablespaces, datafiles, storage structures and undo data. Prerequisite: Oracle PL/SQL Advanced.

\$349.00

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 DBA Performance Tuning Fundamentals

Start with the basics of Oracle performance tuning. Receive a quick overview of performance tuning, then move on to tuning memory and tuning storage. In conjunction with Oracle DBA Performance Tuning Advanced, 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 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 DBA II Fundamentals

Discover key tools and techniques for Oracle database backup, recovery and network administration, including archiving, user-managed backups, user-managed complete recovery, user-managed incomplete recovery, overview of Recovery Manager, and performing backup operations with Recovery Manager. In conjunction with Oracle DBA II Advanced, 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 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 DBA Professional Certification Series

Receive instruction in Oracle DBA II Fundamentals and Advanced, mapped toward Oracle exam #1Z0-032, and Oracle DBA Performance Tuning Fundamentals and Advanced mapped toward Oracle exam #1Z0-033 at a significant discount. For the student looking to delve deeper into Oracle or seeking the Oracle DBA Professional certification. Prerequisite: Previous work with Oracle 9 or Oracle DBA I Fundamentals and Advanced.

\$1,199.00

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.

\$349.00

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.

\$349.00

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.

XCM 8616

Java Server Pages (JSP)

Java Server Pages (JSP) builds on the popular Java servlet technology and makes it easier to develop dynamic web applications. This class is for you, even if you're not a hard-core programmer. Java Server Pages is loaded with clean, portable, well-documented code, providing experts with invaluable tips and insights while giving newcomers all they need to assess and implement their first JSP applications. Prerequisite: Java Programming or equivalent experience.

\$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 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: Access Fundamentals and Access Intermediate.

\$349.00

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.

\$549.00

XCM 8764

CCNA Interconnecting Cisco Network Devices (640-811)

The second class mapped toward the Cisco CCNA exam 640-801 and the only class mapped toward the Cisco 640-811 ICND exam. Coverage includes the topics on the new CCNA ICND exam, including switching concepts, IP addressing and subnetting, variable-length subnet masking (VLSM) support and route summarization. Classless Interdomain Routing (CIDR) and Network Address Translation (NAT), point-to-point leased line implementation, Frame Relay configuration, and IP Access Control List (ACL) security. Prerequisite: CCNA

Introduction to Cisco Networking (640-821)

\$999.00

XCM 8765

CCNA Introduction to Cisco Networking (640-821)

The first class mapped toward the Cisco CCNA exam 640-801 and the only class mapped toward the Cisco 640-821 Intro exam. This class will help you master the topics on the new CCNA Intro exam, including: TCP/IP and OSI networking models, operating Cisco routers and LAN switches, LAN switching basics, VLANs, and Trunking, IP addressing and subnetting, basic router configuration and operation, discovering information about an IP network, dynamic routing protocols, analog modems, PAP/CHAP, DSL and cable. Prerequisite: Understanding of network terminologies and functions.

\$899.00

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.

\$1,299.00

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.

\$699.00

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.

\$699.00

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 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 8926

Project+ Certification

If you don't qualify for the PMP certification but still want an industry recognized project management certification, then this is the course for you. Explore the full range of skills and concepts needed to plan and implement projects. The project initiation and planning process is covered in-depth, culminating in the creation of a project schedule. Learning how to manage business concerns such as cost and risk is balanced by thorough coverage of best practices in managing people and resources. Discover how to manage change and the steps necessary in closing a project. MeasureUp exam prep software included. Prerequisite: Understanding of Project Management terms and functions.

\$699.00

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.

\$899.00

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.

\$299.00

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.

\$299.00

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.

\$599.00

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 workship 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 communication needs, plan for meeting those needs, and discusses effectively communicating project status and forecasts. Prerequisite: Project Management Essentials or equivalent experience.

\$599.00

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. Students gain an in-depth understanding of procurement and contracting issues with special emphasis on contract management. 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.

\$599.00

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.

\$299.00

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.

\$899.00

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.

\$299.00

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.

\$599.00

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.

\$104.00

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 GO2 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 9400

Outlook Fundamentals

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.

\$159.00

XCM 9401

Outlook Advanced

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 or comparable knowledge.

\$159.00

XCM 9402

SharePoint Services: Collaborative Solutions

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. Work with InfoPath to create and implement forms to gather and share information. Prerequisite: Proficiency with Windows, keyboard and mouse.

\$349.00

XCM 9403

SharePoint Services: 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.

\$349.00

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

\$169.00

XCM 9407

Communications Skills for the IT Professional

Communication is a basic skill that affects all aspects of business life. Our words, gestures, appearance, and body language all "speak" volumes as to our intent, state of mind, and attitude. Learning to recognize these conscious and unconscious cues, as well as paying attention to others' signals, make us better communicators and leaders.

\$169.00

XCM 9450

FrontPage Fundamentals

Learn the basics of FrontPage elements and techniques. Explore Web page creation, page structure and formatting, lists, proofing tools, hyperlinks, images, tables, theme, and HTML code. Discuss how to publish a Web site to the World Wide Web, LAN, or SharePoint Portal Server. Prerequisite: HTML and Web Page Design or comparable knowledge.

\$289.00

XCM 9460

FrontPage Advanced

Discover some of the more advanced FrontPage elements and techniques, including designing a Web page by using layout tables and layout tools. Use special effects, templates, style sheets, forms, frames, and data-driven pages to create an interactive, dynamic website. Prerequisite: FrontPage Fundamentals or comparable knowledge.

\$289.00

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 Web Page Design and Cascading Style Sheets, or comparable knowledge.

\$289.00

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.

\$189.00

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. \$289.00

XCM 9477

Flash: Interactive Movies

Discover the advanced features of flash to help you create custom animations. Create simple and complex interactive movies using ActionScript as you explore the advanced features of Flash. Prerequisite: Flash Fundamentals.

\$289.00

XCM 9478

Flash: Advanced Techniques

Discover advanced techniques for the creation and manipulation of Flash-based content as you explore in-depth the techniques used to create dynamic web applications using Flash. Prerequisite: Flash: Interactive Movies.

\$289.00

XCM 9525

Cascading Style Sheets

Cascading Style Sheets (CSS) is an important component of successful Web design. To create valid HTML 4.0 pages, you should use CSS to control your colors, typography, and layout schemes, rather than the HTML style-oriented tags and attributes. Receive an introduction to the concepts, techniques, properties, and values of CSS in a sequence that reflects a typical "building up" of the design rules. Prerequisite: HTML and Web Page Design.

\$349.00

XCM 9540

HTML & Web Page Design

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: Introduction to the Internet and Introduction to Windows; experience with Windows, keyboard and mouse; or equivalent knowledge.

\$289.00

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.

\$399.00

XCM 9548

XML XSLT

Use the features of XSLT and XPath to develop style sheets that convert XML documents to other XML, HTML, or text. Use elements and functions to create style sheet templates and match them with parts of your source document. Prerequisite: XML or comparable knowledge.

\$399.00

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 Tech A description is not available for this course.

\$400.00

XNCO 9999

Cosmetology INStructor Trng A description is not available for this course.

\$150.00

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.

\$49.00

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 for one person.

\$49.00

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 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 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 then attend the center at your own pace. Note: Hours of operation change somewhat when credit classes are not in session.

\$85.00

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 registry hours may be earned by attending this course. Todd Farley, B.S., KS EMT-IC, is the course coordinator. All instructional staff are Kansas BEMS certified.

\$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 Recert/EMT-B Refresher

EMT RECERTIFICATION / 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

CPR Recertification

This course is designed for those currently certified.

\$39.00

ESL Adv. and Prof. Courses (XGF)

XGF 1650

Conversational English A

This class is for individuals who have mastered the essentials of English and are striving for fluency in the language. Students will receive advanced practice in conversational and idiomatic usage of English. Emphasis is on conversing in small and large groups about American everyday life and how it compares/differs from other countries and their cultures. Prerequisite: intermediate or advanced knowledge of English. Curriculum changes each session so students are welcome to repeat this course. The textbook, Conversation: English in Everyday Life Volume 2, can be purchased at the JCCC bookstore. Note: This book is also used for Conversational English B.

\$99.00

XGF 1651

Conversational English B

This class is for individuals who have mastered the essentials of English and are striving for fluency in the language. Students will receive advanced practice in conversational and idiomatic usage of English. Emphasis is on conversing in small and large groups about American everyday life and how it compares/differs from other countries and their cultures. Prerequisite: intermediate or advanced knowledge of English. Conversational English A or B can be taken in any order since the topics covered will not be repetitious. The textbook, Conversation: English in Everyday Life, Volume 2, can be purchased at the JCCC bookstore. Note: This book is also used for Conversational English A.

\$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. The textbook, Pronouncing American English, can be purchased at the JCCC bookstore. Prerequisite: Intermediate or advanced knowledge of English.

\$165.00

XGF 1661

Pronunciation Improvement II

This class is for advanced individuals who are interested in continuing improvements of their pronunciation skills to gain increased self-confidence on the job, in business and in social settings. The class provides additional training in improving pronunciation, clarity of speech, use of idioms, slang, quick speech and fluency. More opportunities are given for presentations and social interactions. The textbook, Pronouncing American English, can be purchased at the JCCC bookstore. Prerequisite: Pronunciation Improvement I or advanced knowledge of English approved by the instructor.

\$165.00

XGF 1665

Personalized Pronunciation Program

This program provides an individualized pronunciation (correction) refinement method designed especially to assist non-native English speakers to improve their business, professional and social speaking skills. Following an individualized speech analysis, each participant is placed on an individualized learning track, which will be followed throughout this 13-week period. The Compton P-ESL instructional method will be used. Class enrollment is limited to 5 students who have a conversational command of English and a "newspaper" reading level. A serious commitment of daily practice is required. You will be contacted 2 weeks prior to the beginning of class to schedule your individual speech analysis.

\$995.00

XGF 1666

Private Tutoring

Private Tutoring \$50.00 per hour/ 10 hours

\$500.00

XGF 1667

ESL Private Tutoring

Private ESL tutoring, 25 hours

\$2,220.00

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. Topics will include past, present, and future verb tenses and aspects; modals; count and non- count nouns; pronouns; comparisons; and clauses. Students will practice written grammar by doing exercises and short writing assignments; they will practice spoken grammar through oral exercises and partner and group interaction. The textbook, Fundamentals of English Grammar, can be purchased at the JCCC bookstore.

\$93.00

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. Verb tenses and aspects, modals, passive voice, gerunds and infinitives, connectives, as well as adjective, adverb and noun clauses will be explored in depth. Students will concentrate on improving both written and spoken grammar. The textbook, Understanding and Using English Grammar, and answer key can be purchased at the JCCC bookstore.

\$93.00

XGF 2000

Individual Grammar Writing Rev

Individual Grammar Writing Review tutoring.

\$75.00

XGF 2001

Individual Grammar Review

Individual Grammar Review Tutoring

XGF 5001

Grammar for ESL - Web Based

This 6-week online course includes in-depth review of English grammar to prepare 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

Education (XNE)

XNE 1096

Divorce-The Impact on Children

Divorce has a tremendous impact on children. You will learn about the consequences of divorce on the children by examining the different developmental stages of children. You will also discuss the role parents play in helping children cope with divorce or conversely how parents can complicate and undermine the children's coping skills.

\$21.00

XNE 1115

Baby/Toddler Sign Language

Infants are capable of communicating long before they are able to speak. You will learn why research supports the use of sign language with hearing children, the do's and don'ts of using sign language, the American Sign Language alphabet, basic signs and hand shapes, and common signs that children will be interested in leaning and using. You will engage in various hands on activities to learn and practice signing, as well as receive a packet of information containing pictures of the signs for future reference.

\$24.00

XNE 1130

Use Art to Help a Child's Development

You will learn how to feed the child's brain and develop their senses through art activities with summer themes. You will discuss how children learn problem solving through art and how manipulative experiences improve the brain. Art supplies are included in the class fee and the class is approved for .2 CEU's.

\$45.00

XNE 1135

Cooking with Children

You will learn cooking tips onhow to help kids be comfortable in the kitchen. This includes how to combine children's literature and cooking because children learn from hands on activities. You will discuss how cooking can enhance a child's memory, math skills, knowledge of science, language skills and fine motor skills. The course handouts will include a list of children's literature and appropriate recipes. This course is approved for .2 CEUs.

\$45.00

XNE 1136

Signs of Illness in Children

You will learn how to identify the signs of illness in children. This course helps you recognize the tell tale signs of illness such as changes in behavior, appearance, fevers, and skin rashes. You will discuss health policies for a classroom or center,

checking for injuries, when to get immediate medical help, care for sudden illness, seizures, first aid tips and indicators of child abuse and neglect. This course is approved for .2 CEUs.

\$45.00

XNE 1137

Standard First Aid and Safety

You will learn how to respond to a breathing or cardiac emergency in infants and children. A short demo of CPR for infants and children will be shown. You will discuss how to prevent childhood injuries as well as the four leading causes of childhood deaths and the first aid basics. You will recognize how to care for victims of sudden illness and injuries. After completing this course participants will be able to: recognize injuries, demonstrate how to care for muscle, joint and bone injuries, and recognize how to care for sudden illnesses. Students will receive an authorization card from The Greater Kansas City Chapter of American Red Cross. This course if approved for .3 CEU's.

\$45.00

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!

\$15.00

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.

\$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 @ Your Library

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.

\$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.

\$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.

\$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.

\$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.

\$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.

\$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.

\$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.

\$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

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

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 1030

Building Construction: Noncombustible, Fire Resistive Construction

I his 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. 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 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

Food and Wine (XPE)

XPE 1013

Holiday Hors d'oeuvres

This class will feature hors d'oeuvres for the holidays that have been collected throughout 2006 and not featured in a JCCC cooking class before. Since traveling leads to tasting new and interesting foods, we have new ideas for this class.

\$35.00

XPE 1026

Easy and Healthy Gourmet

You'll want to taste Lemon Baked Pork Chops, Vegetable Couscous or quick Black Bean Chili with home baked corn chips. Try a great new green salad with pears and topped with low fat honey pear vinaigrette and indulge in a lower calorie carrot cake.

XPE 1028

Cooking for the Family/Freezer

Are you wasting time and money by rushing to the store at the last minute for dinner: Are you ordering take-out because you're not in the mood to cook? Or could your budget use a little extra spending money? Learn how to cook main dishes once a month, and stock your freezer with yummy and healthy main dishes that your family will love and that will save you time and money. In the first session, you'll learn how to plan a monthly menu, as well as some simple recipes and great shopping tips. The second session will be centered on cooking and storage techniques and sampling actual freezer cuisines. Freezer cooking may be done on your own, or with family and friends to really save time and money!

\$35.00

XPE 1033

Hot and Cold Hors d'oevres

New hors d'oeuvre class (with wine suggestions from Nancy, a wine expert at Lucas Liquors). We'll prepare Sausage Nut Strudel, a refreshing mushroom dish, Shrimp-in-a-Pickle, White House Souffleed Crackers, Olive Cheese and Onion Layered Cheese Loaf, Mariachi Drumsticks, and Apple Cream Cheese Torte Cookies.

\$35.00

XPE 1037

Hors d'Oeuvres

These delicious hors d'oeuvres are being used over and over again. We'll prepare Brie Tartlets, Chicken Pate with Nuts, a great dip, Greek Quesadias with Tzatziki and more, ending with Chocolate Rum Pecan Squares. Fee includes food costs.

\$35.00

XPE 1040

Wine Tasting Seminars

Come tantalize your palate with some wonderful and varied wines. The first session will cover red and white wines from France's Rhone region. The second session will be a selection of Washington state merlots. 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.

\$55.00

XPE 1050

Wine Tasting Essentials

Increase your knowledge of wines and enjoy wine tasting! We'll focus on history, production and service, and the process of reading the labels of California, French, Italian, German and other imported wines to determine the best value. Participants must be at least 21 years of age. The fee includes wine and food costs.

\$55.00

XPE 1074

Cooking With the Wok

A Wok is a wonderfully fuel efficient, versatile cooking pan and we'll use it to stir fry, deep fry, steam and smoke food from many countries. Pasta Prima Vera, Sweet and Sour Fish, Thai Beef Chiang Mai, Asian Chicken Salad, American Denver Omelet and Old English Carrot Pudding will demonstrate how useful a wok is.

\$35.00

XPE 1091

More Italian Cooking

Bruschetta with Pecorino and Walnuts, White Bean and Tuna Salad, Ribollita (Soup), Pork Loin Braised in Milk, Polenta with Mushroom Sauce and Cantucci with Vin Santo. These dishes are some of the favorites tasted while exploring Italy from Rome to the South and back to Tuscany.

\$35.00

XPE 1093

A Trip to Tuscany

Enjoy the atmosphere and flavors of the Tuscan Countryside while learning to make these wonderful dishes. Crostini, Papa al Pomodoro (Tomato Bread Soup) Gnocchi in Cream Suace from Sienna, Tuscan Lemon Roasted Chicken, Green Beans with Olives and Brutti ma Buoni. (Florentine cookies called Ugly but Good)

\$35.00

XPE 1117

Slow Cookers for the Fast Family

Still trying to figure out how to cook dinner when you're never ever home? Come learn great crock-pot recipes that will help the evening pace slow down and bring the family back to the table.

\$20.00

XPE 1119

Made by Me! (Parent/Child Class)

Register along with your favorite little one for an evening of sharing and giving. We will learn how to make all kinds of fun gifts for the young and the young at heart. Have fun learning new ideas kids can create in the kitchen to give to their friends and family. The October class has a Halloween theme and the December class has a holiday theme. Children must be age four or older and accompanied by an adult age 18 or older. The class fee for adults is \$21 and for children, \$8.

\$21.00

XPE 1121

Making Chocolate Candy

Learn how easy it is to make your own holiday chocolates! Learn how to make Caramel & Chocolate Apples, Turtles, Molded Chocolates, Dipped Fruit, Chocolate Boxes, etc. Watch a demonstration full of great ideas and sample all the chocolates! Fee includes food costs.

\$25.00

XPE 1122

Cookie Decorating with Royal Icing

Fun hands-on class teaches you how to decorate beautiful sugar cookies using Royal Icing. Students decorate six to eight cookies which they get to take home (or eat!). Handout features recipes and tips for working with Royal Icing. Fee includes food costs.

\$19.00

XPE 1123

Decorate a Gingerbread House (Parent/Child class)

Create a beautiful, edible holiday treasure. Your gingerbread house is assembled

and ready to decorate with a wide variety of candies, sprinkles and sparkles. Gingerbread house, \$15, is available from instructor. Children must be age 6 or older and registered with an adult. Fee for adults is \$12 and for children, \$8. Fee includes food costs.

\$12.00

XPE 1137

Thanksgiving in October

Traditional foods for one of our favorite holidays along with an October-fest theme. Come, learn and sample. Turkey Roasted in a Pastry Crust, Potato Dumplings, Red Cabbage with Apples and Cranberries and Pumpkin Baked Alaska are some of the dishes we'll prepare.

\$35.00

XPE 1141

A Trip to Sorrento

Pizza with homemade fresh Mozzarella and Southern Italian Tomato Sauce; Scialatelli alla Boscaiola, a quickly made flavored fresh pasta with vegetable and porcini sauce; Eggplant Parmesan, Cauliflower Positano Style and Limoncello from scratch, used in a cake...What a delicious way to experience the flavors from a trip to Southern Italy and the Amalfi coast.

\$35.00

XPE 1217

Cook for a Day - Eat for a Month

Do you find yourself in "crisis mode" at dinner time? Save time, money and your sanity with tasty and nutritious meals made in advance and frozen for later use. Learn to adapt this simple method to any dietary or scheduling needs for any size of family. Fee includes workbook with forms and recipes. This is not a cooking class.

\$35.00

XPE 1225

Mexican Gourmet

Wonderful food from the resort regions of Ixtapa and Zihuatanejo and other favorite Mexican style dishes for entertaining. We'll learn to make Shrimp in Tamarind Sauce. Pescado a la Veracruzan (fish), Super Stack Omelets Ranchero, Enchilada Suiza and Sopaipillas with Pineapple.

\$35.00

XPE 1240

Whole Grain Bread 101

Do you love homemade bread, but lack the time and/or skills to make it yourself? It's fast and easy when you learn this speedy method of making up to 6 loaves in just 75-90 minutes, with ideas for 20+ variations from the same recipe. With a focus on 100% whole wheat bread made by machine, topics include: whole grains and milling fresh flour, the 4 secrets of perfect bread dough, the mystery of gluten, baking for profit and more, followed by a taste test. Fee covers most food costs. Optional baking supplies available from instructor.

\$35.00

XPE 1261

Country Italian Style

Come learn how to cook pizza on the grill along with a wide variety of toppings. We'll prepare Beef Braised in red Wine served with Baked Gnocchi and Insalata Mista. For the grand finale, Tiramisu Four Layer Chocolate Cake. The recipe is loaded with calories but we'll make a fantastic version cutting the calories and fat by half. Fee includes food costs.

\$35.00

XPE 1262

A Celebration of Autumn

A very quick preparation makes a great Pumpkin Green Chili soup to serve with Texas Corn Bread. Two new ideas for pork are Pork Chops with Red Wine and Dried Fruits and Sauteed Pork with Rosemary Mustard Sauce; both are delicious with Pumpkin Biscuits with Orange Honey Butter. Perfect for the season, Broiled Apple Slices with Maple Calvados Sauce over ice cream. Fee includes food costs.

\$35.00

XPE 1263

Easy Hors d'Oeuvres and a "Brilliant" Idea for Left-Over Turkey

Come and learn to make six new Hors d'Oeuvres for entertaining any time of the year. We'll prepare Cheese Roll-ups, Herbed Ricotta Bundles, Egg Cornucopias, and Crostini with three toppings. Our Turkey, Rice and Artichoke Casserole could easily take its place on the holiday buffet table and a smooth and easy Chocolate Fondue with fruit is a great ending for any party. The class will include some interesting wine suggestions. Fee includes food costs.

\$35.00

XPE 1421

Fireside Feast

A cozy fire and good food make winter eating fun. This class includes recipes to cook over the fire or just serve before the fire: Spiked and Spiced Hot Cider, Ember Roasted Vegetables and Potatoes with a Special Sauce, Beef Braised in Brandy Broth, Roasted Spices for the Salad and Apple Pie Quesadias. Fee includes food costs.

\$35.00

XPE 1422

Heart Healthy for Your Sweetheart

Here is a Valentine Menu that is delicious, colorful and lower in fat and calories: Smoked Salmon Hearts, Italian Beef Medallions, Green Salad with Beets and Apple-raspberry Vinaigrette, Vegetables and Tangy Cranberry Ice. Fee includes food costs.

\$35.00

XPE 1423

Great Main Course Sandwiches

Make dinner easier or use these ideas for best picnics ever: Spinach/Sausage Stuffed Bread, Muffaletta, Rolled Lavosh or Tortilla Wraps, Homemade Wheat Pita with Salad Filling and a fabulous dessert to serve for spring and summer special occasions. Fee includes food costs.

\$35.00

XPE 1424

Spring Dinner Party or Easter Menu

A menu from around the world makes a festive spring dinner: Roasted Orange Herb Game Hens, Composed Greek Salad, Risotto Prima Vera, Cheese Popovers and Italian Easter Pie. Fee includes food costs.

XPE 1426

Summer Food from Argentina and Chili

These are some of the best foods served to us in private homes and on farms and ranches on a recent trip to South America: Crab Pie, Empanadas, Fresh Vegetable Salads, Grilled Steak with Chimichurie Sauce, Dulce de Leche. Fee includes food costs.

\$35.00

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.

\$82.00

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.

\$82.00

Foreign Language (XPL)

XPL 1010

Ciao Italia I (Italian for Travelers)

Learn basic Italian phrases and conversation with an emphasis on practical usage while traveling. Topics will include how to get around, eating out, shopping, culture and regions of Italy. Note: The textbook, "Italian in 10 Minutes a Day", can be purchased in the JCCC bookstore; you will also need to purchase an Italian dictionary.

\$83.00

XPL 1015

Ciao Italia II

In this continuation of "Ciao Italia I", you will learn new, practical conversational skills as well as reading and writing. Additional verb tenses will be introduced. The class will also emphasize traveling in Italy. Prerequisite: Ciao Italia I or other introductory Italian class. The textbook, "Italian in 10 Minutes a Day", can be purchased in the JCCC bookstore; you will also need an Italian dictionary.

\$83.00

XPL 1017

Ciao Italia III

This class is a continuation of "Ciao Italia II". Emphasis will be on improving reading, writing and speaking skills. The textbook, "Italian in 10 Minutes a Day", can be purchased at the JCCC bookstore. An Italian dictionary is required.

\$83.00

XPL 1100

French for Travelers

This class will teach "survival" French for travelers in France. Learn handy phrases to use when greeting people, shopping, ordering a meal or asking directions. You'll also learn about French culture. The textbook, Getting by in French, can be purchased at the JCCC bookstore.

\$79.00

XPL 1105

French I, Beginning

This course is an introduction to the fundamentals of the French language taught in an informal and fun environment. It is based on the study and use of basic French grammar, vocabulary development, word pronunciation, and common phrases. Students will be able to read, write, and speak in simple French sentences and learn about the culture. The textbook, "French in 10 Minutes a Day", can be purchased at the JCCC bookstore.

\$79.00

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. The textbook, "French in 10 Minutes a Day", can be purchased at the JCCC bookstore.

\$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

Conversational French I

Increase your vocabulary and improve pronunciation in this conversational French class conducted entirely in French. This course is designed for students with a basic understanding of the fundamentals of French. You'll learn about French culture while improving your French.

\$79.00

XPL 1200

German for Travelers

Learn to ask directions, order meals, figure money and conduct basic conversations. An informal conversational approach will be used. The text book, "German Phrase Book and Dictionary" can be purchased at the JCCC bookstore.

\$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. The textbook can be purchased in the JCCC bookstore.

\$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.

\$123.00

XPL 1350

Beginning Chinese

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. The book, "Chinese In 10 Minutes A Day", can be purchased at the JCCC bookstore.

\$79.00

XPL 1355

Beginning Chinese II

Continuation of Beginning Chinese. The course will focus on improving pronunciations, using common expressions and developing conversations. Students will learn basic strokes of Chinese characters and recognize a list of frequently used words. Students also will learn Chinese etiquette and cultures. The book, "Chinese in 10 Minutes a Day", can be purchased at the JCCC bookstore.

\$79.00

XPL 1400

Russian for Beginners I

In this course, students will master the Russian alphabet. They will learn to read, write and speak basic Russian. The book, "Russian in 10 Minutes a Day", can be purchased at the JCCC bookstore.

\$79.00

XPL 1405

Russian for Beginners II

Contiune 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. The book," Russian in 10 Minutes a Day", can be purchased at the JCCC bookstore.

\$79.00

XPL 1505

Spanish, Conversational I

If you understand the fundamentals of Spanish, this informal, fun course will build your conversational skills. Conducted in Spanish, this course is designed to improve your vocabulary and pronunciation rapidly, while learning about Spanish cultures. The textbook can be purchased at the JCCC bookstore.

\$99.00

XPL 1510

Spanish, Conversational II

This course is designed to increase the student's ability to express themselves

orally in Spanish. Vocabulary and grammatical structure will be emphasized. The instructor will present class discussion topics relevant to everyday life and current event situations. The textbook, The Big Red Book of Spanish Verbs, can be purchased at the JCCC bookstore. You will also need to purchase a Spanish/English dictionary.

\$99.00

XPL 1511

Spanish, Beginning I

This course is based on the study and use of basic Spanish grammar. You will learn to read, write and speak basic Spanish. Word pronunciation and common phrases will be stressed. Students will be encouraged to participate in class. The textbook, "Spanish in 10 Minutes a Day" can be purchased at the JCCC bookstore.

\$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 textbook, "Spanish in 10 Minutes a Day", is available at the JCCC bookstore.

\$99.00

XPL 1515

Spanish, Intermediate

This course will foster your ability to communicate basic information about yourself, others and your daily activities, focusing on pertinent grammatical topics, vocabulary and cultural information. You will begin to create orally with the language and rely less on memorized material.

\$79.00

XPL 1525

Spanish, Conversational III

Solo En Espanol. Join the group of advanced students who are interested in practicing and improving their skills in speaking Spanish. This is an advanced Spanish class. The textbook, The Big Red Book of Spanish Verbs, can be purchased at the JCCC bookstore. You will also need to purchase The American Heritage Spanish/English dictionary.

\$99.00

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.

\$79.00

XPL 1551

Swedish I

Join us to learn the basics of speaking this muscial Scandinavian language. We will learn the Swedish alphabet, basic grammatical constructions, and reading simple phrases, all in a fun, easy-going manner from a native born Swede.

\$99.00

XPL 1552

Swedish II

Continuation of our study of the Swedish Language with emphasis on simple converstaions and reading, applying grammar in a fun practical manner. Students' current interest regarding travel, communicating with relatives, and practical help in researching a family tree will be covered. Increasing vocabulary will be a goal.

\$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.

\$99.00

XPL 1710

Beginning Modern Standard Arabic I

In this fast-paced, low-pressure course students will master the Arabic alphabet, learn many conversational expressions, as well as the Arabic case and verbal measure systems. Students will be able to read, write, and speak in simple Arabic sentences. This course will be taught by a native English speaker who was a former Arabic government translator. The book, "Arabic in 10 minutes a Day" can be purchased at the JCCC bookstore.

\$79.00

XPL 1715

Beginning Modern Standard Arabic II

In this follow-up course to Beginning Arabic I, students will continue to learn conversational expressions, while furthering their understanding and usage of the Arabic case and verbal measure systems. Students will be able to read, write, and speak in simple Arabic sentences. This course will be taught by a native English speaker who was a former Arabic government translator. The book, "Arabic in 10 minutes a Day" can be purchased at the JCCC bookstore.

\$79.00

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.

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.

\$139.00

XPL 5000

Speed Spanish I, Web-Based

Imagine yourself speaking, reading and writing Spanish. Now you can with Speed Spanish! This course is designed 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 at all, you'll be able to go into any Spanish-speaking situation and converse in Spanish. Que Bueno!

\$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. Our Speed Spanish courses are unlike any other Spanish classes you may have ever taken. 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 in our unique three-part Speed Spanish learning series. In this advanced-level course, you'll learn the final six recipes that will serve as templates to help you create any Spanish sentence you want.

\$98.00

XPL 5005

French, Beginning Conversational

Learn common French words, phrases and cultural tips for both leisure and business. This course makes pronunciation simple, with phonetic spellings for every word and phrase you'll need to learn. Audio is included so you'll be able to hear and practice the language with little more than 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 5014

Braille Beginning Transcription, Web-Based

Prepare for a rewarding career as a Braille transcriber by learning to write and read the tactual language of the blind. You'll learn the history of Braille, and different ways of producing the Braille English alphabet, Braille numbers, Braille 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 that make up Grade II Braille. These contractions are used to increase your efficiency with Braille by decreasing the amount of space required to produce words or parts of words. After you complete this course, you'll be comfortable with reading and brailing the complete Literary Braille Code. You'll also learn about employment opportunities for those who are proficient at producing Braille.

\$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

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 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 Recovery

\$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

\$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

\$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

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

Care

\$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 III 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

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

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 Alternative Medicine

\$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

Opportunities

\$54.00

XNC 2106

Continuous Quality Improvement in Today's Health Care Workplace Workplace

\$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

\$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, PTs and dietitians.

\$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

\$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

This workshop will explore strategies for prevention and protection and discuss the legal responsibilities to elders when abuse is suspected. RNs, LPNs and LMHTs will earn 3 contact hours for attending this workshop. Approval is pending for other health professionals. Kansas ACHAs will earn 3 (RC) hours.

\$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

\$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

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

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

Baby Boomers: Aging and Health Care

The "baby bommers", the 76 million babies born between 1946 and 1964, have become the dominant social, market and political force in our society. Who are the? 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 and LMHTs will earn 3 contact hours for attending this course. Kansas ACHAs will earn 3 (RC) hours. Approval is pending for other health care professionals.

\$27.00

XNC 2251

Asthma: Update 2001

Astrina: Opdate 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 complels 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 explore the 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. pénding 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

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

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

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

There is currently an EPIDEMIC of heart failure in the United States with over 5 million active cases. In fact, heart failure is the most common reason for hospital admission in Medicare patients. Join us for this presentation and equip yourself to perform a thorough nursing assessment of your next heart failure patient and also gain a current understanding of heart failure and the modern array of therapy for management of this complex problem. As our understanding of the most exciting arenas for the cardiac nurse as we can now make a real impact on the well-being of these patients. This course provides a dynamic & dimensional portrayal of this increasingly prevalent but deadly disease! RNs, LPNs and LMHTs 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 beauth professionals. 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: Assessment and Management Strategies for the New Minermum 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 prevalence of the decision of the d 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 professionals 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 6 contact hours for attending this workshop.

\$54.00

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

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

and Fibromyalgia Chronic Fatigue Syndrome (CFS) 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 disucss criteria for the diagnosis of CFS and Fibromyalgia and review the latest literature on treatment strategies. Energetic body work will also be presented and explored. The program also will highlight current thinking about the roots of these two increasingly common diagnoses and assist participants in understanding current research in the field. RNs, LPNs, LMHTs, social workers, counselors, psychologists, dentists and dental hygienists will earn 3 contact hours for attending this program. Approval is pending for other health care professionals. professionals.

\$27.00

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 (PC) hours (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. BNs. J PNs and Impts will earn 4 contact hours for cases with trial exhibits. RNs, LPNs and limhts 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

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

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 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. 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 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. 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. 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. 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. 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

The relationship of depression to morbidity will be discussed, as well as the role of psychotherapy and environmental interventions. 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 care professionals.

\$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. 4 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 predispostion, 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.

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 and LPNs will earn 3 contact hours for attending this seminar. ACHAs will receive 3 (RC) continuing education hours. Approval is pending for other health care professionals.

\$27.00

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 (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 (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: 2002 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 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 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 meditation, 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

Have you ever heard an elderly person referred to as a "mean old man" or "nasty old lady"? Often elderly people do exhibit problem behaviors, but rarely are these the result of being mean or nasty. In this seminar, you will identify common causes of behavior problems in elderly clients and plan practical environmental, interpersonal and medical interventions. 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 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 spectum, 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.

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 for attending this workshop.

\$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.

\$54.00

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.

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 - 2007

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 should already have a working knowledge of the OSHA Standards. It is important for healthcare providers to not only know what is required by the OSHA Standards but to also understand the intent and spirit of the standards to ensure their efficient application and to assure a safe working environment. 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 3 contact hours. ACHAs will earn 3 (A) hours. Approval is pending for OTs and PTs.

\$36.00

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 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

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

What Every Nurse Needs to Know About Cancer

As people live longer, the number of people affected by cancer is increasing. In June 2000, the human genome was unraveled and began influencing the recognition of people at risk for developing diseases. In cancer, it opened the door to identifying risk factors for developing cancer, defining the type of cancer, as well as developing new treatment strategies. With this information, new breakthroughs have resulted in earlier diagnosis of cancer and less toxic treatments. In this seminar, the causes of cancer will be reviewed, and explanation of how the human genome project has influenced risk identification, cancer screening and diagnosis, and treatment will be discussed. A panel of high risk individuals will discuss how high risk individuals are empowered to control that risk. RNs and LPNs will earn 6 contact hours for attending seminar.

\$40.00

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.

\$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. health care professionals.

\$27.00

XNC 2464

The Compassionate Heart: Responding to the Needs of

Your Seriously and Chronically III 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

Diagnosig 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

I Say? 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, dentists and dental hygienists will earn 3 contact hours for attending this workshop. Approval is pending for other health care professionals.

\$27.00

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 required and and compliance program. 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 No one is immune from loss. Not in today's business and social climate. Loss or 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 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. seminar.

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

The Magic of Music and Mending the Mind

kkk

\$18.00

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

Handling Challenging Behaviors in Persons on the Autism Spectrum

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 he home. This seminar provides information about our aging population, issues related to care giving, how to support the caregiver, and available resources. RN, 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

Working With and Advocating For Alzheimer's Patients

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

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 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 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 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 will earn 6 contact hours for attending this workshop. Approval is pending for other health care professionals.

\$54.00

XNC 2515

FEN/PHENomenon: Are Anti-obesity Drugs the Answer?

A description is not available for this course.

\$27.00

XNC 2520

Thriving in a Kaleidoscope of Change

A description is not available for this course.

\$54.00

XNC 2525

Using Biofeedback to Reduce Stress

A description is not available for this course.

\$54.00

XNC 2530

Taking Positive Action to Manage Stress and Burnout

A description is not available for this course.

\$27.00

Women and Anger

A description is not available for this course.

\$54.00

XNC 2540

Diabetes: Using Pattern Management to Improve Care

A description is not available for this course.

\$54.00

XNC 2545

Osteoporosis: Prevention and Treatment

A description is not available for this course.

\$27.00

XNC 2550

Successful Asthma Management: What Health Professionals Need to Know

A description is not available for this course.

\$54.00

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 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 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 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

Explore a variety of dementing illnesses as well as the clinical problems, treatments and interventions associated with them. 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, 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 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 3 contact hours for attending this seminar.

\$27.00

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

Everything About Hormones

A description is not available for this course.

\$27.00

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 a 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, and LMHTs 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

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. 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. (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

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.

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

Paradigm Shifts in End-of-Life Care

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 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.

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..

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 LMTsI 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 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, 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 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 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 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 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 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: 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 process. Social workers, psychologists, counselors and mental health nurse

clinicians will earn 7 contact hours for attending this workshop.

\$84.00

XNC 3140

CPR for Health Professionals

This course includes discussion of the cardiac and respiratory systems. The student will demonstrate CPR skills and airway obstruction techniques. With successful completion of this course, the student will receive Basic Rescuer level (Health Care Provider) affirmation. In-state tuition \$35 total. Eight (8) 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.

\$35.00

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.

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 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

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. RN, LPNs, LMHTs and social workers will earn 3 contact hours. ACHAs will earn 3 (A) hours.

\$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

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

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.

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 1400

Drug Treatment of Mental Illness

This self-paced course, available online or in booklet format, reviews

classifications of the major mental illnesses and discusses the categories of psychotropic agents used to treat these disorders. RNs, LPNs, LMHTs, and social workers 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 in one of JCCC Labs or 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 in one of the JCCC Labs 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 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

Learn 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 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.

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.

\$1,395.00

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 Ill-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.

\$1,595.00

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.

\$1,795.00

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

\$1,395.00

XNH 8005

Administrative Dental Assistant Certificate (1 CR)

This 240 hour nationally recognized 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 included.

\$1,395.00

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. Clinical rotations include 20 hours of retail and 20 hours of hospital experience. 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.

\$1,395.00

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 1001

Back Safe Workout Program

Back pain affects 80% of adults at one time or another. Many workout programs are potentially damaging to one's back. The Back Safe Workout is a research-based program that will help you get in shape, decrease your current back pain and avoid future problems.

\$10.00

XPG 1003

Natural Solutions to Fibromyalgia

Fibromyalgia is a debilitating condition that can be managed effectively. Dr. Dale Scott will explain why standard medical treatments fail and will offer natural solutions that get results. Learn some pharmaceutical, nutritional, emotional and physical treatment options.

\$10.00

XPG 1014

Stay Fit While You Sit

"Oh my aching back". Let Dr. Dale Scott remedy this oft heard complaint with an evening dedicated to discovering the anatomy of neck/back posture, how to make your work station back and neck friendly and finally learn a battery of self-help stretches and exercises to relieve and prevent musculoskeletal complaints.

\$10.00

XPG 1020

Couples Massage

Learn to give and receive relaxing, therapeutic massage in this fun, one day class. You and your partner practice techniques following instructor demonstrations. No special or expensive massage equipment needed! Bring to class: foam pad or sleeping bag, two sheets, swimsuit, large bath towel and pillow. Lunch on your own. Class is limited to 10 people.

\$39.00

XPG 1021

Natural Alternatives to Prescription Pain Medication

Pain management is a hot topic today. Pharmaceutical companies are pulling popular pain relief medications from the market. This class focuses on safe, non-prescription alternatives to pain medications. Attendees will learn side effects of common prescription pain medications as well as safe relief alternatives and therapies.

\$10.00

XPG 1031

Peak Performance

Understand and learn winning techniques that help eliminate fatigue, improve your body's performance and reduce the risk of injury.

\$10.00

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.

\$82.00

XPG 5005

Introduction to Natural Health and Healing

Learn how to promote wellness, balance and health in all aspects of your daily life. This course will give you a basic understanding of the field of natural health.

\$82.00

Home Ownership (XPK)

XPK 1005

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

XPK 1006

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. In the past two years, 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

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 1015

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

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 1045

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

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 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 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 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 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, pluss 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.

\$82.00

Insurance (XNI)

XNI 1030

INS 21 - Property and Liability Insurance Principles

This course prepares you to take the INS 21 exam which covers the following topics: What insurance is, who provides insurance, how insurance is regulated, measuring the financial performance of insurers, marketing, underwriting, claims, contracts, property loss exposures, liability loss exposures, and risk management.

\$189.00

XNI 1040

INS 22 - Personal Insurance

This course prepare you to take the INS 22 exam which covers the following topics: Personal auto policy, homeowners insurance, other residential insurance, personal loss exposures and financial planning, life insurance, and health and disability insurance.

\$189.00

XNI 1050

INS 23 - Commercial Insurance

This exam covers the following topics: Commercial property insurance, business income, commercial crime and equipment breakdown, commercial general liability, commercial automobile, workers' compensation and employers' liability, and miscellaneous coverages.

\$189.00

XNI 1100

AIC 33 - The Claims Environment

You will learn how the claim representative's role is simultaneously determined by policyholders and other customers, the insurance policy, the insurance company and its management and the law.

\$145.00

XNI 1115

AIC 34 - Workers Comp and Managing Bodily Injury Claims

This course will cover the important factors of the workers' compensation system to workers and to employers as well as the central role of claim settlements in that system. You will learn to analyze comprehensibility and benefits in given situations, evaluate the medical aspects of given injury claims and appreciate the importance of medical knowledge and education.

\$145.00

XNI 1120

AIC 35 - Property Loss Adjusting

You will learn about all the significant aspects of property loss claims, other than auto. You will understand the important role that insurance policy language plays in determining the rights and duties of policyholders and insurers and how it shapes and guides the investigation and adjustment of first-party losses.

\$145.00

XNI 1125

AIC 36 Liability Claims Adjusting

The legal liability in given situations by organizing an appropriate investigation and how to apply the appropriate law will be covered. You will be able to evaluate damages for bodily injury, claims and effectively settle a third-party claim.

\$145.00

XNI 1145

ARe 141 Principles of Reinsurance

A description is not available for this course.

\$125.00

XNI 1150

ARe 142 Reinsurance Practices

A description is not available for this course.

\$175.00

XNI 1151

ARe 144 - Reinsurance Principles and Practices

This course prepares you to take the ARe 144 exam which covers the following topics: Introduction to Reinsurance, reinsurance program design, reinsurance placement process, common reinsurance treaty clauses, quota share treaties, surplus share treaties, casualty excess of loss treaties, catastrophe reinsurance, audits, and regulations.

\$189.00

XNI 1152

ARe143 - Primary Insurance Coverages

This exam covers the following topics: Overview of personal insurance, personal auto, homeowners insurance, miscellaneous personal insurance coverages, commercial property insurance, business income insurance, inland and ocean marine, commercial general liability, commercial auto, and workers? compensation and employers' liability insurance.

\$189.00

XNI 1300

ARM 54 - Risk Assessment

This exam covers the following topics: Risk management programs, the risk management process, legal foundations of liability loss exposures, assessing property, liability, personnel and net income loss exposures, management liability and corporate governance, forecasting, and cash flow analysis.

\$189.00

XNI 1301

ARM 56 Essentials of Risk Financing

The following topics will be discussed extensively in this course; insurance as a risk financing technique, excess & umbrella liability, reinsurance & risk financing, captives, self-insurance, retrospectively rate finite & integrated risk insurance plans and capital market products. The required text may be ordered by logging on to www.aicpcu.org.

\$145.00

XNI 1305

ARM 55 - Risk Control

This exam covers the following topics: Controlling property, personnel, liability, and net income loss exposures, intellectual property loss exposures, criminal loss exposures, disaster recovery for property loss exposures, understanding claim administration, fleet operations loss exposures, environmental loss exposures, understanding system safety, and motivating and monitoring risk control activities. \$189.00

XNI 1510

AAI 82 - Multiple-Lines Insurance Production

This exam covers the following topics: Commercial general liability insurance, commercial automobile, garage and motor carrier, commercial crime, specialty property, excess and umbrella and surety bonds.

\$189.00

XNI 1511

AAI 83 - Agency Operations and Sales Management

This course prepares you to take the AAI 83 exam which covers the following topics: Agency formation/environment, management, production plans, producer-insurer relations, agency image, growth/customer communications, market segmentation, target marketing, agency IT, financial management, and legal/ethical responsibilities.

\$189.00

XNI 2010

CPCU 510 - Foundations of Risk Management, Insurance & Professionalism

This exam covers the following topics: Code of ethics, risk and related concepts, evaluating and managing risk, risk management, how insurance works as a business, risk financing alternatives, fundamental insurance assumptions, insurance contracts, insurable interests, reading a policy, common policy provisions, insured events, amounts payable, and external factors affecting insurance contracts.

\$189.00

XNI 2080

CPCU 540 - Accounting and Financial Analysis for Risk Management and Insurance Professionals

This course prepares you to take the CPCU 540 exam which covers the following topics: Corporate finance, financial statements and taxes, time value of money, discounted cash flow valuation, capital investment decisions, project analysis and evaluation, capital market history, risk metrics, financial leverage, cash and liquidity management, and mergers and acquisitions.

\$189.00

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 3005

Estate Planning - 3 L/H

You will look at strategies involved in estate planning for single, married and nontraditional households. You will review historical perspectives and traditional approaches to planning for the disposition of an estate, as well as the growing popularity of the living trust. This course emphasizes comprehensive estate planning using a team of advisers while offering case studies that illustrate the pitfalls of inadequate or no planning. CECs: 3 L/H - Kansas and Missouri Insurance Departments.

XNI 3015

Estate Planning II - 3 L/H

You'll examine the need for planning to minimize the impact of federal estate tax and state inheritance tax on the larger estate. You'll explore planning techniques such as irrevocable trusts and planned giving programs, as well as estate and business planning for the small- to medium-sized business owner through irrevocable life insurance trusts, charitable remainder trusts, buy/sell agreements and family limited partnerships. You are encouraged to complete Estate Planning I before enrolling in Estate Planning II. CECs: 3L/H Kansas Insurance Department.

\$45.00

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

XNI 6027

CPCU 520 - Insurance Operations, Regulation and Statutory Accounting

This course prepares you to take the CPCU 520 exam which covers the following topics: Insurance operations, regulations, marketing, underwriting property and liability insurance, ratemaking, property and liability claim adjusting, reinsurance, insurer financial statements and management, and insurer business strategy and global operations.

\$189.00

XNI 6028

CPCU 530 - The Legal Environment of Insurance

This exam covers the following topics: U.S. law and regulations, general contract law, contract formation, agreement, legal capacity, consideration, legal purpose, interpretation and obligations, insurance contract law, commercial law, property law, tort law, negligence, products liability, special liability, employment law, and the international legal environment of insurance.

\$189.00

XNI 6029

CPCU 551 - Commercial Property Risk Management and Insurance

This exam covers the following topics: Property loss exposures, building and

personal property coverage, cause of loss forms, flood and specialty forms, business income, inland marine and ocean cargo, crime, equipment breakdown, business owners and farm owners, and surety bonds.

\$189.00

XNI 6030

CPCU 552 - Commercial Liability Risk Management and Insurance

This course prepares you to take the CPCU 552 exam which covers the following topics: Liability loss exposures, liability risk control, business auto insurance, garage and motor carrier insurance, workers compensation and employers' liability loss exposures, management and professional liability loss exposures and insurance, environmental and aviation loss exposures and insurance, excess and umbrella liability insurance, and advanced risk financing techniques.

\$189.00

XNI 6031

CPCU 553 Personal Risk Management, Insurance and Financial Planning

You will learn about the survey of personal risk management, insurance and financial planning, which includes auto insurance, personal auto policy, homeowners insurance, residential insurance, personal financial planning, life, health and disability insurance, investment planning, planning for retirement and estate planning.

\$175.00

XNI 6032

CPCU 555 Personal Risk Management and Property Liability Insurance

You will learn about personal risk and property liability insurance which includes personal risk management, homeowners endorsements & variations, personal auto, recreational vehicles, developing personal insurance products, underwriting profitability, pricing, reunderwriting personal portfolios, and gaining efficiencies in personal insurance operations. This course prepares you for the national CPCU test.

\$175.00

XNI 6033

CPCU 556 Personal Financial Planning

You will learn about life insurance and social security insurance including health, disability and long-term insurance, basic investment principles, equity and fixed-income investments, mutual funds, asset allocation, income tax planning, planning for retirement and estate planning. The course prepares you for the national CPCU test.

\$175.00

XNI 6034

CPCU 557 Commercial Risk Management Insurance &

Financial Planning In this survey course of commercial risk management and insurance you will learn about commercial property, business income, commercial crime and equipment breakdown insurance, inland and ocean marine commercial general liability, commercial auto, business owners and farm workers compensation and employers liability and risk financing. This course prepares you for the national CPCU exam.

\$175.00

XNI 6035

CPCU 560 - Financial Services Institutions

In this course you will learn about different financial markets, federal reserve, money markets, bond markets, stock markets, derivative securities, banks finance companies, insurance companies, securities firms and investments banks regulation of depository institutions. Mutual funds, pension funds and risks incurred by financial institutions. This course prepares you for the national CPCU 560 test.

\$175.00

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.

\$189.00

XGI 1030

Learn & Test-Taking Strategies

A description is not available for this course.

\$250.00

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 1092

Exploring the Plains

Students discover what makes the Midwest and Kansas such a great place to live and learn both from a historical and modern-day perspective. The class will visit local, area attractions to reinforce the themes and topics studied. Themes and topics include food, the early explorers, and the cowboys and Native Americans.

\$192.00

XGI 1094

JCCC Information Systems and Keyboarding Improvement

Practice keyboarding, email and Internet skills necessary for academic success.

\$95.00

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

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.

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.

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.

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.

XGI 1132

Pronunciation 1132

Prerequisite: Appropriate placement test score or XGI 1122. 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. 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 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.

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.

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.

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.

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).

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.

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).

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.

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.

XGI 1411

Vocabulary 1411

Prerequisite: Appropriate placement test score. 3 HRS. Students expand vocabulary and develop vocabulary skills.

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.

XGI 1421

Vocabulary 1421

Prerequisite: Appropriate placement test score or XGI 1411. 3 HRS. Students continue expanding vocabulary and developing vocabulary skills.

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.

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.

XGI 1440

Reading 1440

Prerequisite: Appropriate placement test score or XGI 1430. 3 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.

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.

\$200.00 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. 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

eveloping Your Leadership Style

\$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 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 INTERVIEWING

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

A description is not available for this course.

\$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.

\$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 5755

Gang Update for Law Enforcement

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 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

Leadership (XBZ)

XBZ 0428

Leadership: Basic Principles For A Collaborative Workplace

Workplace As an employee, you must be willing and able to work with others in new collaborative ways. In this seminar, you'll explore the basic principles for a collaborative workplace and the leadership roles you must assume regardless of position or specific assignment. You'll learn the importance of collaboration and shared values in creating a high-performance organization, how to apply basic principles important to a collaborative workplace and five strategies you can use as a leader to create focus for yourself.

\$169.00

XBZ 0431

Influencing Change for Win-Win Outcomes

Successful organizations thrive on new ideas that lead to better ways to work. But in today's cross-functional workplace, successful implementation means those ideas need support from a wide range of people. In this seminar, you'll explore methods to analyze, develop and present ideas in a way that will help you win the necessary support and effectively deal with change for win-win outcomes. You'll discover how to recognize situations where it is appropriate to use influencing skills, identify a variety of factors that motivate people, assess and understand the reasons for change and how to take positive action to make change successful.

\$179.00

XBZ 0432

Proactive Listening

Proactive listening is a powerful tool for building and maintaining the strong relationships required to reach personal and organizational goals. Participants will learn verbal and nonverbal techniques to move from a "reactive" to a "proactive" approach to listening.

\$114.00

XBZ 0433

Influencing for Win-Win Outcomes

Successful organizations thrive on new ideas because these ideas can lead to

finding better ways to work. In this program, participants learn to analyze, develop and present their ideas in a way that will help them win support.

\$114.00

XBZ 0434

Giving and Receiving Constructive Feedback

Individuals and organizations benefit from honest, objective feedback that can improve performance and build strong work relationships. Participants will learn constructive approaches to giving and receiving feedback, with an emphasis on maintaining a spirit of openness and mutual respect.

\$114.00

XBZ 0436

Coaching: Bringing Out the Best in Others

Coaching is a powerful and effective way to maximize the performance of everyone associated with an organization. In this workshop, learn the coaching skills to motivate, guide and support one another in working toward and achieving top performance.

\$114.00

XBZ 0438

Identifying Work Priorities and Setting Verifiable Goals

Employees often manage multiple responsibilities - cross-functional, project-related, short-and-long-term. Moreover, work assignments may come from various sources, resulting in difficulty determining priorities and assessing performance standards. Participants will learn a commonsense approach to formulating clear goals with measurable objectives so they can verify results. They will also learn to limit goals to those with high payoffs for the organization.

\$164.00

XBZ 0439

Moving from Conflict to Collaboration

Employees at every level of an organization need to have the skills to turn conflicts into opportunities to achieve positive, productive results. Participants will learn to identify behavior patterns that undermine their ability to address conflict constructively.

\$114.00

XBZ 0441

Gaining Commitment to Pre-Set Goals

This program offers leaders a process for helping move a group toward commitment to pre-set goals. This is done by building a compelling case, encouraging employees to express their concerns in order to move them toward commitment, and by identifying specific next steps.

\$164.00

XBZ 0442

Correcting Performance Problems

This workshop provides a process leaders can use to get an individual's performance back on track and build motivation for continual improvement. It focuses on discussions that are necessary after less-formal feedback and coaching have failed to result in improved behaviors.

\$164.00

XBZ 0443

Personal Strategies for Navigating Change

In today's workplace, employees are experiencing tremendous changes in the way work gets done and in the way people work together. This program offers participants an approach to navigating change by providing skills for taking positive action to make change successful, both individually and with others.

\$114.00

XBZ 0444

Conducting a Collaborative Performance Review

In this interactive workshop, participants will learn to prepare for a performance review, to manage expectations during the discussions and to create an atmosphere that encourages openness about concerns or plans for the future.

\$164.00

XBZ 0445

Managing Your Priorities

This program provides the awareness and skills participants need to make better decisions about their daily work. They learn techniques for handling complex interpersonal interactions, building strong work relationships, and increasing overall productivity in an environment with changing priorities.

\$114.00

XBZ 0446

Sales Performance Showcase

A description is not available for this course.

XBZ 0447

Giving Recognition

Everyone must learn to give recognition to peers and even those outside the organization to create and sustain a productive workplace. Participants will learn how positive reinforcement inspires people to think beyond their immediate well-being and focus on the concerns of the group and the organization as a whole.

\$114.00

XBZ 0452

Handling Emotions Under Pressure

In today's high-pressure work environment, emotions are bound to erupt. An emotional outbreak is often a clue that a problem is affecting an employee's ability to work effectively. In this seminar, participants will learn a process for handling the emotions in daily work situations and how to take charge in difficult circumstances.

\$114.00

XBZ 0453

Moving the Organization Forward

In this seminar, participants will learn a collaborative planning process that taps into everyone's expertise, creativity and enthusiasm so people can decide how to adapt the work they do to support the goals, strategy or direction in today's fluid and fast-changing organization.

\$164.00

XBZ 0454

Expressing Yourself: Presenting Your Thoughts and Ideas

We can all benefit from learning to express ourselves more effectively. This seminar increases confidence by helping participants better present their thoughts and ideas. Learn how to plan, organize and deliver results-oriented messages; skills useful in a variety of situations, from informal discussions to formal meetings and presentations.

\$114.00

XBZ 0455

Telephone Customer Service

This seminar will show you which telephone skills make a powerful first impression on the customer. You will learn how the different ways a call is handled can influence a long term customer relationship. You will also spend time reviewing internal calls, messaging, etc.

\$109.00

XBZ 2100

Core Skills for Building Commitment

This course teaches you how to get results through people. You will acquire a set of proven interaction skills, discover seven Leadership Imperatives key to meeting today's challenges, and realize your role as a catalyst leader who inspires others to act.

\$99.00

XBZ 2101

Facilitating Improved Performance: Web-

You will learn the skills needed to help people with performance or work habit problems. This course will show you how to help people develop improvement plans, conduct effective improvement discussions, and handle the challenges you may encounter in improvement discussions.

\$99.00

XBZ 2102

Performance Planning: Setting Expectations

This course will help you prepare for and conduct planning discussions, encourage continued involvement, and work with members of project teams or task forces on their performance plans.

\$99.00

XBZ 2103

Trust: Strengthening the Foundation

Trust is a key ingredient of employee engagement and loyalty. You will gain awareness of trust traps and strategies for overcoming them, helping you create an environment where people take risks, identify and solve problems, and work together.

\$99.00

XBZ 2104

Following Up to Support Improvement

Dealing effectively with performance or work habit problems is one of the biggest challenges leaders face. This course will help you plan and conduct meetings with employees who need to improve or face prescribed organizational consequences.

\$99.00

XBZ 2105

Guiding the Development of Others

This course will provide you with the necessary skills and a practical process to develop talent. It focuses on a leader's critical role before, during and after the creation of a development plan.

\$99.00

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 2107

Performance Planning: Reviewing Progress

You will build skills for tracking progress, providing specific, balanced feedback, and conducting review discussions. The course material emphasizes your role of offering ongoing support, guidance, and resources while encouraging others to assume responsibility for achieving their plan. You will also focuses on revisiting objectives and tracking methods if priorities change.

\$99.00

XBZ 2108

Preparing Others to Succeed

You will be introduced to skills for guiding individuals and teams toward achieving successful results. You will learn the importance of helping people learn from successes rather than mistakes, how to balance seeking and telling, and how to conduct an effective coaching discussion.

\$99.00

XBZ 2109

Leading Successful Meetings: Web-based

Meetings can be a source of frustration or a productive use of everyone's time and talent. It often all depends on the leader, and it has a huge effect on productivity. You will learn the skills needed to ensure that meetings run efficiently, generate good decisions, and result in clear action.

\$99.00

XBZ 2110

Guiding Conflict Resolution

You will learn to recognize signs of conflict, assess the conflict to determine your level of involvement, and serve as a catalyst to encourage those involved to achieve resolution. You will also learn how to provide support and to act as a mediator.

\$99.00

XBZ 2111

Helping Others Adapt to Change

You will focus on the crucial role leaders have in effectively exploring change, introducing change, and helping others overcome resistance typically associated with change. You will learn how to conduct effective change discussions that

minimize the potentially negative effects of change on morale, processes, and productivity.

\$99.00

XBZ 2200

Coaching for Improvement

Builds the skills leaders need to help people with performance or work habit problems. Equips leaders to help people develop improvement plans, conduct effective improvement discussions, and handle the challenges they may encounter in improvement discussions.

\$114.00

XBZ 2201

Coaching for Success

Introduces skills for guiding individuals and teams toward achieving successful results. Leaders learn the importance of helping people learn from successes rather than mistakes, how to balance seeking and telling, and how to conduct an effective coaching discussion.

\$114.00

XBZ 2202

Delegating for Results

You will learn skills for successfully matching people, responsibility, and authority to maximize involvement, productivity, motivation, and growth for individuals, groups, and the organization.

\$109.00

XBZ 2203

Developing Others

Provides leaders, coaches, and mentors with the necessary skills and a practical process to develop talent. It focuses on a leader?s critical role before, during, and after the development plan.

\$114.00

XBZ 2204

Essentials of Leadership

This course teaches you how to get results through people. You will acquire a set of proven interaction skills, discover seven Leadership Imperatives key to meeting today's challenges, and realize your role as a catalyst leader who inspires others to act.

\$109.00

XBZ 2205

Leading Change

You will focus on the crucial role leaders have in effectively exploring change, introducing change, and helping others overcome resistance typically associated with change. You will learn how to conduct effective change discussions that minimize the potentially negative effects of change on morale, processes, and productivity.

\$109.00

XBZ 2206

Resolving Conflict

You will learn to recognize signs of conflict, assess the conflict to determine your level of involvement, and serve as a catalyst to encourage those involved to achieve resolution. You will also learn how to provide support and to act as a mediator.

\$109.00

XBZ 2207

Getting Started as a New Leader

Are you a new leader who has direct reports for the first time? In this course you will focus on developing a relationship with your boss, assigning work, dealing with direct reports who used to be peers, and key HR policies and processes. You will also be given a roadmap for success for your first few weeks on the job.

\$109.00

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

Mediation Practicum

The 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 area in which you wish to specialize (core, civil, domestic, juvenile dependency or parent/adolescent). 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 1046

Divorce: Its Impact on Children and the Role of Mediation

Divorce has a tremendous impact on children. In this specialized seminar you will learn about the consequences of divorce on children by examining their different developmental stages. You will also discuss the role parents play in helping children cope with divorce or conversely how parents can complicate and undermine the children's coping skills. You will learn about the role mediation plays in different ways parents and children deal with divorce.

\$49.00

XNL 1055

Parent/Adolescent Mediation Training

In this 16-hour course you will be trained in the skills of mediating parent/adolescent cases. Upon completion of this course, you will be qualified to make application through the State of Kansas Office of Judicial Administration to become an approved parent/adolescent mediator in the State of Kansas. Included in the course content is a short review of basic mediation principles, child and adolescent development theories, family psychology, parent/adolescent relationships and the mediation process itself. The course presentation will offer ample opportunity for role play and class discussion. Prerequisite: Principles of Core Mediation Training.

\$295.00

XNL 1066

Juvenile Dependence Mediation

Juvenile Dependency Mediation is the newest category of mediator approval. In this course, you will study the use of mediation in cases where children are removed from the home pursuant to child welfare statutes. You will learn how the juvenile dependency court functions, the players in that process (SRS, private contractors, district attorneys, CASA, GALs, the court) and how mediation can be used to find placement which is in the best interest of children. Prerequisite: Domestic and/or Parent/Adolescent Mediation Training.

\$385.00

XNL 1121

Introduction to Environmental Mediation

You will learn fundamental information about environmental law, science, technology and social inequalities; and the economics of environmental disputes. In addition you will explore each of these issues through case study role-plays, with follow up critiques and discussion. ADR practioners interested in expanding their horizons should enroll, however, if you are interested in learning about environmentally significant issues and community/environmental well-being, you may find this course worthwhile. This course has been approved for three hours of civil mediation continuing education. Prerequisite: Core Mediation Training.

\$45.00

XNL 1122

Introduction to Transformative Mediation

The primary focus of this 12 hour seminar is to explore the practices and premises of transformative mediation. Through presentation, the theoretical framework of

transformative mediation will be illustrated. Exercises and role plays will give participants an opportunity to experience how transformative mediation is practiced. Participants will explore how their assumptions about conflict influence their approach to mediation. Prerequisite: Core Mediation

\$200.00

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 1140

Principles of Restorative Justice

This introductory course will present the underlying values of Restorative Justice principles. Whether it is act, employment dispute, school quarrel or neighborhood disagreement, Restorative Justice may offer alternative framework for thinking about wrongdoing. At its core is a philosophy that can provide an alternative for mediators to use.

\$95.00

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 1151

Family Mediation-It's Not Just for Divorce

Mediation is a powerful tool for resolving conflict through the family life cycle. You will learn a blend of relations mediation skills and family systems theory tailored for family issues on the continuum of family experience: birth and adoption, parents and adolescents, blended families, aging parents and end-of-life. You will learn how to expand your mediation practice by working with families at various stages of life.

\$49.00

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 1171

Introduction to Transformative Mediation

You will learn the underlying premise that defines the approaches to transformative mediation. You will discuss specific methods, models and exercises that convey the nature of a transformative approach. Understanding these principles will be helpful to you regardless of your current style of mediation.

\$49.00

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 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

Lifetime Learning (XLN)

XLN 1002

Life in Arabia with a Saudi Princess

Author, Teresa McCown, shares her ten-year experience living with a Saudi Arabian royal family. She will discuss the insight gained from those ten years of life with a Saudi princess as her employer and friend. The events of their long journey are chronicled in two books she has authored. Shifting Sands: Life in Arabia with a Saudi Princess and Creating Shamsiyah: Staging the Saudi Feminist Movement. Books will be available for sale at the conclusion of the presentation.

\$6.00

XLN 1003

Boots and Stetons: The Kansas Cowboy

Meet the cowboys and cowgirls who helped create America's legendary folk hero and today make Kansas a leading producer of beef and champion rodeo performers. Authentic folk songs recall the cowboy's orgins in the great 19th century cattle drives. Note: There is no fee for this class but registration is required.

\$6.00

XLN 1005

VanGogh: Portrait of an Artist

Vincent VanGogh was a troubled man with a gift for expressing what he saw in paint. We will explore his short life and experiences, including time with fellow painter, Peter Gauguin, and the paintings which resulted.

\$7.00

XLN 1009

Who Are You? Stealing Your Identity

A Special Agent from the U.S. Secret Service will discuss the ins and outs of identity theft. A PowerPoint prensentation will focus on "Identity Theft" and ways you can protect yourself. A brochure will also be handed out for future references. Questions will be entertained at the end of the presentation.

\$6.00

XLN 1011

Life is Marbleous

My memories gathered during my travels along with a short history of marbles. Also, a chance to get to know your marbles if you haven't lost them. If you wish you can bring your marbles with you to find out if they have value.

\$6.00

XLN 1050

Dead Sea Scrolls

Events surrounding publication of the Dead Sea Scrolls since 1947 will be outlined. Wide spread dispersal of the Scrolls translation since 1990 will be the main focus.

\$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 1013

Write What You Know

Learn how to tap into your personal experiences and write manuscripts that people want to read. This class helps you draw from your personal, educational and work experience and write for publication. The class will also explore tools for writers and teach you how to draft a query letter and book proposal.

\$36.00

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 1044

Writers Group

This facilitated writers group provides a supportive atmosphere to develop and polish fiction, nonfiction, essays and poetry. Each class begins with a discussion of writing or publishing topics. Members read their work and receive suggestions for effective revision and publication. Students should bring 10 manuscript pages of their work-in-progress or 3-4 poems to the first class.

\$55.00

XKL 1047

Fictional Plot

Join professional writers, Lawrence and Suella Walsh, and learn the six elements necessary to develop the fictional plot. The group will participate in constructing a plot of their own. This class will illustrate the plot skeleton upon which 80% of fictional stories are built.

\$12.00

XKL 1048

Creating Fictional Characters

Join professional writers, Lawrence and Suella Walsh, and through a character chart and visual aids, watch a character come to life. The group will participate in developing the character. This class provides techniques for creating characters that will seem real to readers.

\$12.00

XKL 1063

Getting Started Writing Stories

What stories do you know? What stories would you like to tell? We'll work to mine your thoughts and experiences for stories, and to open up your receptivity to the stories surrounding you right now! You'll participate in in-class writing exercises and write the beginning of one story.

\$14.00

XKL 1066

Knowing Your Characters

How do you get your reader on your character's side--and in your character's head? How much do you reveal your character through dialogue, action, and description? Learn to create vivid, complex, and interesting characters so real they jump off the page and into your readers' hearts.

\$14.00

XKL 1067

Point of View

Omniscient? First person? Second or Third? Who is your narrator? Multiple points of view on the same event. This class will help you decide which point of view will work best for your story. From in-class exercises you'll learn how to write from various points of view.

\$14.00

XKL 1068

Plot and Time in Fiction Writing

How should you structure your plot? What needs to happen. ..and how and when? How do you time the action so your reader can't put the story down?

\$14.00

XKL 1069

A Sense of Place

How are your characters and plot influenced by where your story occurs? Should your setting become as active as your characters? How do you weave information about place into action and dialogue? You'll learn the importance of setting in fiction and how to create vivid, real settings for stories.

\$14.00

XKL 1078

Writing Great Dialogue

Writing great dialogue means developing an "ear" for the patterns of natural human speech and then learning to shape and craft that speech so that it sounds natural and reads like writing on the page. A fun class in which you get to eavesdrop!

\$14.00

XKL 1079

Sensory Writing

Words that reflect the senses of smell and taste, hearing, and sight can make your writing richer. Practice sensory writing by creating descriptions from a food-tasting session, a photographic exhibit, and a variety of audio recordings. Instructor is an award-winning writer, restaurant critic, and photographer.

\$25.00

XKL 1082

Finding Your Voice

We'll discuss why it is important to develop your unique voice and techniques to help you do this. Topics include the elements of style in writing: figurative language, sound, rhythm, sentence structure and language.

\$14.00

XKL 1083

Getting Started Writing Your Novel

We'll talk about how to get started on your novel as well as how to move ahead when it begins to get rough. You'll learn writing techniques to get your plot moving, planning techniques to develop a structure for the book, and ways of more deeply understanding your characters so you can begin to let them write your novel for you.

\$14.00

XKL 1084

Fiction Writing Workshop

Now is your opportunity to gain the real benefits from your study of fiction writing techniques by sharing your work with your peer writers. Bring copies of a recent fiction piece you've written. It can be a short story, chapter in a novel, or some form. (Call 913-469-3836 one week before class for number of copies needed.) We'll read these in class and provide responses with the intention of encouraging your development as a fiction writer.

\$14.00

XKL 1086

Enhancing Creativity Through Meditation

Enhance your innate creativity through meditation and creative visualization. The tools taught in this class will help you access the treasures of your creative mind. Perfect for writiers, artists or anyone who wants to expand their creative skills. Students should wear comfortable clothes and bring note taking supplies and a blanket and pillow for comfort.

\$14.00

XKL 1087

Writing "Experimental" Fiction

Working in new forms can open up new territory in your writing and creativity. We'll explore a range of new genres developing in the fiction writing world, including the "short short," the prose poem, post modern and experimental fiction by reading examples and practicing these forms in writing exercises.

\$14.00

XKL 1088

Article Leads and Structure

Have you been told your first paragraph must capture the reader's attention?

Were you warned that editors won't read further if you don't accomplish this goal? Join professional writers, Lawrence and Suella Walsh, and learn methods to hook readers from the first paragraph and hold their attention until the end of the article.

\$12.00

XKL 1089

Tight Writing

Ever wish you could use less words on paper to get your message across? Through interactive exercises, you will learn to cut unnecessary words from your writing. Instructor is a professional freelance writer.

\$25.00

XKL 1140

Writing Children's Literature

Join professional children's authors, Lawrence and Suella Walsh, and learn some fiction techniques used in writing for juvenile's (8-12) and young adults (10-15). Discover how to see the world through the eyes of a child and how to market your stories.

\$12.00

XKL 1408

Creating Fictional Characters

Join professional writers, Lawrence and Suella Walsh, and through a character chart and visual aids, watch a character come to life. The group will participate in developing the character. This class provides techniques for creating characters that will seem real to readers.

\$10.00

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.

\$82.00

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.

\$82.00

XKL 5002

Writeriffic: Creativity Training for Writers

Who doesn't know the fear of the blank page? How can we transform our visions into the written word? Is it really possible to become a terrific writer? You'll find the answer to these and more of your questions in Writeriffic. Writeriffic liberates the imaginative, inventive bolts of genius that are inside everyone.

\$82.00

XKL 5004

A to Z Grantwriting

A to Z Grantwriting is an invigorating and informative seminar specially created for

executive directors, organizers, board members, community volunteers, develop ment officers, and individuals who want to learn a "birds eye" view of the grantwriting process and learn how to: research and develop mutually beneficial relationships with potential funding sources, requests and donations, prepare complete proposal packages and dissolve crisis management and submit 100 proposals a year in 10 hours a week.

\$82.00

XKL 5005

Your Screenwriting Career

Learn how to write and sell professional-quality screenplays from a Hollywood veteran with experience in radio, video, television, film, and the Web. In this six-week online course, you'll learn about the relationship between classic story structure and Hollywood formulas, and you'll understand which genres will provide you with the greatest change of success.

\$82.00

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.

\$82.00

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.

\$82.00

XKL 5008

Writeriffic II: Advanced Creativity Training for Writers

Increase writing confidence, beat writer's block, manage time, negotiate writing fees, write and live your dreams. Learn advanced methods to create and write like the professionals - whether you're launching a career or seeking personal satisfaction through writing. In Writeriffic 2, you'll learn to be the writer you've always wanted to be and have fun too.

\$82.00

XKL 5009

Correcting Oral and Written Errors

You will address four principal areas of common errors: usage, punctuation, spelling, and pronounciation and slang. Once you complete this course, you'll instinctively speak and write with assurance that your word choices, punctuation, spelling and pronounciation are correct.

\$82.00

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. You'll understand what funding agencies are looking for and how best to approach them. Your proposals will help you and your organization successfully Get

Grants!

\$82.00

XKL 5011

Writing Great Technical Documents

Do you write technical documents? Would you like to learn how to write them better? You'll 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.

\$82.00

XKL 5012

Creating a Sense of Place

This practical course is filled with hands-on exercises that will help you create fascinating and truly unique works of fiction or nonfiction. By the time you finish this course, you'll be well-prepared to convert your everyday observations and experiences into believable characters, memorable settings and vivid descriptions.

\$82.00

XKL 5013

Demystifying Forensic Science: A Writer's Guide

This course will provide you with a quick education in forensic science, revealing all the secrets you'll need to know in order to write about crimes and crime-solving with knowledge and confidence.

\$82.00

XKL 5014

Advanced Grant Proposal Writing

Gain a full understanding of the criteria funders use to determine whether your grant proposal gets funded or rejected. Requirements include completion of an introductory grant writing course or equivalent experience.

\$82.00

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.

\$82.00

XKL 5017

Introduction to Journaling

Discover how journaling can help you learn more about yourself, explore your dreams, values, and beliefs, improve your health, survive unwanted change, succeed in your career and express your creativity.

\$82.00

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.

\$82.00

XKL 5019

Writing for Children

Discover how you can touch the hearts of children by creating books for them. In this highly interactive, hands-on course, you'll take pen to paper and begin work on your first fiction or nonfiction manuscript. 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.

\$82.00

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.

\$82.00

Management Development (XDM)

XDM 0501

Train the Trainer

This intensive seminar teaches you effective course design and presentation skills. You'll cover the principles of adult learning and how to develop educationally sound training sessions, effective presentation skills and creative training techniques. You will be videotaped and have a peer critique of your training presentation skills.

\$350.00

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.

\$159.00

XDM 0510

How To Manage Assertively

Assertiveness is the communication style proven to be most effective for getting results and improving work relationships. Learn techniques for communicating assertively at work and at home, when it's not appropriate to use assertiveness, and how to delegate work comfortably and effectively.

\$159.00

XDM 0521

Facilitating Meetings

Turn mediocre meetings into meetings that produce results! So that you can plan and conduct more effective meetings, you'll learn tools to enhance the meeting process, facilitation and communication skills, and strategies for dealing with difficult meeting participants.

\$159.00

Problem Solving

How can you keep problems from controlling your life? In this seminar, you'll learn how to determine the root causes of a problem, look at the factors necessary in implementing solutions and managing change, and study a process of flow charting that will help you resolve problem issues.

\$159.00

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 0540

Supervisory Skills Assessment Center

Offered exclusively by the Center for Business and Technology! Find out what you do well - and what you can improve - through this individualized "diagnosis" of your strengths and development needs in 9 skill areas. During the initial one-day assessment, you'll try your hand at an "in-basket" exercise to see how you handle everyday business challenges, and we'll videotape your interactions in four simulated business situations with a direct report, a peer, a customer and in a group meeting. Your actions and reactions will be evaluated and, three weeks later, you'll receive your "diagnosis". During that in-depth, half-day session, you'll talk to an assessor in a 30-minute private phone session to help you interpret your report and a trained Center for Business and Technology professional will work with you to create a personal development plan with action items that will help you meet any challenge.

\$1,650.00

XDM 0545

Project Management

In this 12-hour, hands-on course, you will learn the models, tools and techniques used in project management. You will start with tasks and requirements, and a systematic approach to project management, including initial planning, goal setting, plan development, delegation, implementation and follow-up. You will look at ways to get results through people, as well as techniques for problem solving, dealing with conflicts and facilitating effective project meetings. You're encouraged to bring a project of your own to the session so you can directly apply what you're learning.

\$299.00

XDM 0551

Roles and Skills for Supervisory Success

The responsibility of a supervisor is to obtain consistent performance from employees. In this program, participants will learn how to make the transition from employee to supervisor, how to define their jobs, and how to avoid the most common factors that can cause a supervisor to fail.

\$114.00

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.

\$109.00

XDM 0567

Helping New Employees Be Successful

This seminar is for managers and human resource professionals who want to help their new employees succeed. Long and short term career success can depend on how well a person does during their first year on the job. The "art of being a new employee" is something many people don't give much thought to. This session focuses on what employers and employees need to know about during the critical first year on the job. Avoiding new job mistakes and the basics of succeeding in the workplace is the focus of this seminar. What can your organizations' managers and human resource professionals do to help new employees be more successful and productive? Attend this seminar and go home with new and reinforced knowledge about how to make your investment in new employees pay off.

\$99.00

XDM 0588

Principles of Sales Management

Master the art of managing sales teams from a sales management professional. Learn the essential roles and responsibilities of a sales manager and develop leadership, motivational, and team-building skills. Learn proven techniques and strategies for communication, conflict resolution, and sales planning to deliver superior sales-team results.

\$109.00

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? If you communicate with others in writing, this course can help you identify and eliminate problem areas.

\$109.00

XDM 0592

Project Management @ e-Speed

With accelerated schedules driving many technology projects today, the smart project manager must rapidly retool their skill set. This course offers a breakthrough model for dealing with the realities of managing projects at supersonic speeds. Learn to meet and win the challenges of truncated timelines, short- staffed project teams, skimpy budgets, and crippling risks.

\$99.00

XDM 0595

Needs Assessment & Evaluation:

Design Them Together for Best Results Are you responsible for meeting the training needs of your staff? Do you need to prove it worked? This session addresses various techniques for determining training needs whether it's for one or many. We also explore numerous ways to develop an evaluation system that will prove the training made a difference and help you justify your training costs. Various author's models for assessment and evaluation will be discussed. Participants will leave with a draft of both a needs assessment and an evaluation tool.

\$189.00

Creative Training Techniques to Help Learning Happen

Want participants to remember your key learning points longer? Want folks to enjoy the training as well as learn? Well, that's what adding in more creative training techniques can do for you - you'll get more "ah ha" moments per session guaranteed. We'll work through openers, energizers, object lessons, games, exercises and closers that will keep the learning alive. And we'll have fun doing it quaranteed!

\$189.00

XDM 0597

Virtual Teams: The Next Generation

Do you lead teams where you interact primarily via email, videoconference or teleconference? Want tips for getting the work done faster and easier? The next generation of teams are teams that don't get together physically but work together across the country or globe on a project. This type of team takes a different kind of leadership approach than traditional teams. Come join us in a discussion of how we can get these teams off to a quick start, get the work accomplished and maximize the process of virtual teaming. We will focus on the interpersonal side of these teams rather than on the mechanics or systems that support them.

\$209.00

XDM 0598

Program Design for Trainers

Do you design your own training? Do you want it to be both educationally sound AND fun for the participants? ASTD estimates it takes 8 hours per 1 classroom hour of design time- do you want to do it faster? In this program, you will develop training that maximizes the learning of key knowledge and skills, shortcuts you can take to program design and ways to add in fun to increase learning retention. We will also discuss the pros and cons of designing training yourself versus customizing "off the shelf" training. You will leave with the structure for a training program designed!

\$189.00

XDM 0599

Project Management: Managing the Project Team

The purpose of this two-day session is to provide participants with an understanding of the need for effective use of interpersonal skills and using the resources of people to obtain the expected results of the project. This class covers many issues in regards to communication, defining expectations, holding project meetings and making the most of team differences.

\$349.00

XDM 0600

Administrative Assistant Fundamentals

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.

\$109.00

XDM 0603

Boss' Day Celebration

A description is not available for this course.

\$95.00

Phil Jackson - Coaching

A description is not available for this course.

\$85.00

XDM 0606

100 Ways to Engage Your Audience

Putting power and excitement into your presentation engages your audience so that your content comes alive and the audience takes home information they can use. You will learn how to infuse your presentation with techniques and activities that will engage every learner, by tapping into their many intelligences. You will learn how to map your presentation, plan for involvement, and experience the activities so you can use them immediately.

\$159.00

XDM 0607

Accelerated Learning

In this dynamic program, you will learn how to strengthen your own particular learning style and learn better in the future. Also, you will gain insight on how you can teach and train others more effectively using the accelerated learning principles in all areas of work and life.

\$189.00

XDM 0608

John Kotter Videoconference

A description is not available for this course.

\$69.00

XDM 0609

Project Management Follow Up Workshop

This four hour workshop is a follow up to the Project Management course and is designed to provide the participants with an opportunity to discuss how they have applied the skills learned. Additional discussion includes: what is working, what could be done differently, tips and techniques, as well as addressing specific issues related to the participant's project.

\$99.00

XDM 0610

Ethical Leadership: Advancing the Plan and Recovery

A practical, interactive seminar for executives that addresses the reciprocal relationship between ethical practices and community in the workplace, featuring Clifton L. Taulbert and Alexander B. Horniman.

\$100.00

XDM 0611

Assessment Showcase

A description is not available for this course.

XDM 0612

Team Follow Up

A description is not available for this course.

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.

\$109.00

XDM 0614

Customer Service Fundamentals

In this course you will learn a number of customer service techniques to keep the customer very satisfied. Topics include measurement of customer service, communication, especially with upset customers, being a good ambassador, teamwork, telephone etiquette, how much service is "enough," the different ways customer service can be performed and what can be done to hang on to a cusomer who's about to take their business somewhere else.

\$109.00

XDM 0615

A Workplace of Differences:

Building Cross-Cultural Competence If you see yourself as a workplace leader now or in the future--whether you take a leadership role as the new member of a work team, as the head of an organization or somewhere in between, this workshop will help you open up your worldview of various cultures and integrate new success skills into your daily interactions.

\$159.00

XDM 0616

Winning the Battle Against Negativity

Can you think of a person you've worked with who's had a habit of making pessimistic remarks - no matter what the subject? Someone who seemed to enjoy dragging others down to their level of sour attitude? Or what about the co-worker who has had a temporary lapse into disagreeable thoughts and contention? This seminar is about people who are short-term or long-term cynics and naysayers, and how you can help them see the bright side of things.

\$159.00

XDM 0617

Cost-Effective Trade Show Selling

This fun and highly interactive session is ideal for any exhibitor that wants to increase his or her return on investment (ROI) at trade shows and conferences. This workshop focuses on "real-life" selling situations, including how to increase booth traffic, how to generate qualified leads and how to get a commitment. We'll also talk about how to enhance your chances of winning business with appropriate post-conference follow-up.

\$159.00

XDM 0618

The Consultative Sell -- Achieve Continuous Sales Success

What can you do to turn prospects into clients, and then keep them? Consultative selling is the answer. This upbeat and practical course focuses on the mind-set of consultative selling. It starts with thinking about your client before, during and after the sale, and ends with keeping your clients for life!

\$159.00

XDM 0619

Team Showcase

A description is not available for this course.

XDM 0620

The Power of Values, Vision and Mission

This session is designed to explore the power of values, vision, and mission in shaping and providing clear direction. This workshop will enable participants to clarify their values, write a vision statement and a mission statement, and understand the importance of all three in the business environment.

\$169.00

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. We'll cover all the bases, from writing checks to preparing an income statement and closing out accounts at the end of each fiscal period.

\$109.00

XDM 0622

Fundamentals of Supervision and Management

Learn how to be an effective manager or supervisor. Master the basics of business and organizations, learn the people skills required to motivate and delegate, and learn tools for solving problems and resolving conflicts.

\$109.00

XDM 0623

Fundamentals of Supervision and Management II

Learn how to be an effective manager or supervisor. Master the basics of communicating effectively, and learn tools for developing your own interpersonal skills. Completion of Fundamentals of Supervision and Management (or equivalent experience) required.

\$109.00

XDM 0624

Thank Goodness It's Monday - Putting FUN to Work

This session is fast-paced, interactive and energizing. It will build team spirit, inspire people and create a greater sense of pride in the organization. You will learn and create strategies to make your work environment better.

\$114.00

XDM 0625

Building an Ethical Business

Master the knowledge and skills needed to build an ethical business and give your company tremendous competitive advantages. Learn how to solve everyday ethical dilemmas in hiring, firing, working conditions, job discrimination and sexual harassment, and explore the social responsibility of companies and their employees for product safety, truthful advertising, and the natural environment. Discover how ethical behavior creates goodwill, enhances reputations, and expands opportunities for new and increased business.

\$145.00

XDM 0626

Process Management: How to be a Leader of

Every activity that requires your time can be identified, documented, measured and, ultimately, improved. You will learn the steps of process management, your roles and responsibilities, value- added and non-value-added analysis, and the importance of cycle-time.

\$169.00

XDM 0627

Project Management Essentials

This course uses lecture, discussion and case studies to provide an overview of project management concepts and principles. Topics include the Project Management Framework, Iterative Process Model, types of organization structures, and assessing project quality and risk.

\$899.00

XDM 0628

Estimating and Managing Project Costs

The successful management of project cost is essential for organizations. Students will practice developing estimates, creating estimate forms, and analyzing cost reports. Prerequisite: Project Management Essentials or equivalent knowledge and Effective Project Scheduling and Control.

\$299.00

XDM 0629

Project Risk Management

In this course students will gain an understanding of risk management, the role and elements of a risk management plan (RMP), and how to apply these methods to software risk management. Prerequisite: Project Management Essentials or equivalent knowledge.

\$299.00

XDM 0630

Effective Project Scheduling and Control

Project managers are charged with developing and managing project schedules. On-time delivery is often critical to project success. This course ensures students have a foundation of critical path method (CPM) scheduling concepts, and the ability to build a workable project plan. Prerequisite: Project Management Essentials or equivalent knowledge.

\$599.00

XDM 0631

Effective Communication for Project Managers

Managing project communications is one of the most important duties of a project manager. This course emphasizes the importance of communication skills in building strong partnerships between technical professionals, project managers and their customers. Prerequisite: Project Management Essentials or equivalent knowledge.

\$599.00

XDM 0632

Project Leadership, Team Motivation and Contract Management

Good leadership and team motivation is critical for the success of any project. In this course, students are introduced to the elements and methods of leadership in a technical environment as well as the tools and techniques for team development. Prerequisite: Project Management Essentials or equivalent knowledge.

\$599.00

XDM 0633

Project Quality Management

Project Quality Management focuses on overseeing product quality and ensuring process quality when creating project deliverables. In this course students master the quality planning process, quality planning tools and metrics, and quality assurance. Prerequisite: Project Management Essentials or equivalent knowledge.

\$299.00

XDM 0634

Real World Project Management Application

This course is designed, but not limited to, as a capstone for the Certificate of Project Management. In this workshop, students gain experience by putting their knowledge into practice by simulating managing a real-world IT project. Prerequisite: Project Management Essentials or equivalent knowledge; Effective Project Scheduling and Control; Estimating and Managing Project Costs; Project Risk Management; and Project Quality Management.

\$899.00

XDM 0635

Principles of Professional Selling - Level 2

This highly interactive course guides you through the entire sales process and incorporates the most modern sales methods today - consultative/solutions selling! You'll return to work better equipped to develop presentations that meet your clients' real needs. Create a specific sales plan to achieve your sales goals, influence the right buyers, anticipate any objections and close the sale with ease.

\$1,695.00

XDM 0636

Negotiate to Win

This hands-on seminar gives you a step-by-step guide to effective negotiation from establishing a formal planning process to prioritizing issues. From mastering persuasion techniques to identifying the communication styles of effective negotiators. From breaking deadlocks to negotiating as part of a team. All managers, salespeople and top-level dealmakers responsible for negotiating the best possible terms of an agreement for their company should attend this seminar.

\$1,595.00

XDM 0637

Fundamental Selling Techniques

Like most people, you'll come to this seminar with very little knowledge of selling, except perhaps what you've experienced as a customer. After just two days of hands-on practice, you'll gain the skills, confidence and professionalism to sell your product or service successfully. This seminar is a roadmap that takes you step by step through the entire sales process. It covers every critical phase of selling and gives you the enhanced listening and prospecting skills you need to succeed as a professional salesperson today.

\$1,495.00

XDM 0638

Enhancing Your Presentation Skills: A Seminar for Sales

Professionals Turn demanding buyers into lifelong customers. Learn all the "insider" tricks of the trade necessary to make a powerful and persuasive presentation - one that considers your client's needs, communicates in his or her language, involves the prospect and communicates solutions. Your in-class presentation will be videotaped for playback and review. The videotape is yours to keep.

\$1,595.00

XDM 0639

Fundamentals of Sales Management

Gain a foundation of critical-to-success management skills. Learn proven communication techniques and interviewing tools that ensure the most appropriate salesperson is hired. Also learn to establish an effective training program and learn a six-step coaching process that helps you maximize each sales team member's potential.

\$1,695.00

XDM 0640

Advanced Sales Management: Level 2

This advanced program shows you how to keep pace with all the issues that are revolutionizing sales force management. It's the seminar to choose if you want to become a more effective manager - and advance further, faster, in your career. You'll discover the "can't fail" techniques that have already benefited thousands of your colleagues. You will learn how to achieve peak performance in every area indispensable to sales management success.

\$1,795.00

XDM 0641

Coaching: A Strategic Tool for Effective Leadership

This seminar gives you a variety of coaching tools, techniques and best practices - from analyzing the cause of subpar performance to creating a climate for effective coaching and learning, from giving corrective feedback to handling difficult responses to coaching. You'll leave this seminar more aware of your personal habits, styles and preferences in coaching situations through assessment, role-playing and exercises.

\$1,695.00

XDM 0642

Time Management: Take Control of Your Time

If you're doing more and enjoying it less, it's time to get out of the time trap and back to productive management. This seminar gives you practical techniques for controlling time and making it a manageable resource. Also included are tips on coping with voice mail and e-mail. Business professionals who want greater control of their time, management style and life should enroll today.

\$1,395.00

XDM 0643

Accounting Fundamentals II

While it is true that accounting professionals are scarce, those with corporate accounting experience are even more rare. This course will build on the knowledge you gained in our Accounting Fundamentals 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.

\$109.00

XDM 0644

Managing Multiple Priorities - Personal Effectiveness Training

You're constantly faced with too many deadlines and too many projects, all of which have top priority. Then, just when you think things are going smoothly, a crisis erupts, priorities change and the scramble is on. You have to return calls, manage email, attend meetings, prepare reports, plus handle all the other interruptions that are part of your day. If any of this sounds familiar, then this workshop is designed for you the busy professional who juggles deadlines, projects and multiple demands, the person with no time to waste! Take this session and become more personally and professionally productive than ever before.

\$114.00

XDM 0645

Successful Assertiveness

A description is not available for this course.

\$114.00

XDM 0646

Business is a Contact Sport

Think about it. We all know someone who can walk into a room full of strangers and work it. Why is it that some people seem to connect with ease and others don't? The truth is that you don't need to be a naturally gregarious person to immediately connect in business. Join us for this fast-paced session and learn the three key steps for creating an instant connection with your business colleagues. Topics covered include how to quickly establish trust and power, meeting and greeting with ease, getting in sync and get them talking and keep them talking.

\$114.00

XDM 0647

Get the Whole Picture: Asking Probing Questions in a Behavorial-Based Interview

Participants in this class will learn to become more verbally disciplined during interviews and apply behavior-based probes to an informational style interview. You will lear to create probes "on the fly" while avoiding common 'distracters'

\$114.00

XDM 0648

Make the Most of Generational Differences

Overcome the generational obstacles and find out the advantages that different generations offer in the workplace. Progressive organizations have found out that the blend of generations is an asset when each generations' strengths are leveraged for maximum advantage. This dynamic and highly-interactive seminar will provide attendees with specific information on how to improve the workplace and productivity.

\$114.00

XDM 0651

Management vs. Leadership

This course will look at management vs. leadership and the components of each. A model will be utilized which gives managers/leaders a tool which will help them identify specific actions they can take in developing direct reports. The Parker Team Player Survey and the Life Styles Inventory assessments are also used.

Administrative Assistant Applications

Gain the skills and knowledge you will 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.

\$109.00

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? You will understand the significance of strategic planning and discover how external and internal environmental factors affect an organization. You will learn about various organizational structures and determine how to use leadership, motivation, and control for maximum impact. You will master the fundamentals of accounting and increase your knowledge about key financial terms, cash flow management, financial statements, and cost control. You will also discover various financial investment models and learn the basics of financial planning and budgeting methods.

\$109.00

XDM 0654

Mastery 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.

\$109.00

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!

\$109.00

XDM 0656

Business and Marketing Writing

This fun 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! Designed for business writers, marketers and anyone interested in these exciting fields.

\$109.00

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 have always dreamed of becoming successful in sales, this course is exactly what you need. You will learn how to turn prospects into buyers, how to provide proper customer service, how to develop a sales plan, and more!

\$109.00

XDM 0658

Effective Selling

Discover how you can easily convert a potential customer into a long term asset. This course 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.

\$109.00

XDM 0659

Hire Smart

The ultimate success of your business depends almost entirely on your ability to find the right people to accomplish your business objectives. This course will provide you with useful techniques that you can put to immediate use to hire the best people for your organization. Under the guidance of a patient and experienced expert in human resources, you will gain practical, hands-on knowledge of a powerful methodology for recruitment and retention.

\$109.00

XDM 0660

Accounting Career Certificate Program

As the number of business establishments increases, more accounting professionals are needed to set up their books, prepare their taxes, and provide management advice. To ensure you gain the breadth of knowledge you'll need to succeed, this program covers accounting in depth as well as related business and industry subjects such as management and basic computer operations and applications. 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.

\$999.00

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. (64 hours)

\$704.00

XNM 5001

Anatomy and Physiology Exam

A description is not available for this course.

\$100.00

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 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)

\$572.00

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.

\$77.00

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.

\$33.00

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

\$792.00

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.

\$572.00

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)

\$325.00

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)

\$726.00

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.

\$132.00

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)

\$374.00

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

Bodywork II Clinic

A description is not available for this course.

\$275.00

XNM 5092

Bodywork III Clinic

A description is not available for this course.

\$275.00

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. RN, PTs, and licensed massage therapists will earn 6 contact hours of continuing education.

\$90.00

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 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 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 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 6060

Watsu

A description is not available for this course.

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 for Women

This two session class is being offered for investors who are already acquainted with the basics. The course will discuss how to evaluate a stock, mutual fund and bonds, diversify your portfolio to help minimize risk, understand what drives stock market prices and much more! Bring a calculator to class.

\$21.00

XPM 1007

How to Choose a Financial Planner

Will your financial consultant be a true advisor or salesperson in disguise? Are they offering unbiased advice for your benefit and not their own? Learn the facts about the financial planning industry and how to find qualified financial counsel.

\$15.00

XPM 1020

Common Stock Analysis, Part 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 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.

\$20.00

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 will be discussed, including how to use options with stocks to reduce risk and enhance returns.

\$35.00

XPM 1047

Long Term Care Insurance: How to Protect Your Wealth and Dignity

The single greatest threat to your retirement security is the potential burden of long term care costs. This course teaches the basics of long term care insurance

and how to protect your assets and independence.

\$15.00

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 and IRA accounts but have an uneasy feeling exactly what are they? 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 their IRA accounts.

\$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

A Woman's Guide to Financial Freedom

A two-hour class and take-home workbook designed to enable women to set financial goals, know their investments and protect their assets.

\$21.00

XPM 1145

Financial Strategies for Successful Retirement

In four exciting sessions, this course introduces key concepts and practices of wise money management for retirement. Participants will learn what they need to know to secure a successful retirement for themselves and their spouse. The fee

is \$70 for couples and \$50 for singles. Note: Only one person needs to register for couple's class.

\$70.00

XPM 1146

Singles Successful Retirement Concepts

In four exciting sessions, this course introduces key concepts and practices of wise money management for retirement. Participants will learn what they need to know in order to secure a successful retirement for themselves. The fee includes a \$30 workbook.

\$50.00

XPM 1185

Common 401K Mistakes

Don't make costly mistakes in your 401(k) plan that can result in losing thousands of dollars! Failure to invest properly in your 401(k) plan can delay your retirement for years. You will learn various aspects of a 401(k) plan that many people are not familiar with. 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.

\$82.00

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.

\$82.00

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.

\$82.00

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. This course will supply you with the skills you need to succeed.

\$82.00

XPM 5008

Debt Elimination Techniques that Work

This course will teach you a specific and workable strategy that will get you out of

all debt including your mortgage in the shortest possible time. You will be pointed down a new path concerning spending, saving and handling money that will keep you out of debt forever.

\$82.00

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. This class is a great way to find out how to start your own business or enhance the one you already have.

\$82.00

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.

\$82.00

Music, Gemology (XKA)

XKA 1018

Wind Ensemble

Join the college wind ensemble and explore music specifically written for wind ensembles (concert bands.) The music will include overtures, marches, polkas, circus band music, traditional concert music and music written by contemporary composers. Emphasis will be on performing music written specifically for this type of instrumentation. Call Ron Stinson for audition information 913-469-8500 ext. 3275.

\$25.00

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 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 January 16, 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 January 23, from 7:30-9:30 p.m. Inquire about the select ensemble which rehearses from 6:30-7:30 p.m.

\$75.00

XKA 1100

Voice Clinic I

You will learn basic vocal technique, covering areas such as posture, breath control, vocal projection and vocal health. Students will learn how to properly vocalize and apply those techniques to songs. Individual instruction and group instruction within the class setting. The textbook, Steps to Singing for Voice Class (3rd edition), can be purchased at the JCCC bookstore.

\$49.00

XKA 1105

Voice Clinic II

Continued vocal training from Voice Clinic I. More opportunity for individual instruction and performance practice. Clinic I is REQUIRED prior to Clinic II without instructor's permission. The textbook, Steps to Singing for Voice Class (3rd edition), can be purchased at the JCCC bookstore.

\$59.00

XKA 1110

Basic Guitar I

This course will emphasize strumming patterns and basic chords used in popular music. It will also serve as an introduction to reading music, fingerpicking and music theory. No musical background is necessary. Only acoustic (nonelectric) guitars may be used in this class.

\$85.00

XKA 1131

Jazz Camp

Heat up your summer with three days and nights of great jazz. Study side-by-side with professional jazz musicians and learn the art of improvisation and listening. JCCC's music department has recruited two of the area's best jazz educators. Camp sessions are designed for both vocal and instrumental musicians. The sessions conclude with an informal concert. Camp will be conducted on the JCCC campus. Note: Early Bird Fee before May 1 - \$25.

\$25.00

XKA 1132

Jazz Camp

Heat up your summer with three days and nights of great jazz. Study side-by-side with professional jazz musicians and learn the art of improvisation and listening. JCCC's music department has recruited two of the area's best jazz educators. Camp sessions are designed for both vocal and instrumental musicians. The sessions conclude with an informal concert. Camp will be conducted on the JCCC campus. Note: Fee after May 1 - \$45.

\$45.00

XKA 5000

Enjoying European Art Online

The art and architecture of Europe offers an overwhelming array of choices that is sure to exhaust even the most dedicated art lover. If you are planning a trip to

Europe, or just want a better understanding of European art, this course will introduce you to the most important works of European art on a personal and familiar level. You'll learn where to find the works, how to get the most out of the viewing experience, and you'll receive a wealth of commentary and interesting historical information based on the instructor's deep love of art and culture and extensive travel experiences.

\$79.00

XKA 5001

Music Made Easy

If you enjoy music and would like to know more about what makes it work, this is the course for you. You'll gain a complete understanding of rhythm, melody and harmony, and you'll be able to recognize pitches on the musical staff and on the keyboard.

\$82.00

Personal Development (XKD)

XKD 1062

Bulletproof Self-esteem

Michael Jordan and Oprah generate bulletproof confidence from primitive feeling brain centers that are not influenced by our 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. You'll understand the reasons for repression of instinctive confidence and will learn techniques to uncover and feel comfortable with instinctive confidence.

\$14.00

XKD 1066

Connections

This weekly social skills course is designed for 18-25 year old students with mild-moderate needs. The weekly instructional session emphasizes 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, students attend a group-planned social activity in the community called "Community Connections," twice a month. Selected college students will function as peer models to help facilitate the course. For "Connections" application form, call 913-469-3837. The course is limited to 28 students with special needs.

\$175.00

XKD 1067

Organizing Residential

We interact with clutter daily. How we interact with clutter is the key to an efficient productive life. This class will help you identify the roadblocks to getting organized and how you can combat them. You'll discover the 1-2-3 approach to organizing and how to apply it to any room in your home.

\$12.00

XKD 1074

Understanding Self-Esteem

What is self-esteem? Where do we look for it. How can we increase it? These three questions will form the basis for this two-hour session. Our self-esteem directly affects the extent to which we are satisfied with our relationships - both with others and with ourselves. Take time out to reintroduce yourself to your best

\$12.00

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 get the attention of those you wish to meet. The material is presented by Don Davidson, 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 1084

Unleash Your Potential and Get Motivated

Most of us have ideas of things we want to do that never get accomplished. We believe if we could just get motivated we could accomplish all that we desire. This workshop will provide a practical model for becoming self-motivated. The model will give you tools to move forward from good ideas to seeing concrete results in your life. Learn why logic and guilty feelings are not enough to motivate you to action. You will have the opportunity to identify barriers to achieving your heart's desire, and will learn strategies to move through these barriers toward success.

\$12.00

XKD 1085

What You See Is What You Get

This course looks at what we pay attention to during our day, and how what we notice affects our self-esteem and our sense of happiness. Through lecture and personal exploration exercises, participants will gain an understanding of how their thoughts and feelings impact them. We will explore how a "good day" is created and how "bad" days happen. Participants will also learn what they can begin doing immediately to achieve a greater sense of contentment and control in their lives.

\$12.00

XKD 1087

Successful Paper Management

Papers flood our home daily and originate from many sources. Learn how to manage your personal papers effectively by identifying roadblocks to organizing paperwork and discover how simple setting up a user-friendly paper management and filing system can be. Bring to class some recent (or that day's) mail to get a "hands-on" experience.

\$12.00

XKD 1089

Asserting Yourself

Are you ever hesitant to speak up for what you want or need? This class stresses

self-management by learning to use assertiveness skills as a way to promote personal growth and fulfillment. Therapist Donna Bacic will help you develop a "personal assertiveness" tool kit through lecture, role play, exercises and sharing.

\$15.00

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 1138

Master of Your Own Reality? Take Action to Consciously Create Your Life!

Many of us believe we have no control over our lives; that we are even victims of life. Discover how thoughts, words and emotions trap us in a box of limitations. Take back your power. Learn how to master the steps of consciously creating the life you always wanted to live. Materials fee, \$3.00, will be paid directly to instructor.

\$12.00

XKD 1141

Changing Your Past: Open Doors to a Reality with Limitless Potential!

Have you ever wanted to change your past, knowing that if you did, your future would be significantly different? The movie, What the Bleep Do We Know?, states that it is possible to change the past. Many indigenous peoples have known how to do this for millennia. Learn how to use an ancient technique called Erase Personal History. Open doors to a future you've only dreamt about.

\$19.00

XKD 1142

Love Busters

Based on the book from the same title (authored by Willared Harvey), this class will take a look at the "love busters" that can destroy a marriage and how to overcome the destruction they can cause individuals and a couple. The "love busters" are: Selfish demands, disrespectful judgments, angry outburst, dishonesty, annoying habits, and independent behavior. A great class for people who want to make their relationships better whether they are married or in a relationship considering marriage, people wanting to learn how to avoid "love busters" before they hit their relationship, and/or those dealing with rebuilding a relationship after "love busters" have already hit their lives.

\$12.00

XKD 1143

Top 10 Ways to Keep Your Marriage Going in the Right Direction

Do you ever feel like your marriage/relationship is stagnant? The things that made it feel so "right" in the beginning might now be buried in daily living, annoying habits, busy schedules, and personal changes. 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; only requirement is that participants are looking to renew their relationship energy in a fun, unintimidating setting. Come alone or as a couple.

\$12.00

XKD 1144

Stressed-Working Too Hard-Can't Let Things Go

Learn a simple revolutionary new approach to stop over-active brain systems from relentlessly demanding that you succeed, resolve problems, or save the world. When you halt these relentless, destructive, self-driving systems, your normal, healthy motivation systems will ignite an enthusiasm that will sweep you to success.

\$12.00

XKD 1146

Effective Decision Making for a Happier Life

Happiness and success do not simply "happen". They are the result of making sound decisions. We will apply The Effective Decision Making Model to our own dilemmas and difficult decisions.

\$15.00

XKD 1156

Being Smart About People

Are you as smart about people as you want to be? Are there people situations that you would like to understand and handle better? Emotional intelligence enables you to have a positive effect on the people and situations around you. This course will present the emotional intelligence model and the key competencies that every person needs to thrive in a changing world, maintain smooth working relationships, and be a good parent, spouse and family member. Participants will learn how they score on emotional intelligence through an in-class survey.

\$15.00

XKD 1179

Get Your Child Organized

Come and learn how to get your child and their room organized. Learn what toys and books to keep and which ones to toss! Learn an easy chart system to keep them organized.

\$15.00

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.

\$82.00

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.

\$82.00

XKD 5003

Get Funny

Learn how to use humor to speak more effectively, write better and increase your popularity. Use your newfound sense of humor to entertain your friends, meet interesting people and even make new friends!

\$82.00

XKD 5004

Get Assertive!

Are you tired of being intimidated and treated badly by others? Discover how you lose power when you talk and how to gain it back. Find out the secrets to defusing anger and avoiding criticism. Gain the skills to be assertive with family members, friends, bosses, co-workers, professionals and clerks. It's your turn to speak out!

\$82.00

Photography (XKP)

XKP 1000

Introduction to Camera

Basic camera handling and operation are explained in this non-darkroom course. Camera accessories, film choice and picture composition will also be discussed. There will be photo assignments. Bring your fully adjustable 35mm single lens reflex camera to class.

\$65.00

XKP 1002

Introduction to Camera II

This class is a continuation of Introduction to Camera. The student will explore more in-depth topics that are of concern to them. There will be assignments and critiques. This will still remain a non-darkroom course. An optional field trip will be offered though attendance will not be manditory. Prerequisite: Introduction to Camera or by permission of the instructor.

\$65.00

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 1022

Introduction to Photo Impressionism

Explore creating images that delve into the realm of impressionism. Learn techniques for turning the ordinary into the extraordinary-creating swirls, zooms, multiple exposures and montages! Participants need a 35 mm SLR or DSLR and must be confident using it in "manual". For intermediate and advanced photographers. Class meets every other week.

\$55.00

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 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.

\$82.00

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.

\$82.00

XKP 5002

Photoshop Elements for the Digital Photographer

Bring out the best in your images! Adobe's Photoshop Elements provides the tools for quick fixes and detailed enhancement of any digital photograph. Discover the basics of this award-winning package specifically designed for photo enthusiasts. Designed for those with no image-editing experience, this class will take you from novice to accomplished user.

\$82.00

XKP 5004

Photoshop 7 for the Absolute Beginner

This course will teach you how to use Photoshop with detailed, step-by-step instructions even if you've never used a computer for graphics before! You'll learn how to create simple digital paintings, edit your own photographs to remove red-eye, dust, scratches and correct image exposure.

\$82.00

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.

\$82.00

XKP 5008

Digital Photography Output!

Get more from your digital camera by learning how to edit and crop out unwanted portions of your photos, resize them, adjust their colors, add special effects, print at the highest possible quality, e-mail digital photos to friends and family and use them to create cards or electronic photo albums.

\$82.00

XKP 5009

Photoshop Elements 3.0 for the Digital Photographer

Bring out the best in your images! Adobe's Photoshop Elements provides the tools for quick fixes and detailed enhancement of any digital photograph. Discover the basics of this award-winning package specifically designed for photo enthusiasts. Designed for those with no image-editing experience, this class will take you from novice to accomplished user.

\$82.00

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.

\$82.00

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.

\$82.00

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 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 and Electrical Repairs

Handson sessions for wire stripping, repairs, installing replacement switches and receptacles. In-depth discussions for lighting upgrades in kitchens, bathrooms andoutdoor security lights. Learn the basics for p

\$40.00

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.

\$27.00

Professional Education (XNX)

XNX 0555

Perspective and Marker Workshop

A description is not available for this course.

\$125.00

XNX 5005

Fundamentals of Mortgage Lending

This course provides you with the basic terminology and regulations of mortgage lending and also provides information on the secondary market. You will discuss basic terminology regarding interest rate fees, job functions and how credit decisions are made. You will identify mortgage lending regulations and how they apply to the lending process.

\$99.00

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.

\$800.00

XNX 9040

Fundamentals of Consumer Lending

This course provides you with basic knowledge about consumer credit. You will learn terminology, basic categories, credit worthiness and the application process. You will review the origin of regulations protecting consumer credit transactions and specific regulations that apply to consumer credit.

\$99.00

XNX 9043

Cross-Selling Banking Products

This course provides you with the skills for cross-selling bank deposit products. You will focus on the importance of cross-selling and the steps in the process, interpreting clues to customer needs, cross-selling solutions to match needs, responding to objections and closing the sale.

\$99.00

XNX 9058

Banking Today

This course gives you an orientation to the essential principles, concepts, and operations of banking and helps you understand how they function as a business and the important role they play in the economy. You do not need to have prior experience with banks or banking terminology. This course is geared towards entry-level personnel and specialists in bank marketing and HR.

\$99.00

XNX 9060

Command Spanish for Bankers

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 customers, cash checks, assist with deposits and withdrawals, change currency, verify identification, and obtain basic information. No prior knowledge of Spanish is necessary. You will receive a reference manual and accompanying CD.

\$129.00

Public Events (XKE)

XKE 1012

Natural History of Kansas

Increasingly, people want an understanding of the place where they live and the ability to achieve a sense of 'rootedness.' In this course you'll examine the physical and biological processes which 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 plants and animals of Kansas. The class will consider how the physical and biological environment relate to the role Kansas played in historical events and to present day land and resource use. 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

Railroad Training (XBR)

XBR 7000

Signal Systems Training Program - Fast Track

A description is not available for this course.

\$6,000.00

Real Estate and Appraisal (XNR)

XNR 1000

Principles of Real Estate: Pre-license Instruction and Exam Review

This 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 Promissor.

\$229.00

XNR 1010

Salesperson's Postlicense Course - 30 CEUs

If you are a newly licensed Kansas salesperson this course counts as the 30 required hours toward recertification and meets one portion of the Kansas Real Estate Commission's requirements for license renewal. Note: You can not receive credit if you complete this course before the issue date on your license.

\$199.00

XNR 1070

Basics for New Agents: Warranty, Inspection and Appraisal - 3 CEUs

If you are a newly licensed agent this course will benefit you greatly. You will review home warranties and what they cover, discuss the different facets involved in a home inspection, and obtain an overview on appraisals and their purpose.

\$49.00

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 from 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 3000

Real Estate Finance, Value, and Investment Performance

All appraisers should be knowledgeable about financial markets, financial mathematics and how financial markets impact real estate values. In this hands-on seminar, you will learn the relationship between debt and investment risk and value. You will understand how financial markets impact value and influence buyer behavior and investment decisions. You will leave this seminar knowing a new terminology that is important for all real estate appraisers.

\$150.00

XNR 3001

Supporting Capitalization Rates

The theme of this seminar is that a well-supported capitalization rate is logically impacted by market activity, tested for reasonableness, and demonstrates consideration by the appraiser of the relevant factors that affect the property. Working with realistic case studies, you will develop well-supported, market-extracted capitalization rates that reflect specific economic and property observer activity also how the appraiser of bound on the support of the relevant factors are accounted on the support of the relevant factors that affect the property. characteristics. You will also learn how the appraiser should apply skills and market knowledge to check the rate for reasonableness.

\$150.00

XNR 3010

Basic Appraisal Principles

If you are considering a career in professional valuation services, this is your first course. This course will introduce you to real property concepts and characteristics, legal considerations, influences on real estate values, types of value, economic principles, real estate markets and analysis, highest and best use, and ethical considerations. The course will provide a solid foundation in basic appraisal principles no matter what appraisal specialty you pursue. By successfully completing the course and exam, you will have met most states' education requirements in the content area identified as basis appraisal principles.

\$450.00

XNR 3011

Appraisal 757 - The Road Less Traveled: Special Purpose Properties

This case study seminar will teach you how to address more effectively the special purposé properties in uniqué valuation assignments. Increase your confidence and business opportunities. CE - 7 hours for General Appraisers.

\$150.00

XNR 3012

Appraisal 740 - Appraising the Tough Ones: Case Studies in Complex Residential Valuation

The seminar provides numerous unique examples and a case study to help you successfully solve complex residential valuation problems. CE -7hrs.

\$150.00

XNR 3020

Basic Appraisal Procedures

In this course you will apply the principles and concepts you learned in "Basic Appraisal Principles." You will go through the valuation process including defining the problem, collecting and analyzing data, reaching a final opinion of value, and communicating the appraisal. You will learn about the three approaches to reaching an opinion of value - income capitalization, cost and sales comparison -and apply them in case studies. Through case studies you will discover the steps and concepts involved in the cost approach. The course will guide you through the sales comparison approach including researching the market, verifying information, selecting units of comparison, conducting a comparative analysis, making adjustments, and reconciliation. By successfully completing the course and exam you will have met most states' education requirements for content identified as basic appraisal procedures.

\$450.00

XNR 3030

Course 210 - Residential Case Study

In addition to reviewing residential appraisal techniques, this course uses a case study to demonstrate the skills needed by modern residential appraisers. The material takes the class through a residential appraisal from the time the assignment is received to the point that a value conclusion is reached and the appraiser is ready to complete the appraisal report. The case study provided is

supplemented by drill problems that focus on individual valuation procedures. Market extraction of data is emphasized in this course. In addition, participants are required to consider the impact of the Uniform Standards of Professional Appraisal Practice and the Code of Professional Ethics of the Appraisal Institute. This practical course is designed to help participants apply the principles and procedures learned in earlier courses. Prerequisites: Appraisal Principles and Appraisal Procedures or Real Estate Appraisal Principles and Basic Valuation Procedures or An Introduction to Appraising Real Property or an equivalent background is strongly recommended. Required Textbooks Appraising Residential Properties, second edition; ictionary of Real Estate Appraisal, third edition.

\$450.00

XNR 3040

Basic Income Capitalization

Pre-requisite: Courses 110 and 120. You will develop an understanding of the mathematical procedures used to analyze data and derive value opinions for income-producing properties. You will review the theory and applicability of the income capitalization approach along with the reasoning and concepts behind yield capitalization formulas.

\$650.00

XNR 3045

Advanced Income Capitalization - 510

You will investigate and explore advanced applications of the income capitalization approach. Discounted cash flow (DCF) analysis provides the framework for much of the discussion of investment analysis concepts, emphasizing an understanding of the relationships among the various components of DCF. Financial leverage, risk analysis, and ways to support a discount rate will be highlighted.

\$650.00

XNR 3050

Course 320

A description is not available for this course.

\$475.00

XNR 3051

Business Practices and Ethics - 420

This is the second course in the Appraisal Institute's Standards of Professional Practice series. You'll learn how the organization's Code of Professional Ethics can empower you to practice your profession in accordance with the Appraisal Institute's guiding values and principles, and why this is important to you as a practicing appraiser. Participants will become familiar with the definitions and canons of the Code of Professional Ethics and how the code relates to the Uniform Standards of Professional Appraisal Practice and the Appraisal Institute's Certification Standard.

\$150.00

XNR 3090

Course 510 - Advanced Income Capitalization

Participants in this course are assumed to have a working knowledge of the income approach. Through lectures and homework assignments, you will receive an understanding of more advanced, contemporary applications of the income approach, as well as a thorough understanding of discounted cash flow analysis. At the conclusion of the course, you will also have an understanding of the relationship between value and real estate investment decisions. Risk analysis will be presented as it applies to the selection and support of yield rates.

Prerequisites: Successful completion of Appraisal Principles (Course 110). Appraisal Procedures (Course 120), Basic Income Capitalization (Course 310) and General Applications (Course 320), or an equivalent educational background and a working knowledge of the income approach is strongly recommended. Required Textbook: The Appraisal of Real Estate 10 edition. Optional Text: The Appraiser Workplace.

\$625.00

XNR 3100

Course 520 - Highest and Best Use and Market Analysis

Course 520 - Hignest and Best Use and Market Analysis This course is designed to help participants apply market analysis to appraisal procedures, with particular emphasis placed on estimating supply and demand. The course provides tools that appraisers can use to support these highest and best use determinations. Course participants will gain a deeper understanding of the markets in which buyers and sellers operate and learn how to measure the future performance of properties in those markets. Demand analysis for retail, office, and residential properties is emphasized. Step-by-step procedures for performing marketability studies are presented and data sources are identified. Absorption and capture rate analysis for use in discounted cash flows is also explored. Prerequisites Appraisal Principles, Appraisal Procedures, Basic Income Capitalization, General Applications, and Advanced Income Capitalization; or an equivalent background and a working knowledge of the three approaches to estimating value is strongly recommended. Optional Textbook Readings in Market Research for Real Estate You may purchase this textbook in the JCCC bookstore.

\$550.00

XNR 3110

Course 530-Advanced Sales Comparison and Cost Approaches

This course provides in-depth instruction in the sales comparison and cost approaches as they apply to income- producing properties. In this course, participants explore various methods of determining elements of comparison in the sales comparison approach. Methods used to select, measure, and support adjustments, including graphing, pairing, sorting, and regression analysis, in addition to non-numerical, subjective arguments, are presented. Participants will learn the importance of the cost approach when it is market driven and how this approach applies to everyday valuations. After reviewing the standard methods of calculation, the course explores alternative applications. In addition, participants will learn how to extract depreciation from the market and apply it to real-world problems. Also covered are how to use quantitative analysis, confirmation of data, and reconciliation in the appraisal process. Prerequisites Appraisal Principles, Appraisal Procedures, Basic Income Capitalization, General Applications and Advanced Income Capitalization, and Highest and Best Use and Market Analysis; or an equivalent background and a working knowledge of the three approaches to estimating value is strongly recommended. Required Textbooks The Appraisal of Real Estate, tenth edition; The Dictionary of Real Estate Appraisal, third edition. You may purchase these books at the JCCC bookstore. the sales comparison approach. Methods used to select, measure, and support

\$550.00

XNR 3150

Appraisal 550 Advanced Applications

Advanced applications synthesizes the three approaches to value, examines their Advanced applications synthesizes the three approaches to value, examines their applications and helps participants apply the basic and advanced valuation techniques they have learned in previous courses. Case studies on actual property will give first hand knowledge to choose appropriate tools to solve appraisal problems. This seminar will teach you to identify the demographic and economic data that are used to estimate an absorption period, prepare cash flow forecast, calculate replacement allowance and reversionary value and distinguish between fee simple, leased fee and leasehold estates. Required textbook: The Appraisal of Real Estate, 11th Edition.

\$700.00

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 5040

Appraisal Course: HUD Form 4150.2-VC Training

This course will cover the following information: Site hazards and nuisances, soil contamination, grading and drainage, wells and individual water supply & septic systems, wood destroying insects, private road access and maintenance, structural conditions, foundations, roofing, mechanical systems, electrical systems, plumbing systems, venting, fixtures, water heating equipment, and other health & safety deficiencies such as windows, staircases, lead based paints, and structure accessibility. This course is approved for 14 credits for appraisers.

\$275.00

XNR 5041

Course 540-Report Writing & Valuation

Report Writing and Valuation Analysis provides instruction and practice in communicating a narrative appraisal. Lectures focus on relevant questions in each step of the valuation process and on the integration of the various parts of an appraisal report. Participants consider relevant questions as they work through a case study, deriving conclusions and organizing them into a consistent, well-reasoned narrative. The examination consists of various parts of a self-contained appraisal report, which are pre- pared as homework assignments and submitted at the end of the course. By focusing on effective organization, style, grammar, and the elimination of wordiness and ambiguity, this course helps develop good writing habits and promote effective communication in appraisal reports.

\$650.00

XNR 5212

Supporting Capitalization Rate

Improve your appraisal reports with well supported capitalization rates by attending this new one day seminar! You will focus on practical ways to incorporate judgment and market experience into the rate selection process. In fact the theme of this seminar is that a well supported capitalization rate is logically impacted by market activity, tested for reasonableness & demonstrates consideration by the appraiser of the relevant factors that affect the property.

\$125.00

XNR 5213

Adv. Residential Form/Narrative Report Writing

Learn to write the results of your appraisal on standard report forms while writing the narrative comments clearly and succinctly. You will discuss and review residential valuation procedures and the current standards for appraisal reports. You'll examine the rule of effective writing and critique samples taken from the text to form your own work. Prerequisite: Course 110, 120 and 210. Required textbooks: The appraisal Writing Handbook and Uniform Standards of Professional Practice.

\$595.00

XNR 5214

Separating Real/Personal Property from Intangible

Business Assets You will learn the theoretical and analytical framework for separating the tangible and intangible assets of operating properties. Through discussion, lecture, role-playing and case studies you will apply the theory of the firm and the concept of economic profit to the solution of problems related to ad valorem taxation, eminent domain, loan underwriting and transaction price allocation. Bring a financial calculator to class. The required textbooks are: A Business Enterprise Value Anthology and Uniform Standards of Professional Appraisal Practice.

\$250.00

XNR 5215

National Uniform Standards of Professional Appraisal Practice (USPAP) Update

This course, designed by the Appraisal Institute, focuses on the recent changes to the Uniform Standards of Professional Appraisal Practice. All sections pertain to the USPAP requirements for ethical behavior and competent performance by appraisers. The material will help you clarify concepts such as scope of work and when USPAP applies. This course is for students who have already completed the 15-hour USPAP course. It satisfies most states' continuing education requirements of a National USPAP Update course for license renewal.

\$165.00

XNR 5216

National Uniform Standards of Professional Appraisal Practice (USPAP)

This course covers basic rules for ethical behavior and competent performance. The course is designed to comply with USPAP requirements for state certified appraisers and it highlights the role of the appraiser and the implied impartiality often associated with this role. Participants will learn how requirements of the USPAP affect their appraisal business. NOTE: The Appraiser Qualifications Board (AQB) has issued a statement that indicates effective 01/01/2005 an appraiser must successfully complete the USPAP update course every two years to meet the state's USPAP continuing education requirement. The appraiser can take this USPAP course but it will only count for hours toward his or her state's continuing education requirement; this course will not meet the USPAP continuing education requirement.

\$275.00

XNR 5219

Appraisal 520 - Highest & Best Use and Market Analysis

In this course participants learn to apply market analysis to appraisal procedures, with particular emphasis on estimating supply and demand. The course presents market analysis techniques as tools to increase reliability of highest and best use analysis and evaluation models. Participants will gain a deeper understanding of the markets in which buyers and sellers interact and learn how to measure the future performance of properties. Other topics include demand analysis for retail, office, and residential properties and absorption and capture rate analysis for use in discounted cash flow analysis. Enrollment requirements: completion of Appraisal Principles 110, Appraisal Procedures 120, Basic Income Capitalization 310, General Applications 320, and Advanced Income Capitalization 510, or the equivalent educational background. A financial calculator is required for this class.

\$650.00

XNR 5225

Reviewing Residential Appraisal Reports

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 fo work will be presented including tips on where to find and confirm data presented in reports. Required equipment HP-12C or equivalent calculator.

\$150.00

XNR 5230

Residential Market Analysis and Highest & Best Use

You will learn how to read and map a market area for a subject property and discover the essential links between market analysis, highest and best use analysis, and the three approaches to value (cost, sales comparison, and income capitalization). Theory is translated into practice through extensive and varied classroom activities encouraging you to become actively involved in applying concepts to real-world situations. Successful completion of the course and exam should satisfy most states? education requirements in the content area identified as residential market analysis and highest and best use.

\$325.00

XNR 5235

Report Writing and Valuation Analysis

This course provides instruction and practice in communicating a narrative appraisal. Lectures focus on relevant questions in each step of the valuation process and on the integration of the various parts of an appraisal report. You will work through a case study, deriving conclusions and organizing them into a consistent, well-reasoned narrative. The examination consists of various parts of a Self-Contained Appraisal Report, which are prepared as homework assignments and submitted at the end of the course. By focusing on effective organization, style, grammar, and the elimination of wordiness and ambiguity, you will learn to develop good writing habits and communicate effectively in appraisal reports.

\$650.00

XNR 5240

Residential Site Valuation and Cost Approach

This NEW course designed by the Appraisal Institute meets current and future AQB criteria. It focuses on the valuation of vacant land parcels and the development of the cost approach for students with introductory experience and understanding of fundamental concepts of appraising. An in-depth case study takes you from the origin of the appraisal assignment to a final value estimate using various cost approach applications. By successfully completing this course and exam, you will have met most states' education requirements in the content area identified as residential site valuation and cost approach. This course will also satisfy part of the required coursework for SRA Associates of the Appraisal Institute who are pursuing the SRA designation after May 2006.

\$325.00

XNR 5245

Evaluating Residential Construction

This seminar will provide you with a comprehensive orientation to all the elements of a house including style, structure, envelope, interior, and mechanical systems components of single-family houseing. You will gain the insight, vocabulary and confidence needed to accurately and efficiently inspect, describe and critique residential properties. You will also improve your skills in identifying the style, quality and condition of a house.

\$200.00

XNR 5250

Evaluating Commercial Construction

This seminar will provide you with a complete introduction to site and building improvements including site, structure, enclosure and mechanical systems components of both old and new commercial construction. You will improve your identification of building conditions and determination of physical and functional depreciation.

\$350.00

XNR 5512

Supporting Capitalization Rates

Improve your appraisal reports with well supported capitalization rates by attending this new one day seminar! You will focus on practical ways to incorporate judgment and market experience into the rate selection process. In fact the theme of this seminar is that a well supported capitalization rate is logically impacted by market activity, tested for reasonableness and demonstrates consideration by the appraiser of the relevant factors that affect the property.

\$125.00

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 6001

Certified New Home Sales Professional

A description is not available for this course.

\$0.00

XNR 9000

Wonderful World of Finance

A description is not available for this course.

\$0.00

XNR 9001

Real Estate Trends & Investment Criteria

A description is not available for this course.

\$0.00

XNR 9002

Market Focused Residential Design

A description is not available for this course.

\$0.00

XNR 9003

Technical New Home Construction A description is not available for this course. \$0.00

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 II

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 (1 CR)

A description is not available for this course.

\$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

A description is not available for this course.

\$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

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 beginners with the manual alphabet and the most commonly used signs, leading toward the development of conversational skills. The textbook," Learning American Sign Language", can be purchased at the JCCC bookstore.

\$79.00

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. The textbook, "Learning American Sign Language", can be purchased at the JCCC bookstore.

\$79.00

XVS 1300

Sign Language III

Continue the development of vocabulary building with emphasis on comprehension and expressive signing skills. The textbook, "Learning American Sign Language", can be purchased at the JCCC bookstore.

\$79.00

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.

\$65.00

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 how to 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

Intro to Quickbooks Pro

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. Textbook available at JCCC Bookstore.

\$288.00

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. Textbook available at JCCC bookstore.

\$432.00

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. Textbook available at JCCC bookstore.

\$288.00

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. The textbook is available at the JCCC bookstore.

\$288.00

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.

\$288.00

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.

\$288.00

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.

\$432.00

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

Tailored to the specialized needs of contractors, you will learn how to set up your business in this popular computerized accounting program - the right way. This beginning-level seminar is for people who have a working knowledge of Windows. You will learn how to create your own chart of accounts; set up customers and jobs, vendors and sub-contractors; generate estimates and invoices for your customers; progress billing; retainage; receive payments and make deposits; pay bills and sub-contractors; track your credit card purchases and balances; reconcile your bank account; 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 Workshop

Designed for persons with a working knowledge of QuickBooks Pro, 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 the 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.

\$432.00

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.

\$288.00

XBE 0276

Strategic Business Planning for Profitable Growth

Is your business growing profitably? Do you take time to strategically plan how to grow your business? Work on your business instead of just in it by attending this comprehensive seminar that will lead you to develop a strategic business plan to grow profitably.

\$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 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 1003

Oriental Rugs

The hand-knotted Oriental rug has long been esteemed as a unique item of household furnishing, as a floor covering and as decorative art. We will explore the wide diversity of rug patterns and colorings, their geography and their beauty. This will be an in-depth study. Textbooks and other optional materials may be purchased at Ara's Gallery.

\$48.00

XPT 1004

Be Ready for the Nerman: The JCCC Collection of Paintings and Sculpture

Have you ever puzzled over the Walking Man on the roof of the Commons Building or pondered the meaning of an abstract painting in the JCCC Dining Hall? With the opening of the Nerman Museum of Contemporary Art just around the corner, this course will teach you about the renowned collection of contemporary art on the JCCC campus. The publication, Public Art Review, can be purchased in the JCCC Bookstore.

\$29.00

XPT 1056

Understanding Diamonds

Gemologist Tom Tivol will discuss and describe how jewelers and gemologists identify both colorless and natural fancy colored diamonds and determine their quality and value, along with the remarkable history of these sparkling gemstones. Attendees will learn the important questions to ask their jewelers when making any diamond purchase.

\$12.00

XPT 1057

Understanding the World of Colored Gemstones and Pearls

Gemologist Tom Tivol will explore the endlessly fascinating worlds of colored gemstones, natural and cultured pearls, and will include their history up to modern times, identification, durability and determination of quality and value by jewelers

and gemologists. You will also learn questions to ask jewelers when purchasing any colored gemstone or pearl jewelry.

\$12.00

XPT 1058

Understanding Diamonds and the World of Colored Gemstones and Pearls

Take this two-session class covering diamonds, colored gemstones and pearls. The first session covers diamonds and session two is pearls and colored gemstones. You can also enroll individually in Understanding Diamonds or Understanding the World of Colored Gemstones and Pearls.

\$19.00

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 a lab environment, times will be announced at the start of class.

\$14.00

XPT 1072

Now You See It, Now You Don't

How do you observe and document alleged paranormal activity? Topics include various ways to conduct, organize and implement investigations of paranormal or unexplained phenomena. Learn to analyze and debunk sources of seemingly unexplained events. Text (optional) How to Be a Ghost Hunter by Richard Southall, is available on Amazon.com.

\$49.00

XPT 1073

Now You See It, Now You Don't - Intermediate

Covers the recommended tools for paranormal investigations including the assembly of an affordable kit. Class will take a field trip. Learn to analyze and debunk sources of seemingly unexplained events. Prerequisite: Now You See It, Now You Don't. Text (optional), How to Photograph the Paranormal by Leonore Sweet, is available on Amazon.com.

\$49.00

XPT 1074

Now You See It, Now You Don't-EVP Technology

Electronic voice phenomena (EVP) is the fastest growing segment of paranormal research. It is unexplained paranormal audible events of unknown origin. Learn the history of EVP, how to identify and disprove various voice recordings. Prerequisite: Now You See It, Now You Don't-Intermediate. Text (optional) is Ghost Tech by Vince Wilson, available on Amazon.com.

\$49.00

XPT 1102

WWI: Trench Warfare and Personal Accounts

The course will focus on the development and utilization of trench warfare during World War I and accounts by soldiers as initially described in personal journals or correspondence and later incorporated in American fiction.

\$15.00

XPT 1225

The Philosophy of War

Those with an interest in the strategy of war will find this class interesting. It will cover justification for going to war, stopping wars, selling of a war, methods of fighting war, the ethics of war and rules of engagement. Illustrations from the Korean War will be used.

\$12.00

XPT 1246

Tae-Kwon-Do/Self Defense

You will develop better balance, coordination, flexibility, self-confidence and self-control while learning basic self-defense techniques. Learn body positioning, blocking, hand strikes, kneeing and kicking.

\$69.00

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 hotel.

\$12.00

XPT 5001

Outdoor Survival Techniques

Learn the essential skills you need to survive in a remote and/or stranded condition. You will learn skills to react appropriately during emergencies, develop a survival kit, purify water, use a map and compass, make a fire, construct shelter and identify a wide variety of wild plants that can be used as survival foods.

\$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.

\$82.00

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.

\$82.00

XPT 5005

Criminal Procedure: From Arrest to Appeal

Take an in-depth and fascinating tour of criminal procedure, beginning with the investigation, arrest of a suspect and the trial and appeal of a criminal case. This course will help you understand the intricacies of criminal law, from arrest warrants to appellate briefs.

\$82.00

XPT 5010

Criminal Law: Introduction

Step inside the world of prosecutors and defense attorneys and learn the criminal justice system from the inside out. The instructor will take you behind the scenes into the real world of murder investigations and other crimes and shows you how prosecutors, police officers and defense attorneys prepare cases.

\$82.00

XPT 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.

\$82.00

XPT 5012

Winning Strategy for the Courtroom

Learn what it takes to win in civil court from an experienced attorney who has tried and won hundreds of cases. Master the techniques that will take you from the initial client interview, through the discovery of evidence, to the prepartion and presentation of a case. This course is a must for anyone working in the legal field or thinking about hiring an attorney.

\$82.00

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.

\$82.00

Sports Clinics-Youth (XLC)

XLC 1000

Baseball Clinic, Boys

Take advantage of personal and group instruction in order to enhance your baseball skill level. Weekly clinics will emphasize the specific skills you need to become a complete baseball player. You will participate in actual baseball games which will highlight skills taught during daily instruction. Lunch is provided.

\$145.00

XLC 1005

Baseball, Preseason Clinic, Boys, Ages 13 to 18

Spring training starts early this year. Start preparing for the upcoming baseball season at JCCC's indoor training facility. JCCC coaches will emphasize the offensive and defensive fundamentals of baseball, including fielding, throwing, hitting and base running instruction, that will help you prepare for the upcoming baseball season. Participants will need their own bats and fielding gloves.

\$85.00

XLC 1010

Baseball Pitching Clinic, Ages 12 - 18

Improve your pitching skills by focusing on all phases of pitching, including mental

approaches, fielding and pickoffs. Proper pitching fundamentals including throwing grips will be taught through specific drills. Be sure to bring your own catcher. Number of participants limited to 10.

\$55.00

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, Ages 13 to 18

This hitting league will provide players an opportunity to practice their skill in a competitive and fun environment during the off season. The objective is to score more points than the opposing team by hitting designated areas with the ball. A member of the JCCC coaching staff will supervise each session. Boys should bring their own bats and helmets.

\$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 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 basketball skills. Note: Any family member (over the age of 18) who wants to serve as "parent" may participate. \$70 per parent & daughter.

\$35.00

XLC 1028

Basketball Parent/Son Clinic, Ages 7 - 10

Here's your chance to participate in the same sports clinic as your son. This interactive clinic provides a fun opportunity to learn together fundamental skills taught in a positive and effective manner. Both you and your son will participate in the drills together. This is a perfect opportunity to help you reinforce your son's basketball skills. Note: Any family member (over the age of 18) who wants to serve as "parent" may participate. \$70 per parent & son.

\$35.00

XLC 1029

Basketball Positional Clinic, Boys, ages 11 to 14

This clinic will cover the fundamental skills of the game (passing, dribbling, shooting and team concepts using demonstrations and competitive contests.)

\$85.00

Basketball, Boys, Ages 11-14

Enjoy learning the fundamental skills of the game (passing, dribbling, shooting, etc.) and team concepts through participating in demonstrations and playing actual games. You will be placed on teams according to age. Lunch is included.

\$145.00

XLC 1031

Basketball Shooting Clinic, Boys & Girls, Ages 12 - 18

If you want to improve your shooting skills this clinic is for you. The clinic will focus strictly on shooting, including free-throws, jump shots, off the pass and dribble, lay-ups and post moves. Limited enrollment.

\$55.00

XLC 1032

Basketball, Boys 3 on 3 Tournament, One Day, Ages 8 to 10

Get your friends together for a JCCC Summer 3 on 3 Basketball tournament. It is a great chance for you to test your skills that you have practiced at the JCCC summer clinics. The day begins with a clinic on all aspects of the game of basketball. Then it's time to tip off the tourney. The tournament will be divided into age groups. Lunch is included.

\$35.00

XLC 1033

Basketball Girls 3 on 3 Tournament, One Day

A description is not available for this course.

\$35.00

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 11 - 14

Enjoy learning the fundamental skills of the game (passing, dribbling, shooting, etc.) and team concepts through participating in demonstrations and playing actual games. You will be placed on teams according to age. Lunch is included.

\$145.00

XLC 1036

Preseason Basketball, Girls Clinic

Start preparing for the upcoming middle and high school basketball season at JCCC. JCCC Basketball coaches will emphasize the fundamentals skills of the game including passing, dribbling, shooting and team concepts, that will help you prepare for the upcoming basketball season.

\$85.00

XLC 1037

Basketball Girls 3 on 3 Tournament, Ages 8 to 10

Get your friends together for JCCCs Summer 3 on 3 Basketball Tourmanent. It is a great chance for you to test your skills that you have practiced in the summer clinics. The day begins with a clinic on all aspects of the game of basketball. Then it's time to tip off the tourney. The tournament will be divided into age groups. Lunch is included. 1 session \$35

\$35.00

XLC 1038

Basketball 1 Day Clinic, Boys, ages 8-10

This one-day clinic covers all aspects of the game of basketball. Fundamental skills of the game (passing, dribbling, shooting etc.) and team concepts using demonstrations, videos and competitive contests will be included. Boys are divided into groups according to age. JCCC Men's Basketball coaching staff will direct this clinic. Lunch is included.

\$35.00

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

Basketball Speed, Agility & Conditioning Clinic, Boys & Girls, Ages

Here's your opportunity to 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.

\$100.00

XLC 1041

Spring Break, Dance Team/Cheerleading Technique Clinic, Girls, Ages 7 to 13

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. Girls should wear fitted dance pants or capris, fitted tank tops; dance sneakers or jazz shoes preferred or regular sneakers. All hair should be pulled back into a pony-tail or bun. Please bring a water bottle and light snack if necessary.

\$95.00

XLC 1042

Dance Team/Cheerleading 1 Day Clinic, Girls/ Boys, ages 8-13

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. In addition, several short dance routines and cheers/chants will be taught. Dance pants, capris, fitted tank tops should be worn; sneakers or jazz shoes preferred. Please bring a water bottle and snack if necessary. Lunch is included.

\$35.00

Golf Beginning, Boys and Girls, Ages 7-9

Are you just getting started playing the game of Golf? If so this beginning clinic is for you. You will 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 and golf balls (minimum 1 dozen). Junior clubs are highly recommended. All practice balls, green fees and lunch are included in the fee.

\$225.00

XLC 1045

Golf Intermediate/Advanced Clinic, Boys & Girls, Ages 13 & Up

Refine your golfing skills and techniques through this intermediate to advanced level clinic. You will work on your putting, chipping, pitching and driving skills while following correct golf etiquette. You will learn how to select the correct club for distance and accuracy to match your own individual ability; gain the feeling and understanding of a balanced and fluid swing; improve your finesse shots around the green; align and stroke putts with greater accuracy; and demonstrate a working knowledge of the rules, terminology and strategies of the game. Most of each day will be spent practicing at a nearby golf course. You will be transported in college vans driven by clinic staff to local golf courses. You should being your own clubs and golf balls (minimum 1 dozen). All practice balls, green fees and lunch are included in the fee.

\$225.00

XLC 1046

Golf Beginning/Intermediate, Boys and Girls, Ages 10 to 12

If you are just getting started playing the game of golf or have had previous golfing experience this clinic is for you. You will learn and practice the skills of putting, chipping, pitching, and driving through demonstrations, videos, practice drills and course play. You will also review the rules of the game, scoring and etiquette. Most of each day will be spent practicing at a nearby golf course. (Participants will be transported in college vans by clinic staff.). You should bring your own clubs and golf balls. (min.1 dozen). All practice balls, green fees and lunch are included in the fee.

\$225.00

XLC 1047

Junior Golf Tournament, One Day, Boys & Girls, Ages 7-18

Here is a perfect opportunity to test your golfing skills. This day-long tournament begins with a brief review of golf including putting, chipping, pitching, driving and etiquette and includes a demonstration of the rules, terminology and strategy of the game. The golf tournament will consist of a modified stroke play and golfers will be divided according to age groups. You should bring your own clubs and golf balls (minimum 1 dozen). Green fees and lunch are included in the fee. Meet at Smiley's Golf Course Smiley's Golf Course.

\$65.00

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.

Premier Golf Clinic, Boys and Girls ages 13 and up

Are you ready to take your golf game to the next level? This premier clinic will get you on the path to reaching your best. You will receive intensive on-course instruction at the area's finest golf courses. Note: The golfer/instructor ratio will not exceed 4:1. You will learn course management strategies that include: how to approach each hole; how to play to your strengths; learn when to take risks and when to avoid them. You will learn how to select the correct club for distance and accuracy and to match your own individual ability. You will be transported in college vans driven by clinic staff. You should bring your own clubs and golf balls (minimum 1 dozen). All range balls, green fees and lunch are included in the fee.

\$375.00

XLC 1050

Soccer, Boys and Girls, Ages 7 to 12

Here's your chance to learn and /or improve your skills in juggling, shooting, passing, and trapping. You will also learn a variety of fast footwork drills, game tactics and the responsibilities of specific positions. Team unity will be stressed. The clinic will include a review of both indoor and outdoor soccer instructional tapes. Youth soccer coaches are also invited to participate and learn from the JCCC staff. Lunch is included.

\$145.00

XLC 1051

Soccer Goalkeepers Clinic, Boys & Girls, Ages 7 - 18

Is goalkeeping your position? If so, come to this comprehensive goalkeeping clinic and learn the skills of 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. You will also learn various stretches and warm-up routines. You'll learn the one way to do everything correctly and avoid the most common mistakes made by goalkeepers.

\$55.00

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 agility 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 One-Day Clinic, Girls, Ages 8 to 10

JCCC's softball coaches will direct this clinic and concentrate on the proper softball fundamentals. Each player will learn basic defensive skills of catching and throwing, and the basic fundamentals of various positions. Each player will also learn basic strategies in hitting. Breakdown drills will be used and games will be played. Players need to bring their own gloves and bats. Lunch is included.

\$35.00

XLC 1061

Softball Positional Clinic, Girls, Ages 7 - 10

If you enjoy softball and want to improve your skills out on the field this clinic is for you. You will learn the defensive skills of catching and throwing, and the basic fundamentals in various positions. You will also learn basic strategies in hitting. Breakdown drills will be used in actual game play in this clinic. Be sure to bring your own glove and bat.

\$75.00

XLC 1062

Softball Outfielder Clinic, Girls, Ages 12 - 18

If you play outfield or want to be an outfielder, this clinic is for you. You will learn the fundamentals of outfielding through drills which are designed to promote and improve your skills. You will work on fly balls, team communication, plus footwork for throwing and catching fly balls. You will also learn hitting fundamentals.

\$75.00

XLC 1063

Softball Infielder Clinic, Girls, Ages 12 to 18

If you play infield or want to be an infielder this clinic is for you. You will learn the fundamentals of infielding through drills which are designed to promote and improve your skills. You will work on groundballs, team communication, footwork, slow-rollers and double play turns/feeds. You will also learn hitting fundamentals.

\$75.00

XLC 1064

Softball Fundamentals for Pitchers, Girls

Learn the proper fundamentals of pitching in this fun, action packed clinic. You will learn the proper techniques through several breakdown drills and pitching to your own catcher. You will learn how to throw different pitches and will have the opportunity to practice good techniques and perfect the different pitches. This clinic in limited to: 10 pitchers (Each pitcher needs to bring a catcher)

Tennis Clinic, Beginning/Intermediate, Boys and Girls, Ages 10 to 18

Move your tennis game up a notch and learn or improve your tennis fundamentals in this comprehensive beginning / intermediate clinic. You will participate in tennis instruction, practice drills, view informational game films and participate in group competition. Meet in the JCCC Gym Fieldhouse. Lunch is included.

\$145.00

XLC 1066

Tennis Clinic - Boys and Girls

Come play tennis in JCCC's state of the art indoor facility. Clinic director Susan Pozek, will teach tennis fundamentals to the beginning and intermediate players. This clinic consists of instruction, drills, films and group competition.

\$95.00

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

All Sports Speed & Agility Clinic, Boys and Girls, Ages 12 to 18

Learn the proper sprint/running mechanics for the sports of track, football, softball, baseball, basketball, tennis and soccer. You will improve your mechanics, learn proper weight-lifting fundamentals for speed/agility development and participate in drills, routines and workouts. Lunch is included.

\$145.00

XLC 1076

Speed Development, Boys & Girls, Ages 13 - 18

Whether you are in preseason preparation or off-season conditioning this clinic is perfectly designed for you. Fundamental drills, routines and workouts to help with improvement of proper sprint/running mechanics for the sports of track, football, softball, baseball, soccer, and tennis will be presented. The clinic will provide instruction on improving mechanics, weight lifting fundamentals for speed development and actual participation in these drills, routines and workouts.

\$85.00

XLC 1077

Spring Break - Speed Development, Boys & Girls, Ages 11 - 13

Students will be taught the fundamental drills, routines and workouts to help with improvement of proper sprint/running mechanics for the sports of track, football, softball, baseball, basketball, tennis and soccer. The clinic will provide classroom instruction on improving mechanics, weight-lifting fundamentals for speed development and actual participation in these drills, routines and workouts.

\$95.00 XLC 1080

Pole Vaulting Clinic, Boys and Girls, Ages 13 to 18

This Pole Vault clinic gives you a great opportunity to refine and improve your skills. You will receive your own biomechanical analysis and participate in intense training activities such as lectures, drill sessions, vault sessions, and video study of world class vaulters. Due to the structure of this clinic, enrollment is limited.

\$100.00

XLC 1081

Pole Vaulting Clinic, Evening, Boys & Girls, Ages 12 to 18

If you have previous pole vaulting experience, here's your opportunity to refine and improve your skills. You will receive your own biomechanical analysis and participate in intense training activities such as lectures, drill sessions, vault sessions, and video study of world class vaulters. Due to the structure of this clinic, enrollment is limited to participants who have previously participated in pole vaulting.

\$100.00

XLC 1083

Lacrosse Clinic

Improve your lacrosse skills and gain a competitive edge for your upcoming season with this unique clinic. JCCC will host this new lacrosse clinic at the indoor training facility. Points of emphasis will include fundamental stick skills, individual offensive and defensive fundamentals, shooting and small group play. Participants will need their own lacrosse stick, non-marking indoor shoes, mouth guard, eye gear and lacrosse helmet.

\$100.00

XLC 1090

Volleyball Clinic, Beginning, Girls, Ages 7 - 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.

\$85.00

XLC 1091

Spring Break, Volleyball Clinic, Girls, Beginning/Intermediate, Ages 11 - 13

If you are a volleyball player with beginning to intermediate level skills in playing the game, this clinic is for you. You will develop and refine your 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.

\$95.00

XLC 1092

Volleyball Premier, Girls, Ages 14 to 18

Are you ready to sharpen your skills and take your game to the next level? If so, this clinic is for you. You must be between 14-18 years of age and have an intermediate to advanced level of skill in volleyball. You will develop real game confidence and improve your mental toughness, aggressiveness, second effort and quickness through the skills developed in this clinic. Team play skills and 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.

\$75.00

Beach Volleyball, Boys & Girls, Ages 11 to 14

Want to catch some rays on the beach and play and up and coming sport? Get some sand between your toes and participate in an enthusiastic learning environment of 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 1099

Volleyball Premier Clinic, Girls, Ages 14 - 18

Are you ready to sharpen your skills and take your game to the next level? If so this clinic is for you. You must be between 14 to 18 years of age and have an intermediate to advanced level of skill in volleyball. You will develop real game confidence and improve your mental toughness, aggressiveness, second effort and quickness through the skills developed in this camp. Team play skills and 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.

\$145.00

XLC 1130

Volleyball Setters Clinic, Girls, Ages 14 - 18

If you are your team's setter than this Setters 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.

\$55.00

XLC 1135

Volleyball Dig & Pass Clinic, Girls, Ages 14-18

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.

\$55.00

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.

\$35.00

XLC 1140

Spring Break, Sports Week, Boys & Girls, Ages 7 - 13

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 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.

Spring Break 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.

\$20.00

XLC 2000

After-Clinic Activities

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.

\$28.00

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

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 2010

Spring Break, Weight Training, Boys and Girls, Ages 9-15

Improve your overall strength, increase your muscle tone, lose fat, gain muscle mass, and improve your bone density in this fun filled sports clinic. You will learn the proper way to use free weights, body bars, and tubing with a strong emphasis on correct body alignment and good posture. Strength training also increases your metabolism and physical capacity while increasing your self confidence. Flexibility training reduces stress, improves mobility, and helps prevent injuries.

\$95.00

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

This clinic will utilize free weights, body bars, and tubing with a strong emphasis

on correct body alignment and good posture. Strength training benefits include stronger muscles, bones, tendons, ligaments; more muscle mass; less fat; increased metabolism; greater physical capacity; and increased self confidence.

\$45.00

XLC 2016

Weight Training Clinic For Parent and Child, Ages 8 to Adult

Here is a great opportunity to spend some time with your young student and start on the path of getting in shape. This clinic is designed to introduce weight training to both the adults and young students. This clinic will use free weights, body bars and tubing with a strong emphasis on correct body alignment and good posture. Strength training benefits include stronger muscles, bones, tendons, ligaments; more muscle mass; less fat; increased metabolism; greater physical capacity; and increased self-confidence. A parent/guardian must be present per child.

\$35.00

XLC 2017

High Jump Clinic, Ages 13 - 18

This pre-season program is designed to help advanced level athletes prepare for non-school sponsored competitions and invitational meets. This clinic will focus on meet preparation, 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 11 - 12

Here's 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.

\$75.00

XLC 2021

Premier Football Training Clinic, Boys, Ages 12 - 18

Are you ready to take your football skills to the next level? This premier football clinic will take you on the path to reaching your goals. Focus will be on footwork, offensive and defensive plays and game strategies.

\$145.00

XLC 2022

Football Running Back/Receiver Clinic, Boys, Ages 12 - 18

Here is your opportunity to improve your ability as a running back/receiver. You will learn the proper techniques on carrying the football, blocking and pass receiving. You will also receive instruction on how to improve your quickness and agility, flexibility and proper running technique.

\$75.00

Football Quarterback Clinic, Boys, Ages 12 - 18

Are you ready to lead your team to victorythe big game? This Quarterback clinic will get you on the 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 them.

\$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 7 - 10

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.

\$85.00

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

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.

\$25.00

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 1008

Fly Fishing, Introduction to

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 and instructor. Please bring \$5 for practice materials to the first class. Note: Enrollment limited to 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 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 1045

Fencing, Intermediate

You'll need basic experience in foil fencing for this course, which includes review and practice of the basic skills and fundamental techniques of foil fencing in order to develop greater skill as well as bouts in class tournaments. Equipment is provided.

\$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. Note: Class is limited to 25 students and no walk-ins will be admitted.

\$12.00

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 (Jan. 21 and Feb.4).

\$14.00

XYS 1070

Golf, Beginning

This class is for those who have never played golf or consider themselves beginners. Learn basic swing fundamentals and develop a general knowledge of the game. Clubs will be furnished. Cost includes driving range and green fees. Note: Enrollment is limited to 15.

\$124.00

XYS 1110

Contract Bridge, Basic

In this introductory class, you will learn bidding and play of the hand in eight short weeks. Come 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 and will 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 of 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? Questions like these will be answered in this class. Note: Class is for experienced players.

\$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 principles 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. Note: There will be 2 week break for this class (Nov. 7 and 14).

\$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

This class is for those who have a basic knowledge of bidding but would like to practice their skill. During each session, we will review by playing eight hands that illustrate bidding fundamentals. Hand 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? During this workshop, 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

This class will involve plenty of bidding and playing with real situation suggestions, for those with a basic knowledge of bridge. Plus you will learn how to be the kind of player others enjoy having around. Note: There will be a 2 week break in this class Nov. 6 and 13.

\$55.00

XYS 1183

Bridge: Guided Practice

You'll see lots of play and little lecture, preset hands and some exposed hands. People will have the opportunity and ask questions and play the same hand in two different contracts to learn which is better. \$55.00

XYS 1185

Fly Fishing, Intermediate

This 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. Note: Reserve Oct. 7 or 8 for stream portion. Enrollment is limited to 20.

\$111.00

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 2010

Welding Update

A description is not available for this course.

\$129.00

XND 5010

Refrigerant Transition and Recovery Review and Exam

This course prepares you to take the Environmental Protection Agency-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 Prepatory Manual, available at the JCCC Bookstore, to participate in a pre-test review.

\$149.00

XND 5011

Plumbing Exam Prep

This course prepares you for the journeyman or master plumber exam. Loose-leaf 2003 editions of both the Uniform Plumbing Code and the International Plumbing Code are required and are 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 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 5012

Mechanical/HVAC Exam Prep

This course prepares you for the masters and/or journeyman licensing exam. Please bring the following books to class: Uniform Mechanical Code, 2003 loose-leaf edition; International Mechanical Code, 2003 loose-leaf edition; Manual N Commercial Load Calculation, 1988 4th edition (printed in 2002); Manual J Residential Load Calculation, 2004; Refrigeration and Air Conditioning (ARI) 3rd edition; Trane Ductulator or ACCA Ductulator; Low Pressure Boilers, 2001 edition; High Pressure Boilers, 2nd edition, 1994. The following books are optional: Code of Federal Regulations; OSHA Excerpts for Contractors; NFPA 54 - 2002 National Fuel Gas Code; NFPA 58 - 2001; Pipe Fitters Handbook, 3rd edition, 1967; System Design Manual Part III; Fibrous Glass Duct Construction Standards; Carrier System Design Manual Part III: Piping Design Carrier, 1960 edition. All books may be purchased at the JCCC Bookstore. You will need to contact your local city or county codes department directly to apply for the exam.

\$369.00

XND 5013

Electrical Exam Prep

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 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 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 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

Testing (XVT)

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 on reading comprehension, analogies, sentence completions, antonyms, logical and analytical reasoning questions 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 guantitative comparison, discrete quantitative, and data interpretation questions that make up the math section of the GRE. We will also cover time-saving techniques for both the paper-based and computer administrations of the test.

\$98.00

XVT 5005

ACT/SAT Preparation - Part 1

This online course includes verbal refreshers and discusses techniques aimed at reducing test-taking anxiety. Topics include effective word usage and grammar for the ACT; sentence completions and analogies for the SAT; and reading comprehension for both tests. 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

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. You'll get valuable hands-on experience and advice on using a calculator; determining the proper amount to pay in tips, 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, including history, biology, geography, business, government, and more.

\$98.00

XVT 5011

LSAT Preparation - Part 1

Taking both part 1 and part 2 will prepare you to perform well on all three question types on the LSAT: reading comprehension, logical reasoning, and analytical reasoning. In this online course you will practice on actual LSAT exams from previous years and learn proven test-taking techniques.

\$98.00

XVT 5012

LSAT Preparation - Part 2

Taking both part 1 and part 2 of this course will prepare you to perform well on all three question types on the LSAT: reading comprehension, logical reasoning, and analytical reasoning. In this online course you will practice on actual LSAT exams from previous years and learn test-taking techniques.

\$98.00

XVT 5021

GMAT Preparation

Learn test-taking techniques and methods for improving your score while saving time on all GMAT questions with this online course. Review familiar and new types of questions like critical reasoning and data sufficiency for verbal and quantative sections. You will practice on actual GMAT tests from previous years.

\$98.00

Writing Center (XGW)

XGW 1103

Practical Writing Skills (B&G \$30)

\$63.00

XGW 1107

Sentence Pattern Skills (B&G \$30)

\$63.00

XGW 1108

Composing Skills (B&G \$30)

\$63.00

XGW 1109

Proofreading Skills (B&G \$30)

\$63.00 XGW 1110

English Grammar Review (B&G \$30)

\$63.00

XGW 1112

Research Skills (B&G \$30)

\$63.00

XGW 1115

Revising Skills (B&G \$30)

\$63.00

XGW 1120

Writing in the Disciplines (B&G \$30)

\$63.00

Youth and Talents (XLY)

XLY 1001

Etiquette for Children, Boys and Girls

The course is designed to model and teach appropriate behavior in different social settings and situations. Students will learn and practice courtesy at home and in school and public places, table and telephone manners, hostess and guest courtesy and conversation etiquette and artful interruptions.

\$33.00

XLY 1063

Supervised lunch

Bring your sack lunch. Fee is for supervision of lunch room.

\$12.00

XLY 1075

Car Care for Teens, Ages 14 - 18

You finally have your own car or are about to get one, but do you know how to take care of it? You'll discuss, observe and get some hands-on experience in observing proper maintenance such as changing tires, oil, filters, belts and plugs. Get familiar with car brakes, electrical, cooling and exhaust systems. This class will be taught in the JCCC Automotive Technology labs by automotive technology staff.

\$49.00

XLY 1080

Emergency Room, Gr. 4-5

Students enrolled in this session will explore the inner working of a hospital emergency room. Students will begin by performing tasks in a fast-paced, intentionally stressful role-play. Debriefing will follow to help students understand the importance of being able to handle multiple situations in a productive way. Students will study the sterile procedure and learn to take vital signs within their own emergency room as they practice on each other. A study of viruses and bacteria, how they have affected the world, and their influence on modern medicine will be a big part of this session.

\$65.00

XLY 1082

City Hospital

Children enrolled in this session will have the opportunity to explore the exciting environment of a community hospital. We will begin by exploring why people go to the hospital and we will practice admitting our own patients. We will then discuss the importance of a sterile environment as we don our hospital garb and learn to take each other's vital signs. We will finish our journey by looking at how our skeletal and muscular systems work together as we practice "surgical skills!"

\$65.00

XLY 1086

Med School Student

Students enrolled in this session will begin with a look at the emergency room. They will identify medical body systems, learn how diseases are transmitted, understand the qualities that define a good doctor, and look at the historical significance of the Hippocrates' contributions to modern medicine. A discussion of medical ethics will certainly make for lively dinner conversation when your child completes this session.

\$65.00

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 ages 6-8

Sign your beginning reader up for the Book Bug Bunch... love of reading and good reading habits will lead to a joyous lifetime hobby and help pave the way for school achievement. The young reader will become acquainted with many selections of picture books through reading, listening and sharing. Each young reader will receive a picture book at the conclusion of the class.

\$20.00

XLY 1136

City Hospital

Children enrolled in this session will explore the magic of the human body. We start by creating maps to guide us through the circulatory and digestive systems. We then move onto our five senses as we conduct laboratory experiments to discover how the brain controls all that we see, hear, taste, touch, and smell. We will conclude with a life-size body outline showing off all that we have learned.

\$65.00

XLY 1137

City Hospital

Children enrolled in this session will create their own community hospital. We will begin by exploring basic first-aid and how to handle making a 911 call. We will then create and set up the various areas of our hospital as we prepare to handle our own medial emergencies. Then mayhem will break loose as everyone takes turns being the patients and the doctors. Be prepared to take x-rays, cast broken bones, and stitch up wounds!!!

\$60.00

XLY 1138

Emergency Room, Gr. 4-5

Students enrolled in this session will study bones and muscles and how the body heals injury. Students will learn the concept of opposing muscle groups and identify muscles and how they work within their own bodies. Students will practice splinting and casting on one another in order to understand how stabilizing injuries can promote healing.

\$65.00

XLY 1139

Emergency Room, Gr. 4-5

Students enrolled in this session will examine several of the bodies exciting complexities. The students will begin by journeying through the anatomy of the eye and ear. Students will then move on to the workings of the respiratory system and how it supplies our body with oxygen.

\$65.00

XLY 1142

Dinosaur Digs, Gr. 2-3

Travel back through time to the Mesozoic Era. We will begin by finding out what made a dinosaur a dinosaur. We will look at how the dinosaurs evolved as time passed through the Cretaceous, Triassic, and Jurassic periods. Finally, we will explore different kinds of fossils and how paleontologists study them, ending with the creation of our very own mold fossil of a dinosaur tooth.

\$65.00

XLY 1147

Dinosaur Digs II, Gr. 2-3

First we will learn the most common dinosaur myths and why they are untrue. We will then reconstruct a skeleton with actual bones, just like paleontologists do with dinosaur bones. We will end with the study of dinosaur behavior, defenses, and communication to help determine which dinosaurs were social and which were loners.

\$65.00

XLY 1149

Dinosaur Digs

Children enrolled in this session will find out where all the dinosaurs have gone. We will begin by each creating our own new species of dinosaurs. Then we will choose how our species died after learning about all of the different extinction theories. Students will conclude the session by looking at all of the ways we can see dinosaurs in the world today. Yes, today!

\$60.00

XLY 1158

Med School Student

Students enrolled in this session will start with a quick overview of Session I. We will then move on to learning how to take vital signs and understanding the relationship of this information to their own health and the health of others. Students will learn the five major steps of patient care and apply them within their own "group practice." Analysis of disease and disease prevention will conclude the session.

\$65.00

XLY 1159

Med School Student

Students enrolled in this session will investigate the aging process and look at life expectancy and its effect on society. Students will examine the brain and its role in learning and memory as well as have an opportunity to learn some strategies for improving their own memory skills. Time permitting, we will finish the session with a look at alternative medicine practices.

\$60.00

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,

\$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 1188

Girl Talk: Navigating the Teen Years, Gr. 7 & 8

In this class teenage girls will discuss the joys and challenges facing young teens in today's world. Topics will include friendships, peer pressure, dating and successful dealings with parents and other adults. The class will be led by a school counselor who will have frank discussions and activities to help build a positive sense of self.

\$45.00

XLY 1189

Shutterbugs & Crazy Chemistry, Grades 5-6

How does a camera work? What does a lens do? How does film capture light and store an image? A great hands-ON introduction to photography. Then - mix, mush and brew together different chemicals to create things that you can use in this hands-ON chemistry lab. Great take-homes and treats!

\$105.00

XLY 1190

Machine Mania & Robotics, Grades 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, Grades 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

Nature and Earth Awareness, Grades 5-6

Play the nature scavenger hunt that combines science exploration with the animal kingdom! Then discover how science will help us protect our planet. Understand the basics of water pollution, acid rain, and the benefits of solar energy!

\$105.00

XLY 1194

Advanced Castle Building, Gr. 4-9

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 1195

Advanced Egyptian Mummy Making Gr. 4-9

Students will travel back in time to study, design and build complete Egyptian mummies. We will watch video clips and History, Learning & Discovery Channel shows regarding ancient Egypt and study the reasons and ways Egyptian mummies were created. We will examine Egyptian artifacts, writing and in the end create individual or team created tombs, mummies, sarcophagus and canopic jars. Students will need to bring one 12-inch action figure or doll to be mummified and four small two-inch tall plastic containers (preferably film canisters for the body parts). Students are encouraged to do research before class including checking out library books regarding Ancient Egypt and mummies and/or printing off pictures and articles from the internet.

\$115.00

XLY 1196

This, That & More, Gr. 2-3

Calling all scientists, thinkers and problem solvers. Each day will be an adventure into the world of strange science. Learn about geysers, ball of lightning, slime, silly putty, mirages and more. Each day use your thinking and problem solving in completing a challenging activity.

\$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 1201

Supervised Lunch Break

Supervision is available at no charge during the lunch hour for students enrolled in both morning Adventurers and afternoon Talents classes. Students are required to bring a sack lunch and a drink.

\$0.00

XLY 1204

Step-Discipline: What Does and Doesn't Work

Step-parenting is the most difficult dynamic that step couples face. The better you understand the principles of step-family discipline, the more productive your parenting will be in the step-family.

\$11.00

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 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 Doc. 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

Household allowance is a key to building your child's money management skills and can teach responsibility that can last a life time. Learn how to design an allowance program that is just right for your household no matter the ages of the kids or the amount of the family income.

\$12.00

XLY 1233

From Innocence to Entitlement

A perfect class as we enter into the holiday season to curb our children's wants and open up their hearts for giving. This is for every parent who has heard their children have more "wants" and "give me's". The focus will be on how parents can implement easy to learn techniques into their parenting skills to ward off entitlement and raise responsible, respectful children.

\$12.00

XLY 1234

Surviving the First Year of Parenting

If you are a first time expectant mom or dad, you'll want to check out this class filled with first hand tips and ideas about the first year of parenting. You'll have the opportunity to meet new friends and learn helpful advice in preparation for the arrival of your little one.

\$12.00

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 can cause chaos in any household but it can also bring along many wonderful attributes when the energy is funneled in a positive direction. Meet with an ADHD Parent Coach for ideas of how to teach your ADHD child social skills, getting homework accomplished, getting the day organized, raising your child's self esteem and dealing with day to day issues that occur in an ADHD household. While every household is different, this class will explore options that can refuel all parents' ideas toward making a calmer household and raising a more responsible child.

\$12.00

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 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 1257

Potential to Publish: eWriters, Grades 6-8

Love to write but tired of the "old school" way of doing things? Then join this exciting, motivated group of writers as we surf the web, read eZines and submit works of our own for publication. You don't want to miss this fast paced writing opportunity! Eligibility: Students must have an IEP (Individualized Education Plan) or have tested in the 98th percentile on an IQ test.

\$150.00

XLY 1258

JCCC Evening Hands-ON Science Enrichment, Grades 3-6

Mad Science-KC sparks the imagination and curiosity of elementary age children by providing them with educational and entertaining activities that instill a clear understanding of what science is really about and how it affects the world around them. You will experience five topics: "Matter of Fact" Investigate the ingredients of the universe. Play alchemist by creating a chemical change right before your very eyes, and make your own take-home Mad Science Putty. "Optical Illusions" Build your own take-home periscope while learning about optics, reflection and sight. Watch celebrity images change before your very eyes. Seeing Is not always believing... "Sonic Sounds" Discover sound, and how household items can be used to create amazing movie sound effects. Use our Mad Science VoiceBox to alter your very own voice; fun take-home. "Space...the Final Frontier" Your mission: to take an exciting look at planets, moons, comets, and stars. Boldly explore space and return from your mission with your take-home Roto-Rocket. "Tantalizing Taste" Map out your tongue's taste sensations. Compare your sense of smell with your sense of taste. Carbonate water for yummy pop and make a great-tasting take-home treat.

\$75.00

XLY 1259

I Love You Too Much to Argue With You

Do you find yourself drawn into power struggles, bickering and arguing with your kids? Does it drain your energy? Do you want it to stop? Whether you have a small child or a teenager, come learn some tools and tactics to use that will put an end to the energy drain and a start toward more respect from your kids. This class promises practical techniques that parents can start using immediately as well as resources to rely on for years to come.

\$12.00

XLY 1262

Becoming a "Love and Logic" Parent

Are you looking for a better way to parent? Ideal for parents of toddlers to teens as this class will offer and build weekly on better ways to communicate with your

children, create stronger family relationships, and raise the odds on raising a responsible child through learning how to set limits through enforceable statements, choices within those limits and consequences with empathy. Each week participants will build on the knowledge and experience of the week before while finding their parenting confidences grow!

\$53.00

XLY 1268

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.

\$65.00

XLY 1269

Raising a Lifelong Reader

Research shows that parental involvement in a child's education is one of the strongest indicators of academic success. Learn ideas and activities (to share with your child 0-5 years) that create great readers.

\$12.00

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 "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.

\$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.

\$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 and inequalities.

\$115.00

XLY 1274

Drawing, Gr. 2-3

Come join this drawing class and become a better artist. Students will focus on the elements of art and become better observers. Every student will have their

own sketchbook for pre-drawing skills as well as landscapes, portraits and still-life drawings.

\$115.00

XLY 1275

An Apple a Day, Gr. K-1

Enjoy a literature based science and math exploration of nature's perfect fruit. Follow Johnny Appleseed as he plants trees throughout the colonies. Watch the changing seasons affect the apple tree. Sing a collection of songs that build early reading skills, and cook, sample, and share some tasty treats.

\$75.00

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 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 and 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 2050

Mock Trial Experience, Gr. 6-7

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 2068

Comedy Improv! (CRN 50198-Gr 6-7, CRN 50214-Gr 8-9)

Thinking on your feet creatively is the hallmark of improvisation...fine tune your creative skills and practice tickling funny bones in this fast paced, fun adventure. You'll enjoy learning games that will help with characterization, movement, and plot development. Class finale will feature an improv performance.

\$115.00

XLY 2072

E.O.A.S. Earth, Oceans, Atmosphere, Space, Gr. 6-7

Students will use the internet, videos and websites to learn and apply information about earth, oceans, atmosphere and space. Students will prepare related presentations and websites to apply their knowledge.

\$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. Field trips and 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.

\$65.00

XLY 2109

Maz-zles

You'll develop and experiment with age-appropriate puzzles and mazes. Using your own designs, you'll join Jan Miller, a nationally recognized teacher, for a foray into fun with critical thinking.

\$115.00

XLY 2119

Creative Problem Solving in Mathematics, Gr. 6-7

This class is for students who love a math challenge and math competition. Take this opportunity to analyze fundamental problem solving techniques as applied to mathematics. Through a variety of whole-class lessons, individual projects and team competition, students will learn to apply the techniques to a wide variety of math problems.

\$115.00

XLY 2122

Bugs, Bugs, Bugs, Gr. K-1

Come explore the exciting world of bugs. Children will learn all about insects and other creepy crawlies as they get involved in reading, writing, math, art and science activities. We will learn about interesting bugs from around the world as well as explore our own backyards.

\$75.00

XLY 2138

Archeological Restorations

Students will be cleaning, polishing and restoring a myriad of antique brass, copper, and silver projects used in the archeology classes. Some of the objects you'll be working with are a brass/copper fire extinguisher and brass electric fan from the 1930's, silver dishes, brass buttons, etc. A before and after picture will be taken to show the progress made during the session. Students should bring work gloves, a cover-up shirt and polishing rags.

\$105.00

XLY 2140

Cashflow 101

Get ready to explore the concepts of money by using hands-on activities to learn how to be financially intelligent. You'll learn a glossary of financial terms, and how to figure your assets and liabilities, income and expenses. Use all your new found knowledge to play the game Cashflow 101, which makes getting out of debt fun!

\$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 2147

Life as a Marionette, Gr. 4-5

Join us as we create an "artful" story. You'll use your creativity and imagination to create a plot, scenes and yes, the marionettes to complete the story. You'll fashion wire, paint and papier-mache into your own fantastic story.

\$115.00

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.

\$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, Science Adventurers, Special Interests and Summer Academy.

\$25.00

XLY 2152

Archeology/Advanced Archeology

This class is for first-time Archeology students and returning Archeology veterans. Working with our collection of 8,000 archeological artifacts from railroad and mine sites in the Arapaho National Forest, we will learn and review the 10 steps of the archeological process. This class will focus on the sorting and cleaning of newly recovered artifacts, the reconstruction of glass and pottery pieces and the reorganization of the Archeology Treasure Chest which includes our most valuable and rare artifacts. Bring work gloves, 5-10 old towels and 2-5 old brushes (toothbrushes are great).

\$115.00

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 field of architecture. You'll enjoy lots of hands-on, creative activities as you investigate what makes buildings strong and interesting to look at. Your creativity will get a workout as you plan your very own building design.

\$115.00

XLY 2161

Mars City

Join a team of scientists to develop the first human habitation on Mars! You will learn all about the red planet and apply your critical and creative thinking skills to create plans for a functioning colony.

\$105.00

XLY 2162

ACT/SAT Vocabulary & Essay Writing (CRN 50180 & 50200-Gr 6-7, CRN 50212-Gr 8-9)

Students will learn upper level vocabulary through a variety of activities such as puzzles, games, worksheets and interactive websites. Sentence and essay writing will help prepare students for college entrance tests.

\$115.00

XLY 2163

Science Fair

Students will create their own mini science experience. You will decide what you would like your experiment to test, learn about controlling the variables and collecting data as you test your hypothesis.

\$105.00

XLY 2164

Comedy Improv II

A description is not available for this course.

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 2166

Enchanted Castle

Visit your favorite fairy tale characters and you enter the world of enchantment. Develop critical thinking skills as you decide if the Big Bad Wolf was really bad or if Snow White should have taken the apple from a stranger. Apply your own creative writing skills as you develop your own fractured fairy tale.

\$105.00

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 2168

Discover Science Olympiad

If you've ever wondered what Science Olympiad is all about, now is your chance

to find out. We will work with as many events as possible. Mystery architecture and science crime busters are just a couple of the possibilities.

\$115.00

XLY 2169

Deal 'Em Up!

You will learn the basic rules for card games of all levels, beginning with classics like solitaire and speed. Our strategic problem solving skills will be challenged as we learn the ins and outs of games such as pitch, gin rummy and hearts. Eventually, students will create their own card games using their new knowledge and skills.

\$115.00

XLY 2170

Book-in-the-Box

Are you a Harry Potter fan or do you prefer Junie B. Jones or The Hobbit? Whatever your literary taste, bring your favorite fiction book and a shoebox. We will enjoy developing word puzzles, mazes, stories and games based on your book.

\$115.00

XLY 2171

Picasso and Matisse Gr 2-3

Artists Picasso and Matisse had completely different styles, but are always compared to one another. Learn about two great modern masters and create art in their style.

\$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 2174

Masters of the Night - " The Owl"

Learn more about the owls of Kansas: Whoo they are, their habitat, and their amazing adaptations. Dissect an owl pellet to learn more about the legendary owl. Enjoy a field trip while listening to naturalists describe these remarkable nocturnal creatures.

\$115.00

XLY 2175

Castle Building 101

Students will travel back in time to study, design and build Medieval Castles. We will watch video clips regarding castles and study the way middle age warfare was conducted. We will examine working catapults, build paper castles and in the end create a team designed and constructed sugar cube castle. Students are encouraged to do research before class including checking out library books regarding Middle Age Castles and/or printing off color pictures and articles from the internet.

\$65.00

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 2177

Eco Columns

In eco-columns you will create and maintain your own ecosystem. Create a living environment with fish, plants, and grass, all in an enclosed ecosystem.

\$65.00

XLY 2178

Fun Flying

Students will examine, study, create and play with things that fly. We will watch video clips regarding gliding, flying and space flight. We will examine, create, build and work with Parachutes, Propellers, Balloons, Frisbees, Paper Airplanes, Gliders, Water Rockets, Kites and Air Rockets. Students should bring any flying toys or items listed above that they already own. Students are encouraged to do research before class including checking out library books regarding flight, lift, balloons, or any of the items listed above and/or printing off color pictures and articles from the internet.

\$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 2182

Making Egyptian Mummies

Students will travel back in time to study, design and build Complete Egyptian Mummies. We will watch video clips regarding Ancient Egypt and study the reasons and ways Egyptian Mummies were created. We will examine Egyptian artifacts, writing and in the end create individual or team created tombs, mummies, sarcophagus, and canopic jars. Students will need to bring one 12" action figure or doll to be mummified and four small 2" tall plastic containers (preferably film canisters for the body parts). Students are encouraged to do research before class including checking out library books regarding Ancient Egypt and Mummies and/or printing off color pictures and articles from the internet.

\$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 and explore a brand new planet. Analyze rocks and 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 2187

Smart Money, Gr. 6-7

Handle your own checking account, pay bills, earn money, invest and learn about charge card debt. You will be given the task of managing your own income and making spending decisions. This "real world" experience will affect you for the rest of your financial life.

\$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 3001

Summer Academy Gr 2-7

Summer Academy offers a full-day program that includes an science, board games, computer, team building and brain teaser module each day. 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 that includes an art, computer, physical education and brain teaser module each day. A supervised hot lunch is included in the Academy fee.

\$170.00

XLY 3003

Summer Academy Jump Start, Gr. K-1

New this summer for Kindergarten through First Grade students! Choose either a morning or afternoon session of fun-filled reading and math activities.

\$69.00

XLY 5004

Solving Discipline Problems at Home

Develop your own home discipline plan. You will learn not only what you need to

do when your children misbehave, but you will also learn how to teach your children the rewards of behaving responsibly.

\$82.00

XLY 5008

Caring for Children

You'll learn how to keep children safe, how to create an effective learning environment in your home, how to encourage healthy habits, and how to promote physical activity. You'll also learn quick and easy ways to give yourself time to re-connect and meet your own needs.

\$82.00

Student Handbook

Student Handbook

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