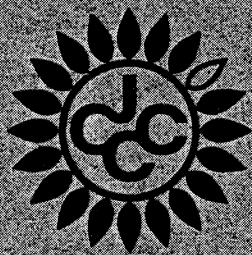


C A T A L O G



1980
1981



Johnson County Community College

New Courses

Fall 1980

MANAGEMENT ATTITUDES AND MOTIVATION **BUS 4029**

Study of techniques for self-improvement and conflict resolution through class discussion, group projects and role playing. Participants will examine their communication, management and problem solving skills. Class meets three hours a week. Three credit hours.

MACHINE TRANSCRIPTION

BSC 5189
Prerequisite: BSC 2376 or by permission. Extensive use of dictation equipment learning transcription skills needed for efficient transcribing of business correspondence and technical reports. Language skills will be developed through correct word division, punctuation and number transcription exercises. Special topics such as news releases, agendas and minutes; medical and legal terminology will be studied. Class/lab meets five hours a week. Three credit hours.

PASCAL

BDP 4023
Prerequisites: BDP 4700 or 1698 or 6703. Use of PASCAL programming language in solving typical problems. Emphasis on function and use of statements in writing structured code. Computer used in compiling and executing the program. Class meets three hours a week. Laboratory by arrangement. Three credit hours.

HISTORY OF PHOTOGRAPHY

HPH 4009
A survey of the history of photography from the 1830s to the present. The technology and aesthetics of photography will be covered and related, in an interdisciplinary manner, to the broader histories of art, culture and ideas. Class meets three hours a week. Three credit hours.

ELECTRONIC CALCULATORS

BSC 5190
Emphasis on fundamental operations of arithmetic and application to business problems on electronic display machines. Class meets one hour a week. One credit hour.

PRINCIPLES OF ASTRONOMY

NPS 3031
A basic introduction to the evolving science of astronomy. This course uses the unique capabilities of television to introduce you to the origin, characteristics and evolution of the solar system, the stars, the galaxies and the universe. No laboratory, no observing. Three credit hours.

AUTOMATIC TYPEWRITERS

BSC 5188
Prerequisite: BSC 2376. Gives student the opportunity to develop a high degree of proficiency in the operation of IBM Mag Card II typewriter with magnetic storage cards and the IBM Memory Typewriter. Class/lab meets four hours a week. Two credit hours.

DEVELOPMENTAL READING FOR THE HEARING IMPAIRED

LC 5270
Small group sessions to help develop reading skills for the hearing impaired student. Instruction will emphasize reading comprehension and vocabulary development through the use of selected readings, current affairs readings, discussion and vocabulary building. Class meets three hours a week. Two credit hours.

RHYTHMIC AEROBICS

PD 1380
Exercise program of choreographed routines combining motor skills, jogging and dance steps. These exercise routines improve muscle tone and cardiovascular fitness. Class/lab meets one hour a week. One credit hour.

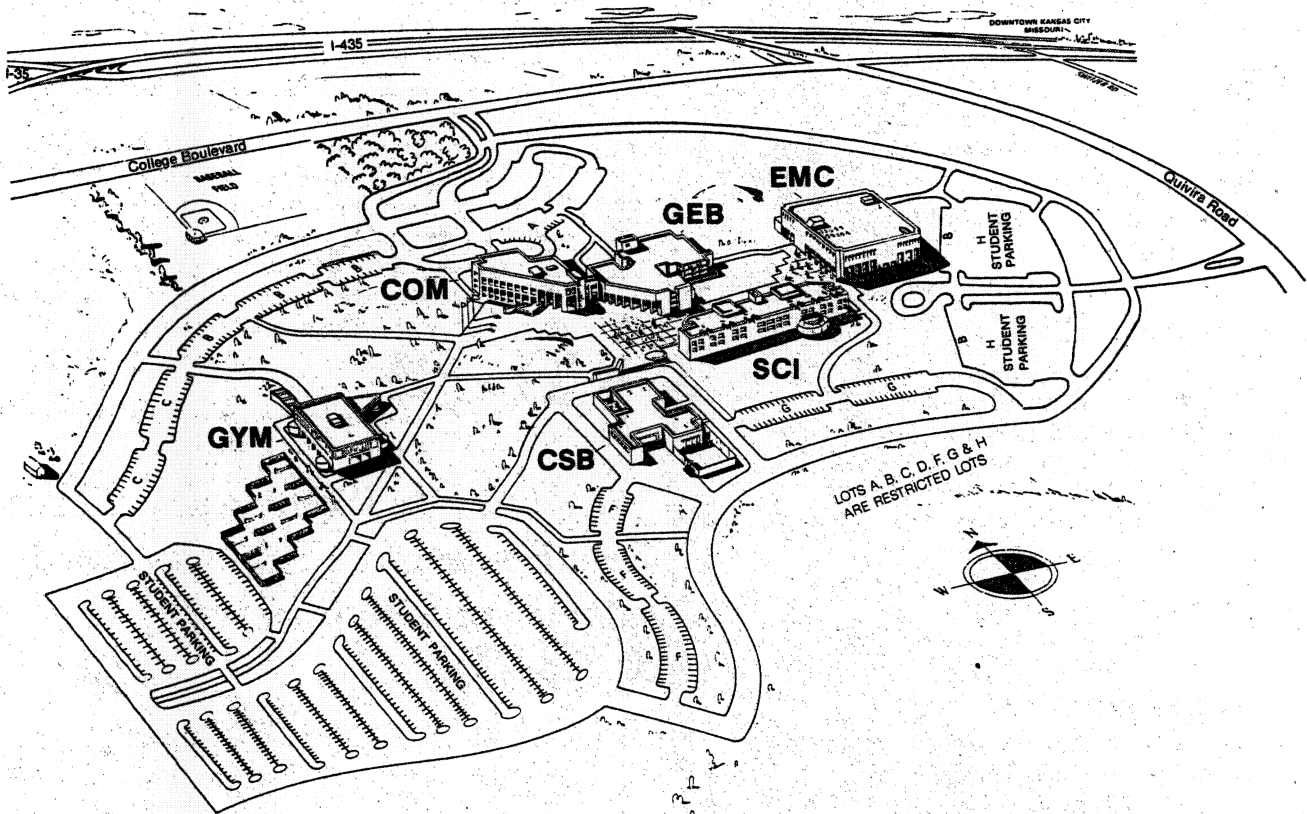
For complete descriptions of all courses offered by Johnson County Community College, see the College Catalog, available in the Admissions Office, GEB 144.

CATALOG

1980-81

Johnson County Community College
College Boulevard at Quivira Road
Overland Park, Kansas 66210
(913) 888-8500

JCCC Campus Map



GEB General Education Building: Administrative offices; general classrooms; lecture hall/little theater; data processing; faculty offices; seminar rooms; business management labs; admissions and records; business and personnel offices.

EMC Educational Media Center: Library, production area for graphics, television, photography and printed matter; faculty, counseling and veterans offices; general classrooms; art studio; electronics lab; hearing impaired program; learning center and testing center.

SCI Science and Technology Building: General classrooms; labs for life science, chemistry, physics and nursing; dental hygiene clinic; faculty offices; music and law enforcement areas; animal room; greenhouse; lecture halls.

CSB Campus Services Building: Security office; telephone communication center; maintenance office and shops; vehicle repair area; central warehouse; art instructional area; air conditioning and electrical equipment room.

GYM Gymnasium: Three basketball cross-courts which can be converted to an arena or auditorium; physical education facilities including weight room and wrestling room; general classrooms; faculty offices; minor first aid center for the campus; outdoor activities, playing fields and courts located adjacent to Gymnasium.

COM Commons: Bookstore; food service; recreational facilities; lounges and meeting rooms; faculty offices; hospitality management program.

Academic Calendar 80-81

SUMMER-MAY MINI SESSION 1980

- May 15-16 Registration and payment of fees for first two-week summer mini session.
- 19 Two-week mini session classes begin.
- 26 Memorial Day. Classes not in session. College offices closed.
- 31 First two-week summer mini session ends.

SUMMER SESSION 1980

REGULAR AND MINI SESSIONS

- June 2 Community Education classes begin.
- 4-6 Registration and payment of fees for eight-week summer session and first four-week mini session.
- 9 Summer session and first four-week mini session classes begin.
- July 2-3 Registration and payment of fees for second four-week mini session.
- 3 First four-week mini session ends.
- 4 Independence Day. Classes not in session. College offices closed.
- 7 Second four-week mini session classes begin.
- Aug. 1 Eight-week summer session and second mini session are concluded.

FALL SEMESTER 1980

- 18 Registration for all students begins. Teaching staff returns.
- 25 Fall semester begins. First day of credit classes.
- Sept. 1 Labor Day. Classes not in session. College offices closed.
- 2 Community Education classes begin.
- Oct. 30-31 Staff Development Days. College offices open. Credit classes not in session except for credit classes that meet once a week.
- Nov. 27-29 Thanksgiving holiday. Credit classes not in session. College offices closed.
- Dec. 19 Last day of fall semester classes.
- Dec. 24-
- Jan. 2 Christmas and New Year's holidays.

SPRING SEMESTER 1981

- Jan. 12 Registration for all students begins. Teaching staff returns.
- 19 Spring semester begins. First day of credit classes.
- Feb. 2 Community Education classes begin.
- March 15-21 Spring recess. Credit classes not in session. College offices closed.
- May 15 Last day of spring semester classes. Commencement.
- 25 Memorial Day. Classes not in session. College offices closed.

SUMMER SESSION 1981

REGULAR AND MINI SESSIONS

- June 1 Community Education classes begin.
- 3-5 Registration and payment of fees for eight-week summer session and first four-week mini session.
- 8 Summer session and first four-week mini session classes begin.
- July 1-2 Registration and payment of fees for second four-week mini session.
- 2 First four-week mini session ends.
- 3 Independence Day holiday. Classes not in session. College offices closed.
- 6 Second four-week mini session classes begin.
- 31 Eight-week summer session and second four-week mini session end.

NOTICE OF NON-DISCRIMINATION

Johnson County Community College is committed to a policy of non-discrimination on the basis of race, age, sex, religion, color, national origin, creed, handicap, marital or parental status in admissions, educational programs or activities and employment, as specified by federal and state laws and regulations. Inquiries may be addressed to: Dr. Glen E. Gabert, Assistant to the President, Johnson County Community College, College Boulevard at Quivira Road, Overland Park, Kansas 66210, (913) 888-8500, or Director, Office of Civil Rights, HEW, Washington, DC 20201.

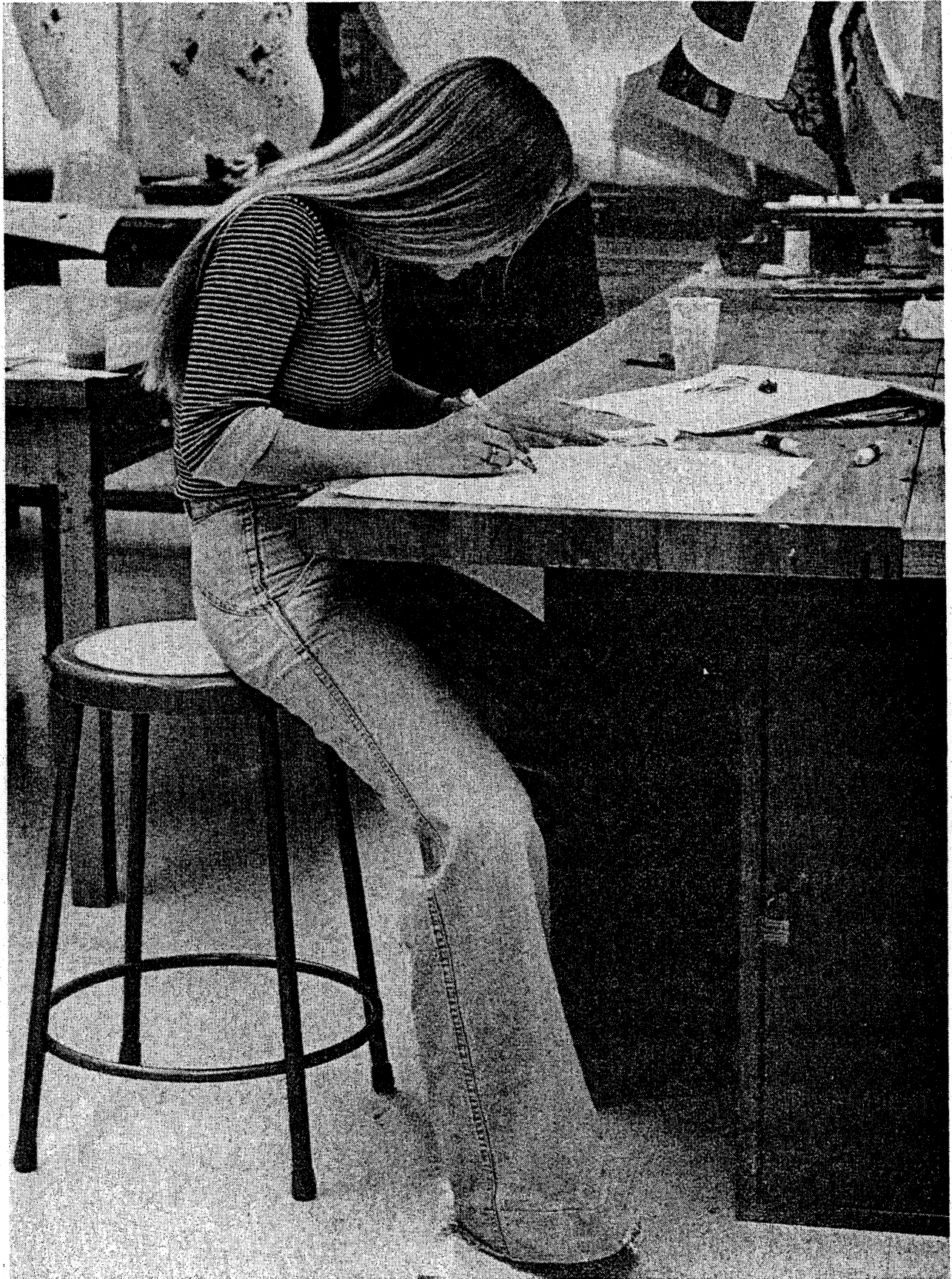
This catalog becomes effective July 1, 1980.

This catalog is for information only and does not constitute a contract. The College reserves the right to change, modify or alter without notice all fees, charges, tuition, expenses and costs of any kind and further reserves the right to add or delete without notice any course offering or information contained in this catalog.

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Table of Contents

Campus Map	2	Career Planning and Placement Center	102
Academic Calendar	3	GED Program	102
Notice of Non-Discrimination	4	General Studies Program	102
Admissions	7	Writing Center	103
Admissions Procedures	8	Project CLEAR	103
Registration	8	Hearing Impaired Program	103
Tuition and Fees	8	Gallaudet College Extension Center	103
Refunds	8	Child Play Center	103
Textbooks	9	Dental Hygiene Clinic	103
Address/Name Changes	9	Student Activities Program	104
Foreign Students	9	Campus Ledger	104
High School Students	9	Athletics	104
Handicapped Students	9	Library	104
Veterans	9	Parking	105
Financial Aid	10	Student Code of Conduct	106
Academic Information	13	Access to Student Information	107
Attendance	14	Community Education	109
Courses by Arrangement	14	Continuing Education	110
Independent Study	14	Community Development	110
Travel for Credit	14	Community School Program	110
Advanced Standing Credit	14	VIEWS for Women	110
KRCHE	15	Cultural Arts Program	110
Grading System	15	A Program for Those Over 60	111
Honors	16	On-Site Education	111
Academic Progress	16	Clinics and Courses for Youth	111
Associate of Arts Degree	16	Speakers Bureau	111
Intent to Graduate	16	Child Care Directory	111
Commencement Exercises	17	About the College	114
Honors	17	League for Innovation	114
Certificate Program	17	KRCHE	114
Programs of Study	19	Accreditation	114
Transfer Programs	20	Weekend College	114
Career Programs	23	Summer Session	114
Course Descriptions	43	Board of Trustees and Staff	115
Student and Instructional Services	101	History of JCCC	115
Counseling Center	102	Index	125
Testing/Assessment Center	102		



Admissions

Admission Procedures
Foreign Students
High School Students
Registration
Tuition and Fees
Refunds
Textbooks
Name/Address Change
Veterans
Financial Aid

ADMISSIONS

Can anyone go to Johnson County Community College?

Anyone may apply for admission to JCCC – regardless of age or educational background. The only exception is high school students who must have written approval from their high school principals. Non-residents of Johnson County will be accepted on a space-available basis.

How do I apply for admission?

If you are enrolling at JCCC for the first time, follow these steps:

1. **Complete an application form** and return it to the Admissions/Records Office. Application forms are available in the Admissions/Records Office.
2. **Provide your high school transcripts.** Request that your high school send your transcripts directly to the JCCC Admissions/Records Office. You do not need to submit high school transcripts if you have been out of high school two years or more.
3. **Provide your college transcripts** if you are transferring to JCCC from another college. Request that all the institutions you have attended in the past mail your transcripts directly to JCCC Admissions/Records Office. Your record at JCCC will be withheld if your transcripts are not submitted.
4. **Determine if you are a resident or non-resident.** Kansas law requires that you live in the state six months before you are considered a resident. Non-residents at JCCC must pay out-of-state tuition and fees—\$52.50 per semester credit hour. If you have questions about residency requirements, see the director of Admissions/Records.
5. **Provide your American College Testing (ACT) scores.** You are encouraged—but not required—to submit your ACT scores unless you are entering the Nursing or Dental Hygiene career programs. Both those programs require you to submit ACT scores by Feb. 15, 1981. If you plan to submit your scores, take the ACT test as early as possible and request that your scores be sent to JCCC.



6. **Fulfill any special entrance requirements** of the career program you plan to enter. Contact the career program coordinator or the Admissions/Records Office for complete details.

After I am admitted, how do I register for classes?

Registration at JCCC is easy. First, you need to meet with your JCCC counselor to develop a program plan. Your counselor will tell you about prerequisites for courses, the transferability of courses and the sequence in which you should take them.

After your counselor approves your program plan, you are ready to register. The exact time and day you must register will be listed in the schedule of credit classes available each semester at the Admissions/Records Office. This schedule also details the registration procedures you need to follow. **You must pay all tuition and fees at the same time you register!**

Can I take advantage of early registration?

Early registration is open to students who have submitted admission applications or who are currently enrolled. During early registration, you may register over the phone at times specified in the Early Registration schedule available in the Admissions/Records Office. See the schedule for complete details.

TUITION AND FEES

Kansas residents:

Tuition	\$15 per semester credit hour
Commons fee	\$1.50 per semester credit hour
<u>Student Activity fee</u>	<u>\$1 per semester credit hour</u>
TOTAL PER CREDIT HOUR	\$17.50

Out-of-state and foreign students:

Tuition	\$50 per semester credit hour
Commons fee	\$1.50 per semester credit hour
<u>Student Activity fee</u>	<u>\$1 per semester credit hour</u>
TOTAL PER CREDIT HOUR	\$52.50

The JCCC Board of Trustees has the right to change these tuition and fees. Changes in tuition or fees will be published before they are effective.

Some of your courses may require fees in addition to tuition. Check the Credit Class Schedule, where any additional fees will be listed. Pay all tuition and fees in the Business Office, GEB 110.

Remember, you must pay all tuition and fees **when you enroll**. You may not graduate or have a transcript issued until all your tuition and fees are paid.

Will I get a refund if a class is canceled or if I withdraw?

You will get a full refund of tuition and fees if JCCC exercises its right to cancel a class. If you withdraw from a class, you may get a partial refund. Apply for a refund through the Admissions/Records Office by presenting your validated copy of the registration form and completing a drop form. Here are the percentages of refunds you may receive:

Sixteen-Week Semester

Time of Official Withdrawal	Refund
Through the first week of classes	100%
During second week of classes	90%
During third week of classes	60%
During fourth week of classes	30%
After start of fifth week of classes	0%

Four-Week Mini Session, Academies, Short Courses

Time of Official Withdrawal	Refund
Drop form filed before second class meeting	100%
Drop form filed before third class meeting	60%

There are two exceptions. You may file a written appeal for partial refund if you have been seriously ill and a physician can certify your illness. You also may file if you can document that you have been through a personal hardship. Any appeals you make after the start of the ninth week of classes will not be considered. For details about refund appeals, see the dean of Student Services.



How much will my textbooks cost?

Your textbooks probably will cost from \$40 to \$60 per semester. You may purchase your textbooks at the JCCC Bookstore, located in the College Commons.

Who do I notify if I change my name or address?

Notify the Admissions/Records Office immediately by submitting in writing your old and new name or address. If you don't alert the Admissions/Records Office of the change, you may miss important College mailings.

SPECIAL STUDENTS AT JCCC

Foreign Students

JCCC welcomes foreign students. If you are a foreign student, you need to apply for admission and supply required documents within these deadlines:

June 1, if you are applying for fall semester

Oct. 1, if you are applying for spring semester

March 1, if you are applying for summer session

You also must take the Test of English as a Foreign Language (TOEFL).



If you are transferring to JCCC from another institution, file all additional documents at least one month before classes begin. For more information, contact the director of Admissions/Records. JCCC is required under federal law to enroll non-immigrant alien students.

High School Seniors

If you are a high school senior, you may be eligible to earn college credit now through JCCC's QUICK STEP program. You must have completed at least 15 units to be eligible. If you are interested in JCCC's QUICK STEP program, contact your high school counselor or JCCC's director of Admissions/Records.

Handicapped Students

Handicapped students at JCCC have access to a variety of support services. Special services include notetakers for hearing and visually handicapped students. The buildings are equipped with ramps, elevators and restrooms designed to accommodate wheelchairs. Parking areas convenient to the buildings are reserved for handicapped students. If you would like more information about the services, activities and facilities available to handicapped students, contact the director of Student Development and Special Services.

Veterans

If you are a veteran, you may be eligible for educational benefits under the G.I. Bill of Rights. And if you are planning to attend JCCC, you must establish your eligibility by completing the appropriate forms in the JCCC Veterans Affairs Office.

The benefits you will receive will be based on this schedule:

If you enroll in	you will be considered
12 or more semester hours	full time
9-11 semester hours	3/4 time
6-8 semester hours	1/2 time
1-5 semester hours	less than 1/2 time

Before you register, your courses and program must be approved by the JCCC Veterans Affairs Office. Remember, you must attend **all** your classes regularly and sign in **monthly** at the Veterans Office in order to receive educational benefits.

FINANCIAL AID

Does JCCC offer financial aid to its students?

JCCC makes available grants, scholarships and long-term and short-term loans to both full-time and half-time students. Some part-time employment opportunities also are available to students, depending on availability of jobs.

How is financial need determined?

Most financial aid is awarded to students who show financial need. Your financial need is based on the amount of money your parents (and/or you) should be able to contribute and on your educational costs at JCCC.

JCCC assesses your financial need through a fair, objective form called the Family Financial Statement (FFS), provided by the American College Testing Program. If you are applying for financial aid based on need, you will have to submit a completed FFS and the required fee to the office designated on the form. FFS forms are available in the Financial Aid Office.

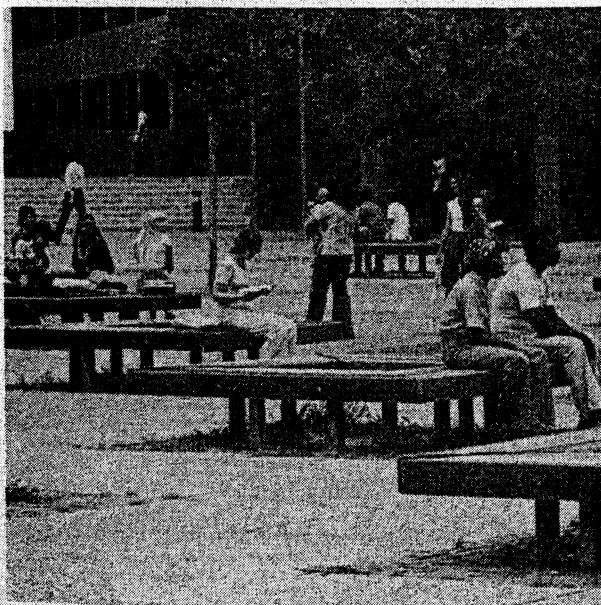
If you are financially independent of your parents, you should follow the same financial procedure as other students, but you are not required to provide financial information about your parents.

How do I apply for financial aid?

First, complete an application for admission to JCCC and fulfill all admission requirements. Then contact the Financial Aid Office for the appropriate application form. You must submit financial aid applications by July 1 for the fall semester and by Dec. 1 for the spring semester.

How will I know if I am awarded financial aid?

You will be notified through the mail as soon as possible.



What types of aid are available?

• Basic Educational Opportunity Grant (BEOG):

The federal government began this program in 1973 for undergraduate students. These grants range from \$200 to \$1600. The actual dollar amount depends on the funding level the federal government establishes and on the number of hours in which you are enrolled. Six hours a semester is the minimum.

• Supplemental Educational Opportunity Grant (SEOG):

The federal government provides funds for these grants which are awarded to students with the greatest financial need. The maximum grant under this program is \$1,500. The amount of your grant will be determined by your Family Financial Statement.

• Higher Education Loan Program (HELP):

The federal government authorized the Insured Loan program for students. You may be eligible if you do not show enough need to qualify for other loans or grants and if the financing of your education would be a burden on your family. These loans are available from any local participating lending agency or from the Higher Education Loan Program of Kansas.

If you qualify you may borrow up to \$2,500 per academic year and \$1,500 for freshmen. The total amount borrowed may not exceed \$7,500 for your undergraduate studies. Application forms are available in the Financial Aid Office. You must receive verification of your enrollment from the College to be eligible. **The participating lending agency decides to whom these loans are awarded.**

• **Board of Trustees Grants:** You may be eligible for a Board of Trustees grant if you are a Johnson County resident, attend school at least half-time, and show financial need, academic excellence or special talent. These grants are \$100 a semester for half-time students, \$150 for three-quarter time and \$200 for full time. Applications are available in the Financial Aid Office.

• **JCCC Foundation Awards:** A number of service, business and industrial organizations provide grants and scholarships through the JCCC Foundation. Some of these grants and scholarships are designed for students in particular career programs, but others are open to all students. The Financial Aid Office has application forms for these awards and can answer any questions you may have about requirements. These scholarships are currently available:

- B'Nai Brith Women's Scholarship
- American Association of University Women's Scholarship
- The Jones Scholarship
- The Dickinson Scholarship
- Smith Golf Scholarship
- Cohen Trust Scholarship
- Cress Memorial Scholarship
- St. Joseph High School Scholarship



• **College Work Study Program (CWSP):** You may be eligible for this grant if you are from a low-income family and show financial need. This program provides part-time jobs on campus. Openings may include secretarial, clerical, lab assistant, library assistant positions. Your eligibility is determined by your FFS.

• **National Direct Student Loan (NDSL):** JCCC is a participating member of the NDSL Program. You may apply for this loan if you are a U.S. citizen and have financial need. It provides a maximum of \$2,500 for your first two years of college. Your eligibility is determined by your FFS. This loan is repaid to the College after leaving school at 3 percent interest.

What effect will my grades have on my financial aid?

NDSL, BEOG, SEOG, CWSP and the Guaranteed Loan Program require that you meet these academic standards to continue to receive financial aid:

1. You must complete at least six credit hours a semester
2. You must maintain a cumulative grade point as follows:

Upon completion of	Minimum GPA
6-15 credit hours	1.25
16-30 credit hours	1.65
31-45 credit hours	1.75
46-60 credit hours	2.00

If you do not meet these standards, your financial aid will be discontinued. You also will lose your financial aid if you receive all I's, W's or N's. Your financial aid will be reinstated once you meet these standards.

You may remain at JCCC if you fail to meet the standards listed above, but you will not receive financial aid.



Academic Information

Attendance
Courses by Arrangement
Independent Studies
Travel for Credit
Advanced Standing Credit
KRCHE
Grading System
Honors
Academic Progress
Degree/Certificate Information

ACADEMIC INFORMATION

Attendance

You are responsible for regularly attending the classes and laboratory sessions in which you enroll. There is no policy which permits your grades to be lowered for non-attendance. However, your instructors may consider class participation, examinations and group work when determining your final grade. If you must fulfill special attendance requirements to satisfactorily complete a class, your instructor will inform you in writing at the beginning of the semester. When you are absent from class, you still will be responsible for making up any work or assignments you missed. If you are receiving benefits from a government agency, you must follow any policies the specific agency stipulates.

Courses by Arrangement

JCCC courses by arrangement are for those students who find it impossible or undesirable to attend regular courses on campus. You may complete a course by arrangement out of the classroom and on a schedule you arrange with an instructor. Before you enroll in a course by arrangement, contact the instructor (or the division director if the instructor is unavailable) who can tell you how much instructor contact the course requires and how your performance will be measured. See the Credit Class Schedule for the courses available by arrangement each semester.

Independent Study

You may explore in depth an area not covered in the regular curriculum by enrolling in independent study. You must show above average performance in the area to be eligible. For details, contact the division director of the area in which you are interested.

Travel for Credit

In a travel-for-credit class, you may earn from one to three credits while pursuing special interests through guided travel, reading and instruction. Travel is carefully planned and supervised by instructors. A list of travel-for-credit courses offered each semester is available in the Credit Class Schedule.



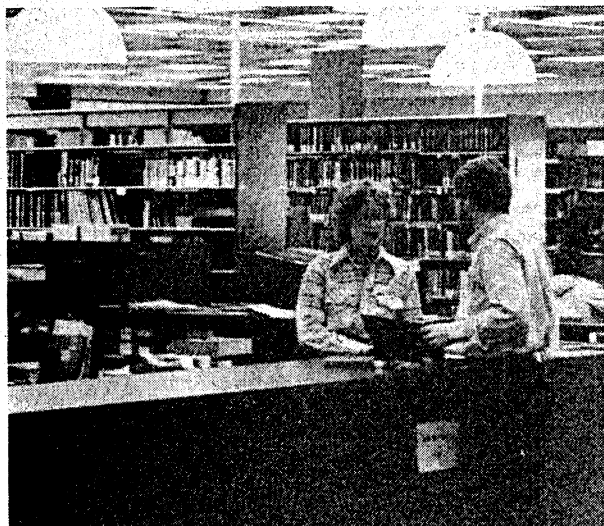
Advanced Standing Credit

If you have become knowledgeable in a particular area through self study, work experience or courses, you may be eligible to receive advanced standing credit. Here are six ways to do it. For complete details, including scores required, contact the Testing/Assessment Center.

- **College Level Examination Program (CLEP):** You may gain credit through CLEP if you have knowledge equivalent to an undergraduate college course. The *General Examination* compares your knowledge of general information to that of college freshmen. The *Subject Examination* tests you in a specific area. Anyone may take the CLEP, regardless of age or education. Apply to take the CLEP exam at the Testing/Assessment Center or at any other CLEP testing center. When you apply for the test, request that your results be sent to JCCC.
- **College Entrance Examination Board (CEEB) Advanced Placement Program:** The CEEB test is offered at high schools during the third week of May. You will be granted advanced standing credit if you score 3, 4 or 5.
- **Credit by Examination:** You may gain credit if you demonstrate a satisfactory level of achievement on this comprehensive exam. The exam may be written or oral or both, depending on the subject. The credit by examination does not cover all courses. Contact the Testing/Assessment Center for a list of courses covered. You will be charged a fee to take the test. Submit a written request to the Testing/Assessment Center if you are interested.
- **Military Service:** You may be granted credit for military service upon the recommendation of the Commission of Accreditation of Service Experiences, which is approved by the American Council on Education. You are eligible if you have been in continuous active duty for at least one year. If you are currently enrolled at JCCC, present a copy of Form DD 214 for discharged personnel or Form D 295 for active duty servicemen when you apply. You will be awarded credit for military service that is similar to course work offered at JCCC.

• **Experience Based Education:** Your life experiences (work or personal), or your experience in area vocational-technical schools or proprietary schools also may earn you credit. Contact the Testing/Assessment Center if you think you qualify. You will be charged a non-refundable fee upon application.

• **Credit transferred from other colleges:** You may apply up to 45 hours of credits you earned at another college toward an Associate of Arts degree.



KRCHE Student Exchange and Library Services

JCCC's membership in the Kansas City Regional Council (KRCHE) means that you and other students have special opportunities.

One is the Student Exchange Program through which you can enroll in courses at other Kansas City area schools at no extra charge if you are enrolled at JCCC as a full-time student. This program gives you the opportunity to take courses not offered at JCCC. For more information about the Student Exchange Program contact the dean of Student Services.

You also have access to library benefits of the 17 other institutions which belong to KRCHE—and free use of the public libraries in the seven-county metropolitan area.

A KRCHE library card, available at the JCCC library, provides you regular book-borrowing privileges at the other participating and public libraries.

The other KRCHE institutions are: Baker University, Benedictine College, Donnelly College, Graceland College, Haskell Indian Junior College, Kansas City Art Institute, Longview Community College, Maple Woods Community College, Missouri Valley College, Park College, Penn Valley Community College, Pioneer Community College, Rockhurst College, Saint Mary College, University of Missouri at Kansas City, Webster College and William Jewell College.

Grading System

JCCC uses both the regular grading system and the credit/non-credit grading system.

Regular Grading System

JCCC uses these grades to indicate how well you achieved the educational objectives of a course:

A – outstanding achievement of objectives

B – highly satisfactory achievement of objectives

C – adequate achievement of objectives

D – passing, marginal achievement of objectives

▶ N – no credit, unsatisfactory achievement

W – withdrawal, without academic assessment (You may withdraw from a class up to one week before the last day of the semester. You will receive a “W” on your transcript if you withdraw after the official state reporting date of the 20th day of class and after one fourth of the summer or mini session has been completed.)

I – incomplete – You will receive this grade only if special circumstances prevent you from completing the course. Your instructor can explain how to complete the course. Usually you do not have to re-enroll in the class, but you will have to complete all course work by the end of the following semester. (An “I” will be changed to “N” if the instructor does not initiate a grade change by the end of the semester following the grading period for which the “I” was given.)

R – repeated course (Whenever you repeat a course, only the later credit and grade you earn will be used in computing your grade point average. The earlier grade for the course will be changed to “R.”)



Credit/Non-Credit Grading System

You may wish to choose the credit/non-credit option if you want to explore courses outside your usual range of subject matter.

Your transcript will indicate courses you complete under this option, but grades you earn will not be computed in your grade point average.

Here are the grades you may earn:

- ▶ S – credit earned
- * ▶ N – no credit
- ▶ W – withdrawn

You need a counselor's approval before you choose the credit/non-credit grading system. Usually, you may enroll in only one course a semester under this option. If you choose this option, you must complete a form in the Counseling Center before the ninth week of the semester.

- ▶ Some schools, scholarship committees and honorary societies do not accept this grading system and may convert grades of S to C, and N to F when computing grade point averages, or in some other way may penalize you.

Grade Point Average

- A – 4 grade points per semester credit hour earned
- B – 3 grade points per semester credit hour earned
- C – 2 grade points per semester credit hour earned
- D – 1 grade point per semester credit hour earned

The total grade points you accumulate are divided by the total semester credit hours you successfully complete, excluding the semester credit hours for which an "S," "W," or an "N" were assigned. The result is your accumulated grade point average.



Honors

Your name will appear on the Dean's list if you complete a minimum of 12 credit hours and earn an overall grade point average of 3.0 or higher during any semester. You will be listed on the President's list if you maintain an average of 3.5 or above. Honors notification will be indicated on your final grade card.



Academic Progress

If you are not making satisfactory academic progress, contact your counselor. A counselor will help you reassess your program, motives, interests and aptitudes and help you decide whether you should change your program or get additional assistance.

Here are JCCC's guidelines for "satisfactory academic progress:"

Upon completion of	GPA
15 credit hours	1.25
30 credit hours	1.65
45 credit hours	1.75

Associate of Arts Degree

You must successfully complete a minimum of 60 semester credit hours in an approved program* with a cumulative grade point average of 2.0 to earn an A.A. degree. You must earn a minimum of 15 of those credit hours in residence at JCCC. Credits earned through non-classroom experience are not considered resident credits.

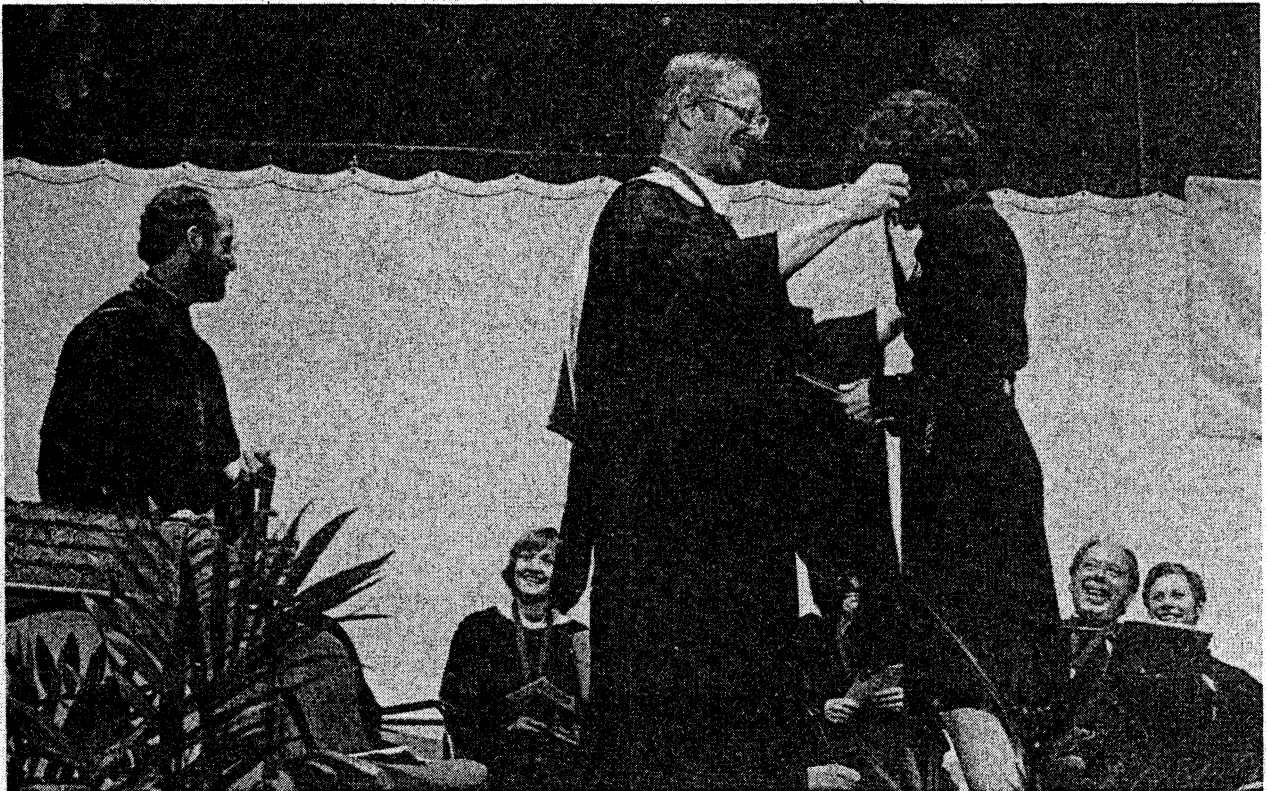
*An approved program is one you develop and your counselor approves to meet your requirements for graduation.

Intent to Graduate

You must file written notice of intent to graduate in the Admissions/Records Office by the following dates:

- Oct. 1 for fall graduation
- Feb. 1 for spring graduation
- July 1 for summer graduation

Appeal to the director of Admissions/Records if you wish to extend these deadlines.



Commencement Exercises

Remember, you may complete your requirements for graduation during any semester. But you will not be granted a diploma until the commencement exercises held at the close of each spring semester. Your degree status will be included on your permanent record as soon as you meet the graduation requirements.

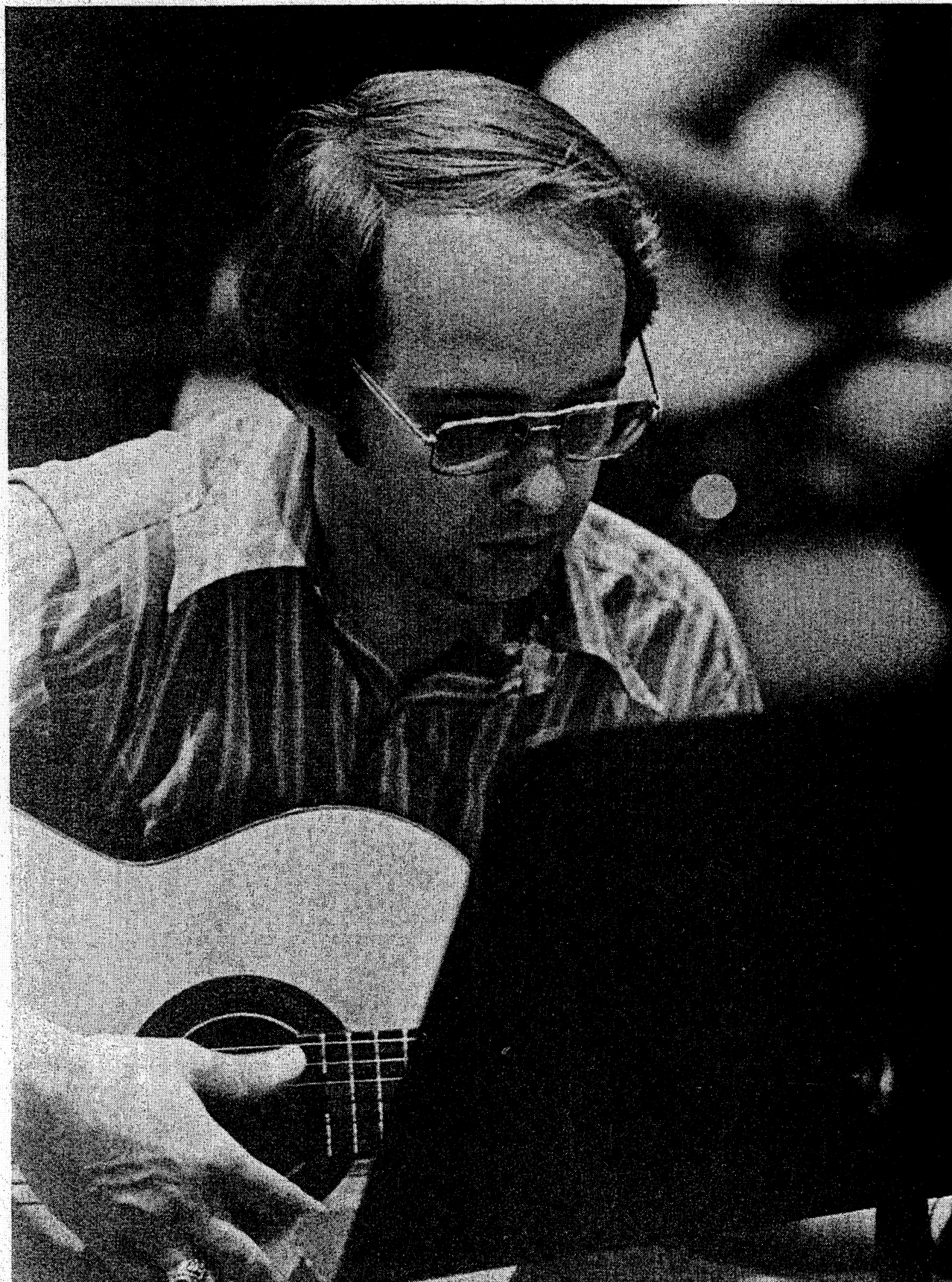
Honors

You will graduate "with honors" if you earn an overall grade point average of 3.5 or more in all courses that apply to your degree.

Certificate Program

You will be awarded a certificate of completion if you successfully complete a Board of Trustees-approved program that usually takes more than one year to complete and if you maintain a cumulative grade point average of 2.0 in prescribed course work. Usually, you will be awarded a certificate of completion when you complete any of these programs:

- Emergency Medical Technology (less than one year)
- Fire Protection and Public Safety
- Hospitality Management
- Medical Transcription (less than one year)
- Mental Health Technology
- Paralegal
- Police Dispatcher
- Recreational Leadership
- Riding Instructor Program
- Secretarial Careers



Programs of Study

Transfer
Career

JCCC'S TRANSFER PROGRAM

JCCC offers the first two years of most college baccalaureate degree programs. That is, you can begin most standard college majors at JCCC. Generally, you can attend JCCC for two years and earn an Associate of Arts degree, then transfer to a four-year institution without losing time or credit.

What if you are planning to transfer after two years, but you have not decided on an area of specialization at JCCC? You should satisfy general education requirements that are common prerequisites for earning most four-year degrees.

If you have decided on a field of study, look closely at the requirements of the four-year institution to which you plan to transfer. Some majors – such as architecture, fine arts and some engineering fields – may require a specific sequence of courses you must follow to graduate. Plan your program carefully with a JCCC counselor *before* you enroll in the first semester of classes to make sure you select courses that will transfer.

SAMPLES OF MAJORS

Business

Accounting
Business Administration
Finance
Management
Marketing
Real Estate
Insurance

Education

Elementary/Secondary
Physical Education
Special Education
Recreation

Engineering

(Pre-Engineering)
Architecture
Chemical Engineering
Civil Engineering
Electrical Engineering
Mechanical Engineering

Home Economics

Humanities & Fine Arts (Liberal Arts)

Art*
English
Foreign Language
Journalism
Law
Liberal Arts or Studies
Literature
Music*



Philosophy
Speech
Theater

Medicine and Health

Science and Math

Biology
Botany
Chemistry
Geography
Geology
Mathematics
Physics
Zoology

Social Science (Liberal Arts)

Anthropology
Economics
Geography
History
Political Science
Psychology
Social Work
Sociology

*May have a specific sequence of courses to take.
Check four-year college requirements.



A SAMPLE FOUR-YEAR DEGREE
(May vary with major. See a counselor.)

Total 124-128 hours	General Requirements			Distribution Requirements				
1st Two Years <i>(First 60-64 hours which may be taken at JCCC)</i>	English	Oral Comm.	Foreign Language (required for some degrees)	*Math	Humanities	Natural Science and Math (incl. Lab Sci)	Social Sciences	Electives
2nd Two Years <i>(Remaining 60-64 hours)</i>	Courses taken in major field			Upper division courses taken not in major field				Electives

If you plan to transfer, select courses from General and Distribution Requirement Areas as illustrated above. These courses, also known as General Education Requirements of baccalaureate (four-year) degrees, will come from the five divisions listed below. The number of courses required in each division depends on the requirements of the college or university to which you plan to transfer and the major field you plan to enter. Look closely at your major field requirements when planning which courses to take.

The following course description suggestions may help. This sample program is only a guide.

COMMUNICATIONS

(3-4 courses)

- COM 6524 Communications I (Eng. Comp.) 3
- COM 1467 Communications II (Eng. Comp.)# . . . 3
- CSP 4950 Interpersonal Communication 3
- CSP 4130 Public Speaking 3
- COM* 2618 Creative Writing 3
- COM* 4444 Poetry and Drama 3
- COM* 2779 Studies in the Novel 3
- COM* 5271 American Writers 3
- COM* 1051 Masterpieces of the Cinema 3
- COM* 1015 Children's Literature 3
- COM* 6024 World Masterpieces 3
- COM* 3694 Advanced Composition 3

Some college degrees may require foreign language. JCCC offers Spanish, French and German.

#The next 3-6 hours could be Speech or Literature depending on your major. Communications II is a prerequisite for most of the following literature and composition courses.

*Prerequisite is COM 1467 Communications II.

MATHEMATICS

(1 course)

At least one math course usually is required. If you are unsure of your skills, take a pre-test available in the Testing Center to determine proper course selection.

- MTH 7246 Introduction to Algebra 3
- MTH 3000 Geometry¹ 2
- MTH 9009 Intro. to Algebra & Geometry¹ 5

- MTH 3001 Intermediate Algebra¹ 3
- MTH 3427 College Algebra 3
- MTH 2594 Trigonometry 3
- MTH 6079 Algebra 5
- MTH 7091 Algebra & Trigonometry 5
- MTH 3268 Analytic Geometry/Calculus I² 5
- MTH 6463 Calculus I³ 3
- MTH 2642 Finite Math⁴ 3

¹May not transfer to some four-year colleges.

²Prerequisite: MTH 7091 or equivalent; usually taken by students enrolled in engineering, science or business.

³Usually taken by students enrolled in business.

⁴Usually taken by elementary education majors.

NATURAL SCIENCES

(2-3 courses)

All schools require at least one lab science. Some majors require both a biological and physical science.

Biological Sciences

- NLS 6540 Life Sciences (AVT Lab included) 4
- NLS 5020 Principles of Biology 3
- NLS 5091 Principles of Biology Lab 1
- NLS 5402 General Botany 5
- NLS 4241 General Zoology 5
- NLS* 5593 Microbiology 3
- NLS* 6057 Microbiology Lab 2
- NLS 6186 Human Anatomy/Physiology 5
- NLS 1128 Human Anatomy 4
- NLS* 1144 Human Physiology 4
- NLS 6719 Environmental Science 3
- NLS 4720 Environmental Science Lab 1
- NLS 4248 General Genetics (no lab) 3

Physical Science

- NPS 1031 Physical Science 4
- NPS 6070 Astronomy 4
- NPS 4858 General Geology 5
- NPS 6634 Principles of Chemistry 5
- NPS* 4515 General Chemistry I 4
- NPS* 4516 General Chemistry I Lab 1
- NPS* 4455 General Chemistry II 4
- NPS* 4456 General Chemistry II Lab 1
- NPS* 3308 General Physics I 4
- NPS* 5212 Engineering Physics I 4

*Check catalog for prerequisite.

HUMANITIES

(2-3 courses)

HUM	6120	Introduction to Humanities	3
HUM	5431	Comparative Cultures	3
HAR	1713	Introduction to Art History	3
HAR	3878	Modern Art History	3
HMU	8927	Intro. to Music Listening	3
HUM	7520	Introduction to Philosophy	3
HUM	6392	Logic	3
HUM	3080	Ethics	3
HUM	2532	Philosophy of Current Civilization	3
HUM	2541	Philosophy of Religion	3
HUM	5966	History of Ancient Philosophy	3
CDR	1809	Introduction to Theater	3



SOCIAL SCIENCES

(2-3 courses)

SS	3404	Sociology	3
SS	3428	Social Problems	3
SS	3721	Physical Anthropology	3
SS	1029	Cultural Anthropology	3
SS	1068	Introduction to Psychology	3
SS*	3546	Child Development	3
SS*	4639	Personality and Adjustment	3
SS	5716	Marriage and the Family	3
SS*	5663	Social Psychology	3
SS	1456	Political Science	3
SS	3138	American National Government	3
SS	2678	State & Local Government	3
SS*	5852	Intro. to Comparative Governments	3
SS	2808	International Relations	3
SS**	1055	U.S. History to 1877	3
SS**	2000	U.S. History from 1877	3
SS**	9922	European History—1750	3
SS	2004	Introduction to Economic Issues	3
SS	2253	Economics I	3
SS*	3093	Economics II	3

*Check catalog for prerequisite.

**History courses will transfer as humanities credits to some schools.

GENERAL ELECTIVES

Elective courses that will transfer could be selected from Business and Economics, Physical Development, Art and Music.



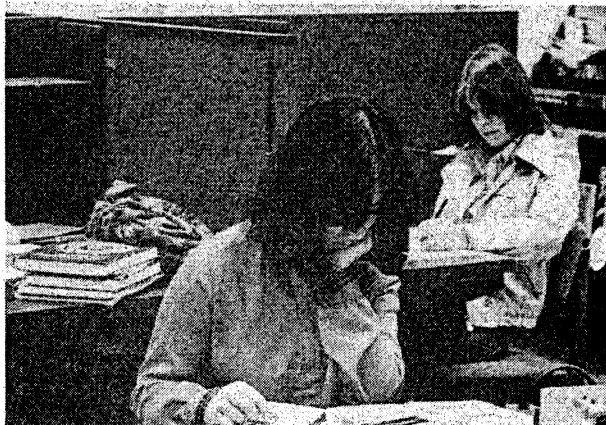
SAMPLE PROGRAM

The following is an example of a first-year program plan for a liberal arts transfer student. This is only an example and your own program could look different. If you are interested in architecture, fine arts, engineering, science or medicine, talk with a counselor.

First Semester	Credit Hours
Communications I	3
Social Science elective	3
Math/Natural Science elective	3-5
Humanities elective	3
*General elective	3
Total Hours	15-17

Second Semester	Credit Hours
Communications II	3
Speech elective	3
Math/Natural Science elective	3-5
Social Science/Humanities elective	3
*General elective	3
Total Hours	15-17

*A general elective could be a course in your own field of interest. Check with a counselor to see if it will transfer to a four-year school.



CAREER PROGRAMS

JCCC's career programs give you the opportunity to study a specific career and enter the job market directly.



Most of JCCC's 30 career programs can be completed in two years or less. There are a few you can complete in one year or less. The career programs now offered are:

- Accounting
- Administration of Justice/Law Enforcement
- Biomedical Equipment Technology
- Business Management
- Commercial Art
- Data Processing
- Dental Assisting
- Dental Hygiene
- Drafting Technology
- Electronics Engineering Technology
- Emergency Medical Technician
- Equine Studies
- Fashion Merchandising
- Fire Protection & Public Safety
- Hospitality Management
- Culinary Career
- Interpreter Training
- Life and Home Management
- Marketing and Management
- Medical Laboratory Technician
- Medical Record Technology
- Mental Health Technology
- Nursing (RN)
- Paralegal
- Physical Therapy Assistant
- Radiologic Technology
- Recreational Leadership
- Respiratory Therapy
- Secretarial Careers
- Small Animal Health
- Urban Agribusiness

Each program has been designed with the assistance of a community advisory committee composed of men and women currently working in the field who are well aware of the requirements – and job potential – in today's market.

If you decide on additional college work, many of the career program courses will transfer to four-year colleges and universities. Several of the career programs also offer you a chance to gain valuable work experience in the community while you study.

Contact the program coordinator or a JCCC counselor if you are interested in a career program or want more information. They can help you consider entrance requirement, course selection and sequence, and job possibilities. Remember, your careful planning and course selection can be just as important in a career program as your dedication in the classroom.

Career programs are described in detail on the following pages, and in the career brochures available in the Admissions/Records Office. You are encouraged to talk with a counselor or program coordinator before you enroll.



ACCOUNTING CAREERS

This dual-purpose accounting curriculum is designed to prepare you to enter the job market at a para-professional level after two years of post-high school study. The program also provides initial preparation for a bachelor's degree. If you are enrolled in a transfer program, you do not need to take the Field Study courses.



Required Accounting and Business Courses		Credits
BAC 4092	Accounting I	3
BUS 1121	Business Law I	3
BAC 6524	Communications I	3
BAC 5096	Accounting II	3
RDP 7135	Bus. Data Processing <i>or</i>	
RDP 6699	Program Fund	3-4
BAC 2036	FS Human Relations	3
BUS 3093	Economics II	3
BAC 3111	FS Business Math	3
BAC	Accounting Elective (see below)	3
BAC 5099	FS Accounting Seminar	3
BUS 1007	Business Communication	3

Recommended Electives 18

Accounting Elective (choose one)

BAC 6299	Intermediate Accounting I
BAC 2436	Cost Accounting
BAC 4218	Account. for Nonprofit Organizations

Required General Courses

Social Science	3
Math	3
Humanities	3

Recommended Electives

BUS 4282	Introduction to Business	3
BUS 5134	Business Law II	3
BAC 4063	Managerial Accounting	3
BAC 2436	Cost Accounting	3
BAC 4218	Acct. for Nonprofit Org.	3

BUS 2253	Economics I	3
BAC 6299	Intermediate Accounting I	3
BAC 6294	Intermediate Accounting II	3
BAC 6038	Savings and Investment	3
BUS 2259	Personal Finance	3
BUS 2341	Personnel Management	3
BUS 7007	Marketing	3
BUS 2360	Federal Income Tax	3



ADMINISTRATION OF JUSTICE/ LAW ENFORCEMENT

The Administration of Justice Program is designed to accommodate a variety of student career goals. Through individual selection of program electives, you may prepare for a career in law enforcement, probation, security, investigation and corrections. You should develop your program plan with the program coordinator.

Associate of Arts Degree	Credits
General Education Requirements	18
Required Program Core Courses	24
Required Program Electives	12
Free Electives	6
TOTAL HOURS	60

General Education Requirements

COM 6524	Communications I	3
COM 1467	Communications II	3
SS 3404	Sociology	3
SS 2678	State and Local Government	3
SS 1068	Introduction to Psychology	3
BSC 1263	Beginning Typing*	3
TOTAL HOURS	18	

*If you can demonstrate proficiency of 35 w.p.m. corrected, you may substitute another course.

Required Program Core Courses

SLE 2080	Intro to Admin. of Justice**	3
SLE 7108	Study of Criminal Justice System	3
SLE 1585	Criminology	3
SLE 4263	Crime Prevention	3
SLE 6432	Police and the Public	3
SLE 4588	Criminal Law**	3
SLE 4418	Constitutional Case Law**	3
SLE 5137	Fundamentals of Crim. Invest.	3
TOTAL HOURS	24	

**If you are certified under Kansas Law 7456.02, you are eligible to receive Experience-Based Education credit for these courses.

Required Program Electives (12 hours—any 4 courses)

If you are a transfer student, you may substitute relevant social science courses for program electives with approval of the program coordinator.

SLE 1160	Juvenile Code and Procedures	3
SLE 7288	Defensive Tactics for Police**	3

SLE	2461	Motor Vehicle Law	3
SLE	6653	Traffic Safety/Accident Invest.	3
SLE	4033	Patrol Procedures	3
SLE	7292	Intro to Criminalistics	3
SLE	7161	Supervisory Techniques	3
SLE	7454	Police Organization & Management	3
SLE	1174	Readings in Police Science	3
SLE	5006	Fundamentals of Private Security	3

Correctional Services Offered at Longview College

Through a cooperative agreement with Longview Community College, you may take all or some of their 12 program elective credits in Correctional Services. The following courses are taught at Longview. You can register for them at JCCC, pay resident fees and have them listed on your JCCC transcript.

ADJU	160	Principles of Corrections	3
ADJU	126	Corrections in the Community	3
ADJU	162	Correctional Psychology	3
ADJU	236	Correctional Administration	3
ADJU	201	Internship in Corrections II	3
ADJU	202	Internship in Corrections II	3
ADJU	165	Theory of Child Care Work in Residential Treatment	3
ADJU	166	Methods of Interacting with Emotionally Sensitive Child	3

Emergency Services Dispatcher Certification

SLE	7108	Study of Crim. Justice System	3
SLE	6432	Police and the Public	3
SLE	4033	Patrol Procedures	3
BSC	1263	Beginning Typing	3
BSC	2376	Intermediate Typing	3
BSC	1342	Records Management	3
COM	6524	Communications I	3
COM	1467	Communications II	3
SS	1068	Introduction to Psychology	3
SLE	5063	Field Study	3
TOTAL HOURS			30



BIOMEDICAL EQUIPMENT TECHNOLOGY

A biomedical equipment technician may work for a hospital, medical equipment manufacturer, medical equipment service firm or as a field service technician selling, maintaining and installing specialized electronic systems used in the health field. A biomedical equipment technician's work may include electrical safety checks; troubleshooting and repairing medical equipment; preventive maintenance procedures; and in-service training of medical personnel. JCCC's program is centered on courses devoted to the fundamentals of electronics, natural sciences and related mathematics. Internship in an area hospital or medical equipment service is required.

Suggested Sequence of Courses

Credits

First Semester

MTH	9000	Math for Electronics I	5
EET	2322	Resistive Circuits	3
EET	5290	Introductory Electronics	3
COM	6524	Communications I	3
TOTAL HOURS			14

Second Semester

MTH	9001	Math for Electronics II	5
EET	5056	Capacitive and Inductive Circuits	3
EET	4289	Resistive Electronics	3
EET	7643	Digital Electronics	3
NS	5381	Medical Terminology	2
TOTAL HOURS			16

Third Semester

EET	7604	Linear Electronics	3
NLS	6186	Human Anatomy and Physiology	5
EMT	6824	Biomedical Equipment Tech. I	3
EMT	4504	Biomedical Electrical Safety	2
COM	1260	Technical Writing	3
TOTAL HOURS			16

Fourth Semester

EET	7490	Nonlinear Electronics	3
EET	4503	Microprocessors	3
EMT	9824	Biomedical Equipment Tech. II	3
NPS	6634	Principles of Chemistry	5
EMT	4505	Biomedical Internship	3
TOTAL HOURS			17



BUSINESS MANAGEMENT

The Business Management Program is designed to help you acquire entry-level skills in the mid-management areas of any business. The program's objectives include:

- increase your awareness of your role as an employee
- increase your awareness of responsibilities of management
- increase your skill in decision-making
- increase your awareness and appreciation of the basic functions of management, i.e., planning, organizing, directing and controlling.

This program is flexible enough to meet the needs of students planning to assume positions of administrative or management responsibility in a variety of areas. Some four-year colleges will accept all the courses in this curriculum although it is not intended to be a transfer program.

Suggested Sequence of Courses

Credits

First Semester

COM	6524	Communications I	3
BUS	4282	Introduction to Business	3
BDP	7135	Business Data Processing	3

BUS	2259	Personal Finance or	
BUS	6038	Savings and Investment	.....3
		Elective	.....3
		TOTAL HOURS	.....15

Second Semester

BAC	4092	Accounting I	.....3
BUS	1007	Business Communication	.....3
BUS	7822	Principles of Management	.....3
MTH	7246	Introduction to Algebra	.....3
		Elective	.....3
		TOTAL HOURS	.....15

Third Semester

BAC	5096	Accounting II	.....3
BUS	2341	Personnel Management	.....3
BUS	2253	Economics I	.....3
BUS	1121	Business Law I	.....3
		Elective	.....3
		TOTAL HOURS	.....15

Fourth Semester

BAC	4063	Managerial Accounting	.....3
BUS	5360	Principles of Supervision	.....3
BUS	3093	Economics II	.....3
BUS	5134	Business Law II	.....3
		Elective	.....3
		TOTAL HOURS	.....15



COMMERCIAL ART

The Commercial Art Program is designed to provide the visual and technical skills, problem-solving ability and creative versatility you will need to be an effective commercial artist. High professional standards, established within the graphic arts industry, are maintained in all courses in this JCCC program. Outstanding



studio facilities offer you in-depth experience with the type of equipment, tools, materials and processes which you will encounter on the job. Full-time faculty and professional advertising artists working in the Kansas City area teach the classes. A major objective of the program is for you to develop a professional portfolio for presentation to prospective employers and job placement after graduation. There are no formal requirements associated with entering the Commercial Art Program. But there is a committee review of all student work at the conclusion of each semester. Your participation in this review is a requirement for continuing in the program.

Suggested Sequence of Courses

Credits

First Semester

HAR	2880	Design 2D	.....3
HAR	7209	Design, Color	.....3
HCA	6862	Basic Representation I	.....3
HPH	5555	Basic Photography I	.....3
HCA	7205	Lettering	.....3
		TOTAL HOURS	.....15

Second Semester

HCA	5863	Basic Representation II	.....3
HPH	6666	Photography II	.....3
HCA	4679	Visual Technology I (S)	.....4
HAR	4028	Silkscreen (S)	.....3
HCA	1861	Layout	.....3
		TOTAL HOURS	.....16

Third Semester

HAR	6021	Design 3D	.....4
HAR	1689	Visual Communications I (F)	.....4
HCA	6688	Visual Technology II (F)	.....4
		Art Elective	.....3
		TOTAL HOURS	.....15

Fourth Semester

HCA	9689	Visual Communications II (S)	.....4
HCA	7690	Preparation of Portfolio**(S)	.....2
HCA	5691	Commercial Art Field Study**(S)	.....3
		Electives	.....6
		TOTAL HOURS	.....15

Suggested Art Electives

HCA	8853	Airbrush Techniques*(R)	.....3
HAR	3564	Introduction to Printmaking*	.....3
HAR	1713	Introduction to Art History	.....3
HAR	3878	Modern Art History	.....3
HAR	7576	Drawing I	.....3
HAR	2021	Life Drawing I*	.....3
HAR	3033	Drawing II*	.....3
HPH	3880	Photography III*	.....3
HAR	6662	Life Drawing II	.....3

*These classes have prerequisites.

**These courses are corequisites and may be taken only with the permission of the coordinator of the Commercial Art Program.

(F) offered fall semester only

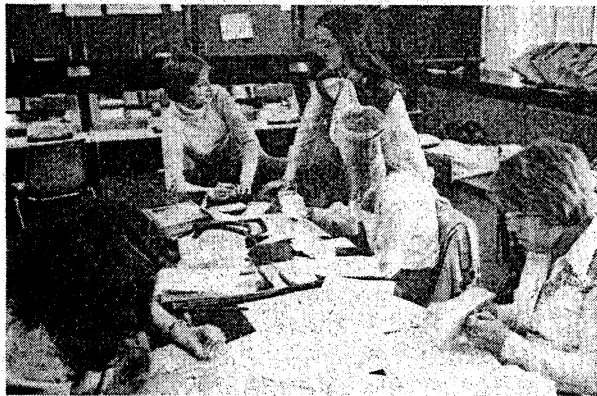
(S) offered spring semester only

(R) offered summer semester only



DATA PROCESSING

You can gain skills for entry-level programming positions or related occupations through this program. On-the-job experience is recommended as part of the curriculum. JCCC's data processing laboratory is open on an unscheduled basis seven days a week (over 80 hours). JCCC's data processing equipment includes a Hewlett Packard 3000 system which provides access to an IBM 370-158 as well as in-house processing. Time-sharing, batch and remote batch processing are used. Programs for some courses will be run on the College's Burroughs B1900. Auxiliary equipment includes keypunches and cathode-ray tubes. You will have the opportunity to code programs on-line using an editor as well as off-line using cards. The course emphasizes practical experience. If you already are in the field of data processing, you may enroll in courses to upgrade and broaden your knowledge.



Required Data Processing Courses		Credits
MTH	3001 Intermediate Algebra	3
BAC	4092 Accounting I	3
BDP	6699 Programming Fundamentals	4
BDP	4700 COBOL I	4
BDP	1702 COBOL II	4
BDP	1698 Assembler Language I (F)	4
BDP	4551 Intro Systems Design/Analysis (F)	3
BDP	6514 Application Programming: Data Processing Topics (S)	3
BDP	7300 Application Programming: Applications (F)	3
BDP	6451 Operating Systems (S)	3
TOTAL HOURS		36

Data Processing Electives

You must take three of the eight courses listed below and at least one elective language.

BDP	6703 FORTRAN	4
BDP	4701 PL/1	4
BDP	1684 Assembler Language II	4
BDP	7683 RPG/II Beginning (S)	4

BDP	5832 RPG/II Advanced (F)	4
BDP	7224 Teleprocessing (F)	3
BDP	1036 Data File Management (S)	3
BDP	6005 OS/JCL (F)	3
BDP	3009 SPSS	4

Suggested Electives

COM	6524 Communications I	3
COM	1467 Communications II	3
CSP	4950 Interpersonal Communication	3
BAC	5096 Accounting II	3
HUM	6392 Logic	3
SS	1068 Psychology	3
BUS	2253 Economics	3
MTH	Math/Additional	
BDP	4023 Pascal	4
BDP	4049 Fundamentals of BASIC	3

(F) offered fall semester only

(S) offered spring semester only



DENTAL ASSISTING

Your successful completion of this cooperative program with Penn Valley Community College enables you to meet requirements for an Associate of Arts degree and to sit for the Certified Dental Assistant examination. You must be accepted into the program at Penn Valley prior to enrolling at JCCC and should plan your program with a counselor. You should take the following courses concurrently at JCCC and Penn Valley. **All courses with NDA prefix are taught at Penn Valley Community College.**

Required Courses at JCCC		Credits
CSP	4950 Interpersonal Communication	3
NPS	6634 Principles of Chemistry	5
COM	6524 Communications I	3
SS	1068 Psychology	3
NLS	6816 Human Anatomy/Physiology	5
SS	3404 Sociology	3
NLS	5593 Microbiology	3
NLS	6057 Microbiology Lab	2
BAC	2171 Small Business Accounting	3
NLS	6152 General Nutrition	3
	Elective	2
NS	5381 Medical Terminology I	2
TOTAL HOURS		37

Required Courses at PVCC

NDA	2041 Fundamentals of Dent. I	5
NDA	1044 Fundamentals of Dent. II	4
NDA	1052 Pre-clinical Practice	4
NDA	2855 Fundamentals of Dent. III	4
NDA	1047 Clinical Practice I	3
NDA	5048 Fundamentals of Dent. IV	3
NDA	6050 Clinical Practice II	5
TOTAL HOURS		28



DENTAL HYGIENE

The dental hygienist, as a member of a modern dental health team, is qualified by education and licensure to provide direct service for maintenance of oral health and prevention of disease. The Dental Hygiene Program is fully accredited by the American Dental Association's Commission for Accreditation of Dental and Dental Auxiliary Education. The program consists of two full academic years and one summer session. The dental hygiene clinic on campus is used to develop your efficiency in clinical techniques under the supervision of a licensed dentist and registered dental hygienists. In addition, learning experiences are arranged so you can help raise the dental health standards throughout the community. The application packet for the Dental Hygiene Program, available in the Admissions/Records Office, includes information about deadlines, admission, and options for meeting academic criteria.



Suggested Sequence of Courses		Credits
First Semester		
NDH	7252 Clinical Dental Hygiene I	6
NDH	2339 Head and Neck Anatomy	3
NDH	7253 Developmental Dentistry	3
NPS	6634 Principles of Chemistry	5
TOTAL HOURS		17
Second Semester		
NDH	7254 Clinical Dental Hygiene II	5
NDH	6266 Dental Radiology	2
NLS	6152 Nutrition	3
NLS	1144 Human Physiology	4
NDH	7255 Periodontics	1
NDH	7256 Dental Health Education	1
SS	1068 Psychology	3
TOTAL HOURS		19

Third Semester (Summer)

NLS	5593 Microbiology	3
COM	6254 Communications I	3
SS	3404 Sociology	3
TOTAL HOURS		9

Fourth Semester

NDH	7257 Clinical Dental Hygiene III	7
NDH	7258 Pathology and Periodontics	3
NDH	7259 Dental Therapeutics	3
NDH	5250 Dental Materials	2
NDH	7260 Community Dental Health	2
TOTAL HOURS		17

Fifth Semester

NDH	7261 Clinical Dental Hygiene IV	7
CSP	4950 Interpersonal Communications	3
TOTAL HOURS		10



DRAFTING TECHNOLOGY

The drafting technology curriculum provides a comprehensive program based on standards for drafting technicians which industries in the Kansas City area have established. Drafting technicians work in areas such as machine production; electronics; structural, architectural and technical illustration; and cartography. Duties may include detailed production drawings, assemblies, schematics, specifications, pictorials, reproductions, photographs, estimating, inspection and design. Projects and laboratory procedures in this program will be similar to those used in industry. The laboratory is equipped with up-to-date drafting, photo-mechanical and reproduction equipment. If you take the courses below in the sequence indicated, you should be able to develop a portfolio reflecting your skills in design, photodrafting, technical illustration and reproduction techniques.

Suggested Sequence of Courses		Credits
First Semester		
EDT	5810 Technical Drafting I	5
EDT	1813 Reprographics I	2
MTH	2942 Industrial Math I	5
COM	6524 Communications I (or Elective)	3
TOTAL HOURS		15
Second Semester		
EDT	2811 Technical Drafting II	5
EDT	7812 Pictorial Drafting	2
MTH	2943 Industrial Math II	5
	Selected Drafting Class or Elective	3
TOTAL HOURS		15
Third Semester		
	Selected Drafting Classes	5-8
EGR	5269 Industrial Science I	3
EGR	4661 Processes & Materials of Manufact.	3

Elective 3
TOTAL HOURS 14-17

Fourth Semester

Selected Drafting Classes 6-8
 EGR 3315 Industrial Science II 3
 EGR 7118 Building Materials & Construction ... 3
 Elective 2-3
TOTAL HOURS 14-17

Selected Drafting Courses

EDT 4011 Interpreting Architectural Drawings .. 2
 EDT 4013 Electronics Drafting 2
 EDT 2915 Architectural Drafting* 3
 EDT 4014 Process Piping* 3
 EDT 2297 Technical Illustration 3
 EDT 4012 Interpreting Machine Drawings 2
 EDT 4010 Reprographics II* 2
 EDT 1916 Structural Drafting* 3
 EDT 5924 Electrical Drafting* 3
 EDT 4015 Cartography and Land Surveying* ... 3
 EDT 1229 Building Construction Estimating ... 3
 EDT 6016 Interpretation of Welding Drawings .. 2

*Courses have prerequisites.

Suggested Electives

EDT 7674 Graphic Communication 1-7
 EGR 1243 Engineering Graphics I 3
 BUS 2253 Economics I 3
 CSP 4950 Interpersonal Communication 3
 HPH 5555 Photography I 3
 BUS 2259 Personal Finance 3
 BUS 2341 Personnel Management 3
 MTH Math (Additional)
 NPS 1031 Physical Science (Additional)
 COM 1260 Technical Writing 3



ELECTRONICS ENGINEERING TECHNOLOGY

This program focuses on a core of courses devoted to the fundamentals of electronics and related mathematics. Laboratory instruments comparable to those used by industry are available for diagnosing problems and repairing equipment. The "open lab" concept allows you access to the electronics lab during the week. The following suggested sequence of courses is designed to provide comprehensive, theoretical and practical information in electronics technology. The goal of the program is to train you for job entry in the electronics industry upon graduation. But you also may select to enter the JCCC Biomedical Equipment Technician Program. The first-year requirements for this program and the Electronics Engineering Technology Program are almost identical. So you may choose to switch programs any time before the start of the second year. Another alternative is to attend a four-year college or university for two more years of

study in electronic engineering technology and earn a B.S. in engineering technology.

Suggested Sequence of Courses

Credits

First Semester

EET 5290 Introductory Electronics 3
 EET 2322 Resistive Circuits 3
 MTH 9000 Math for Electronics I 5
 COM 6524 Communications I 3
TOTAL HOURS 14

Second Semester

EET 5056 Capacitive & Inductive Circuits 3
 EET 4289 Resistive Electronics 3
 EET 7643 Digital Electronics 3
 MTH 9001 Math for Electronics II 5
TOTAL HOURS 14

Third Semester

EET 7604 Linear Electronics 3
 EET 4065 Basic Computer Components 3
 EGR 7724 Programming for Eng. & Science ... 4
 EGR 5269 Industrial Science I 3
 COM 1260 Technical Writing 3
TOTAL HOURS 16

Fourth Semester

EET 7490 Nonlinear Electronics 3
 EET 2468 Electronic Comm. Systems 3
 EET 4503 Microprocessors 3
 EGR 3315 Industrial Science II 3
 Nontechnical Elective 4
TOTAL HOURS 16



EMERGENCY MEDICAL TECHNICIAN

This short-term certificate program requires approximately 120 class hours to complete. If you successfully complete the program, you will meet the educational prerequisite for taking the State Registry Examination for Emergency Medical Technicians. An additional fee for taking the registry examination is required at the time of testing. Classroom instruction will include basic anatomy and physiology, pathophysiology, emergency recognition and care of acute medical emergencies and trauma-related injuries. The program also teaches skills in performing CPR, bandaging, splinting, childbirth techniques and other emergency care procedures. In addition, you will spend 10 hours of in-hospital observation in such areas as the recovery room, intensive care unit and the emergency, obstetric and psychiatric departments. A simulated automobile accident will help you gain first-hand experience in auto extrication—the safe removal of accident victims from their vehicles.

Any Semester

Credits

NET 6441 Emergency Medical Technician 5



EQUINE STUDIES

The Equine Studies Program is designed to prepare you to earn a living while working with horses. Part of the instruction also is designed to help you improve your skills in riding, training, judging or caring for horses. The Riding Instructor Certificate Program requires 30 credit hours of specialized course work in equine skills. You may apply these hours to giving lessons in horsemanship, managing a small business, learning basic riding techniques and sharpening your competitive skills for entering horse shows. The Associate of Arts Degree Program is designed to prepare you for a career as a stable owner or manager, breeder, trainer or a manager of other programs and facilities in today's horse industry.

Associate of Arts Program

Suggested Sequence of Courses

Credits

First Semester

COM 6524	Communications I	3
SES 1216	Stable Management	3
SES 2335	Equine Anatomy and Physiology	4
SES 1395	Western Equitation	2
SES 2352	Basic Horse Training	2
	Elective	3
	TOTAL HOURS	17

Second Semester

COM 1467	Communications II	3
SS 1068	Introduction to Psychology	3
SES 3820	Equine Health & Disorders	4
SES 1880	English Equitation	2
SES 3784	Advanced Horse Training*	2
	Elective	3
	TOTAL HOURS	17

Third Semester

CSP 4950	Interpersonal Communications	3
BAC 2171	Small Business Accounting	3
SES 3029	Equine Breeding & Management	4
SES 4139	Intermediate Western Equitation*	
	or	2
SES 4140	Intermediate English Equitation*	
SES 1103	Equine Showmanship	2
	Elective	3
	TOTAL HOURS	17

Fourth Semester

BUS 2341	Personnel Management	3
SES 1156	Basic Horseshoeing	3
SES 1350	Equine Nutrition	4
SES 2430	Advanced Western Equitation*	
	or	2
SES 3762	Advanced English Equitation*	
SES 1308	Equine Judging	2
	Elective	3
	TOTAL HOURS	17

Riding Instructor Certification Program

Suggested Sequence of Courses

First Semester

SES 1216	Stable Management	3
SES 1184	Tech. of Riding Instruction I	3
SES 1395	Western Equitation	2
SES 1880	English Equitation	2
SES 2352	Basic Horse Training	2
	Elective	3
	TOTAL HOURS	15

Second Semester

SES 1237	Tech. of Riding Instruction II*	3
SES 2430	Advanced Western Equitation*	2
SES 3762	Advanced English Equitation*	2
SES 3784	Advanced Horse Training*	2
SES 1103	Equine Showmanship	2
SES 1308	Equine Judging	2
SES 3489	Advanced Equitation Project	2
	TOTAL HOURS	15

*Prerequisite course work required.



FASHION MERCHANDISING

In the Fashion Merchandising Program you will take courses related to merchandising, marketing and management because they are competitive areas which apply to today's fashion field. The fashion industry includes five areas of operation: textile, apparel designs, manufacturing, media and promotion, and retailing. JCCC's Fashion Merchandising Program is a combination of campus instruction and on-the-job training experiences in fashion-related fields. Field experiences are an essential part of the program. You will be guided through behind-the-scene operations in Kansas City stores to observe the network of sales-supporting activities as well as manufacturing operations. You also will have the option to participate in field experiences in Dallas, New York City, the Orient and Europe.

Suggested Sequence of Courses

Credits

First Semester

BFM 2017	Seminar: Human Relations (F)	3
BFM 7013	Fashion Fundamentals I (F)	3
BFM 3046	Fashion in Society	3
BMM 1026	Retailing	3
	Elective	3
	TOTAL HOURS	15

Second Semester

BFM 2204	Seminar: Supervisory Develop. (S)	3
BFM 1195	Textiles	3
BMM 2407	Creative Retail Selling	3
BFM 4655	Fashion Promotion (S)	3
	Elective	3
	TOTAL HOURS	15

Third Semester

BFM	7552	Seminar: Career Options (F)	3
BFM	1019	Fashion Fundamentals II (F)	3
BUS	7007	Marketing	3
BFM	1054	Fashion Display (F)	3
		Elective	3
		TOTAL HOURS	15

Fourth Semester

BFM	1165	Seminar: Marketing Research (S)	3
BFM	3503	Merchandise Evaluation (S)	3
BUS	2004	Intro. to Economic Issues	3
		Electives	6
		TOTAL HOURS	15

Suggested Electives

BFM	2568	History of Dress (S)	3
BFM	5294	Fashion Illustration I	3
BFM	1926	Fashion Illustration II (S)	3
BFM	5149	Interior Design I	3
BFM	2925	Interior Design II	3
BFM	2259	Personal Finance	3
BFM	4092	Accounting I	3
HAR	1192	Weaving	3
BUS	2341	Personnel Management	3
BUS	1121	Business Law I	3
BDP	7135	Business Data Processing	3
COM	6524	Communications I	3
MTH	2122	Fundamentals of Math	3
CSP	4950	Interpersonal Communication	3
SS	3404	Sociology	3
SS	1068	Psychology	3

(F) offered in fall semester only.

(S) offered in spring semester only.



FIRE PROTECTION/PUBLIC SAFETY

The associate degree and certificate programs are designed to provide advanced professional training to fire fighters, architects, insurance adjustors and others with fire and safety interest. This program allows you to work on a 30-credit-hour certificate program in fire prevention, fire protection or fire service administration. You may receive an associate degree by combining two 30-credit-hour programs or by completing one certificate program and an additional 30 credit hours of relevant course work.

Prevention

Credits

EFS	1745	Fundamentals of Fire Prevention	3
EFS	2742	Hazardous Materials I	3
EFS	6749	Hazardous Materials II	3
EFS	3744	Building Construction for Fire Protection	3
EFS	4750	Fire Investigation	3
		Electives	15
		TOTAL HOURS	30

Administration

EFS	1752	Fire Company Organization and Management	3
EFS	4754	Fire Service Comm. Systems	3
EFS	5746	Fire Service Records & Reports	3
EFS	6753	Related Codes & Ordinances	3
		Electives	18
		TOTAL HOURS	30

Protection

EFS	1743	Introduction to Fire Science	3
EFS	1748	Fire Hydraulics	3
EFS	3757	Fire Apparatus and Equipment	3
EFS	4751	Fire Protection Equipment and Systems	3
EFS	5756	Fire Tactics and Strategy	3
NET	6441	Emergency Medical Technician	5
		Electives	10
		TOTAL HOURS	30

Technical Electives

EFS	6747	Fire Vehicle Maintenance for Operators and Mechanics	3
EFS	6755	Rescue Practices	3
NPS	6634	Principles of Chemistry	5
EGR	5269	Industrial Science	3
MTH	4354	Technical Math I	5
SLE	7108	Criminal Justice System	3
EFS	2415	Seminar: Fire Protection and Public Safety	1
		*Major Disasters & Civil Disorders	3
		*Investigative Photography	3
		*Readings in Fire & Safety Tech.	1-3

Nontechnical Electives

COM	5035	Fundamentals of Writing	3
CSP	4950	Interpersonal Communication	3
SS	1068	Introduction to Psychology	3
		*Public Relations	3
		*Industrial Supervision	3

*Courses yet to be developed.



HOSPITALITY MANAGEMENT

You choose from two options in the Hospitality Management Program at JCCC. You may earn either a one-year certificate or a two-year degree which emphasizes management skills. The program emphasizes principles of restaurant and hotel management including food purchasing and preparation, planning menus and service for all types of food operations, beverage control, sanitation laws, supervision of hotel and restaurant employees, and office procedures and techniques used in lodging establishments. Primary emphasis is on training you for job entry management positions. But the program also is designed to help you broaden and update your skills and knowledge. Plan your program with the program coordinator.



Suggested Sequence of Courses Credits

First Semester

BHM 6037	Hospitality Management Fund	3
BHM 7028	Basic Food Preparation	3
COM 6524	Communications I	3
BHM 1287	Seminar: Purchasing	3
	Elective	3
TOTAL HOURS		15

Second Semester

BHM 3006	Food Management	3
BHM 4489	Supervisory Management	3
BHM 5008	Seminar: Accounting	3
BUS 2341	Personnel Management	3
	Elective	3
TOTAL HOURS		15

Summer Session

BHM 2640	Seminar: Internship	3
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Third Semester

BHM 4805	Seminar: Menu Planning and Sales Promotion	3
BHM 4203	Hotel-Restaurant Operations	3
BHM 3804	Design Techniques	2
CSP 4950	Interpersonal Communications	3
	Elective	3
TOTAL HOURS		14

Fourth Semester

BHM 7803	Advanced Food Prep. & Meats	4
BHM 1388	Seminar: Advanced Hosp. Mgmt.	3
BHM 4807	Seminar: Beverage Control	3
	Elective	3
TOTAL HOURS		13

Suggested Electives

BDP 7135	Business Data Processing	3
CJO 2136	Fundamentals of Advertising	3
HUM 6392	Logic	3
PD 1078	Phys. Fitness & Weight Training	1
SS 1068	Psychology	3
BAC 2171	Small Business Accounting	3
BUS 2259	Personal Finance	3
BMM 5026	Salesmanship	3

BUS 1121	Business Law I	3
BUS 5134	Business Law II	3
BUS 7007	Marketing	3
NLS 6540	Life Science	4
NLS 6152	General Nutrition	3



HOSPITALITY MANAGEMENT/CULINARY

Culinary arts is one of the most dynamic fields you can enter. Because of the steady increase in disposable income, the average family eats out more often than previous generations, thus creating a tremendous growth in the hospitality industry. The restaurant/food service industry is the third largest in the United States.

This program consists of three years (6,000 hours) on-the-job training. You will be on probation during the initial 500 hours. Upon job placement, you will be eligible to join the American Culinary Federation Educational Institute for registered apprentice membership. Also, at this time you will be registered with the Department of Labor and will be officially indentured to your supervising chef and the sponsoring American Culinary Federation affiliate chapter.

Suggested Sequence of Courses Credits

First Semester

BHM 6037	Hospitality Management Fund	3
BHM 7028	Basic Food Preparation	3
BHM 2913	Practicum I	2
TOTAL HOURS		8

Second Semester

BHM 4807	Seminar in Beverage Control	3
BHM 4489	Supervisory Management	3
BHM 4941	Practicum II	2
TOTAL HOURS		8

First Summer

COM 6524	Communications I	3
	Elective	3
TOTAL HOURS		6

Third Semester

BHM 1287	Seminar in Purchasing	3
BHM 2166	Food Specialties: Garde-Manger	3
BHM 5942	Practicum III	2
TOTAL HOURS		8

Fourth Semester

BHM 7803	Advanced Food Preparation	3
BHM 5008	Seminar in Accounting	3
BHM 7942	Practicum IV	2
TOTAL HOURS		8

Second Summer

CSP 4950	Interpersonal Communications	3
	Elective	3
TOTAL HOURS		6

Fifth Semester		
BHM 4805	Menu Planning	3
BHM 6944	Practicum V	2
	Elective	3
TOTAL HOURS		8

Sixth Semester		
BHM 1388	Seminar in Adv. Hosp. Mgmt.	3
BHM 2163	Fundamentals of Baking	3
BHM 9945	Practicum VI	2
TOTAL HOURS		8



INTERPRETER TRAINING

This comprehensive program provides skills in interpreting and basic knowledge and awareness of the hearing impaired to prepare you for jobs in a variety of interpreting situations. The trend for interpreting services for the future looks promising as more social agencies, school systems, medical services and industries are providing interpreting services for the hearing impaired.

You have the choice of entering a comprehensive two-year A.A. degree program or a certificate program. Upon completion of the program you will experience a practicum class that will give you interpreting experience with supervision in a variety of situations at JCCC and in the community.

The Interpreter Training Program is designed to prepare you to pass the professional evaluation of interpreters given by the National Registry of Interpreters for the Deaf and for entry level interpreting positions.



Suggested Sequence of Courses Credits

First Semester

LC 7029	Basic Manual Communications	3
LC 1818	Sign Language Lab	1
LC 5166	Orientation to Interpreting	3
COM 6524	Communications I	3
NLS 6186	Human Anatomy/Physiology	5
TOTAL HOURS		15

Second Semester

LC 6053	Advanced Manual Communications	3
LC 5167	Comm. Systems of Deafness I	3
LC 5169	Understanding Deafness	3
COM 1467	Communications II	3
SS 1068	Introduction to Psychology	3
TOTAL HOURS		15

Third Semester

LC 5168	Comm. Systems of Deafness II	3
LC 5170	Interpreting I	3
CSP 4130	Public Speaking	3
SS 3404	Sociology	3
	Elective	3
TOTAL HOURS		15

Fourth Semester

LC 5171	Interpreting II	3
LC 5172	Interpreting Practicum	3
	Hum/Soc. Sci Electives	6
	Elective	3
TOTAL HOURS		15

Interpreter Certificate Program

LC 7029	Basic Manual Communications	3
LC 1818	Sign Language I Lab	1
LC 5166	Orientation to Interpreting	3
LC 6053	Advanced Manual Communications	3
LC 5167	Comm. Systems of Deafness I	3
LC 5169	Understanding Deafness	3
LC 5168	Comm. Systems of Deafness II	3
LC 5170	Interpreting I	3
LC 5171	Interpreting II	3
LC 5172	Interpreting Practicum	3
TOTAL HOURS		28



LIFE AND HOME MANAGEMENT

The development of human relations and home management skills is becoming more important as today's individuals and families face new complexities and crises, changes in lifestyles and socio-economic problems.

The fact that women are becoming more involved in jobs outside the home, coupled with changes in traditional male/female roles, means that both men and women need to develop better skills in managing lifestyles in the home.

You may choose to complete a 30-hour certificate program in life and home management. Or you may pursue an associate degree by combining the certificate program and completing an additional 30 credit hours of course work in another career program or in General Studies.

Certificate Program

30 Hours in Life and Home Management

Suggested Sequence of Courses

First Semester

BLH 7004	Home Management	3
BLH 7003	Family Communications	3
BLH 2859	Nutrition/Meal Planning (F)	3
	Electives	6
	TOTAL HOURS	15

Second Semester

BUS 2259	Personal Finance	3
BFM 3046	Fashion & Society	3
BLM 2858	Housing & Equipment (S)	3
BFM 5149	Interior Design I	3
	Elective	3
	TOTAL HOURS	15

Associate of Arts Degree

30 Hours in Life and Home Management

**30 Hours in One of the Existing Career Programs
(or in General Studies)**

Suggested Sequence of Courses

First Semester

BLH 7004	Home Management	3
BHM 5149	Interior Design I	3
	Electives	9
	TOTAL HOURS	15

Second Semester

BLH 7003	Family Communications	3
BUS 2259	Personal Finance	3
	Electives	9
	TOTAL HOURS	15

Third Semester

BLH 2859	Nutrition/Meal Planning (F)	3
BFM 3046	Fashion & Society	3
	Electives	9
	TOTAL HOURS	15

Fourth Semester

BLH 2858	Housing & Equipment (S)	3
BHM 2925	Interior Design II*	3
	Electives	9
	TOTAL HOURS	15

*Suggested

(F) offered fall semester only

(S) offered spring semester only

Suggested Electives

LC 2002	Human Potential Seminar	3
SS 1068	Psychology	3
SS 3546	Child Development	3
SS 5716	Marriage and Family	3

BFM 2925	Interior Design II	3
BFM 1195	Textiles	3
LC 7227	Career/Life Planning	3
BSC 1342	Records Management	3
SS 4639	Personality and Adjustment	3
BUS 6038	Savings and Investment	3
CSP 4950	Interpersonal Communications	3
SS 8975	American Family History	3



MARKETING AND MANAGEMENT

This comprehensive, two-year program is designed to prepare you for a career in retail, wholesale or manufacturing sales; in marketing research analysis; store management; and buying and service sales. As a full-time or part-time student in this program, you will attend classes at JCCC and, on an individual basis, participate in a formal career experience program (on-the-job training) in a business. Instruction on the job and at the College is integrated to provide the knowledge, skills and attitudes you need to reach your career objectives.



Approved work experience in a related marketing or management position in the community provides you an opportunity to check your theoretical training against the everyday problems of a practical business operation. The evaluation of your progress on the job is a cooperative effort between the training sponsor/employer and College coordinator. While on the job, you may acquire basic merchandising information and learn how to deal with people. The program coordinator may arrange for job interviews if you are seeking employment. If you already have a job, it must be approved by the coordinator. While in training you will be paid a wage you and your employer agree upon.

Required Courses		Credits
BMM 5026	Salesmanship or	3
BMM 2407	Creative Retail Selling	(3)
BMM 1206	Retailing	3
BMM 1303	Retail Advertising & Display	3
BUS 7007	Marketing	3
BUS 1121	Business Law	3
BAC 2171	Small Business Accounting	3
BMM 2370	Sales Management	3
BUS 5360	Principles of Supervision	3
BUS 7822	Principles of Management	3
TOTAL HOURS		27

Work Experience Courses		Credits
BMM 1060	Seminar: Organization & Operation .	3
BMM 2155	Seminar: Sales Promotion/Mgmt. .	3
BMM 1283	Seminar: Mgmt. Decision-Making .	3
BMM 7076	Seminar: Marketing Analysis	3
BMM 6072	Seminar: Marketing Research	3
TOTAL HOURS		15

Suggested Electives		Credits
Develop your program plan through the Marketing and Management coordinator from the following electives:		
BDP 7135	Business Data Processing *	
COM 6524	Communications I	
CSP 4950	Interpersonal Communication	
BUS 4282	Introduction to Business	
SS 3404	Sociology	
SS 1068	Introduction to Psychology	
BUS 2004	Introduction to Economic Issues	
BUS 2341	Personnel Management	
	Math-related courses	
	Fashion-related courses	
	Advertising-related courses	



MEDICAL LABORATORY TECHNICIAN

The medical laboratory technician is a valuable member of the health care team. The MLT works under the direct supervision of a medical technologist in a variety of settings. During the campus year, you will acquire a foundation in biological, physical and social sciences and communication skills. During the clinical year, you will apply this foundation to the performance of clinical laboratory procedures and to working relationships with laboratory staff.

The program is designed so you will be prepared to pursue a Bachelor's degree if you wish. The Medical Laboratory Technician Program is a cooperative program between JCCC and Penn Valley Community College. You must be formally accepted by both JCCC and Penn Valley Community College to be admitted into the program. The supportive courses will

be held at JCCC and essential courses at Penn Valley. Register for all courses at JCCC. You will receive an Associate of Arts degree when you successfully complete the program.

Required Courses at JCCC		Credits
NLS 6186	Human Anatomy and Physiology .	5
NPS 6634	Principles of Chemistry	3
COM 6524	Communications I	3
NLS 5593	Microbiology	3
NLS 6057	Microbiology Lab	2
NPS 2650	Principles of Organic Chemistry .	5
MTH 3001	Algebra	3
CSP 4950	Interpersonal Communications .	3
TOTAL HOURS		27

Required Courses at PVCC		Credits
NLT 9759	Diagnostic Parasitology & Mycology .	1
NLT 9760	Intro. to Clinical Lab	1
NLT 9761	Fund. Tech. & Proc.	3
NLT 9762	Diagnostic Microbiology	3
NLT 9763	Clinical Practicum I	5
NLT 9764	Clinical Chemistry	4
NLT 9765	Hematology	3
NLT 9766	Clinical Practicum II	10
NLT 9767	Departmental Seminar	3
NLT 9768	Applied Immunology	3
NLT 9769	Clinical Practicum III	10
TOTAL HOURS		46



MEDICAL RECORD TECHNOLOGY

The medical record technician has the technical skills 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 medical record technician. The College faculty teach some of the courses at Baptist Memorial Hospital. You will be responsible for transportation to Baptist Memorial Hospital and to all other clinical agencies.

When you graduate from the program, you will receive an Associate of Arts degree and will be eligible to take the accreditation examination of the American Medical Record Association. Application packets for the Medical Record Program, available at the Admissions/Records Office, include specific information on admission requirements and procedures. The program is accredited by the Committee on Allied Health Education and Accreditation in collaboration with the American Medical Record Association.

Suggested Sequence of Courses

Credits

First Semester

NMR	1135	Intro. to Med. Record Profession	2
NMR	2681	Health Record Systems, Analysis and Controls	3
NLS	6186	Human Anatomy/Physiology	5
COM		Elective	3
		Elective	3
		TOTAL HOURS	16

Second Semester

NMR	2685	Health Statistics & Research Meth.	2
NMR	2682	Classifications, Nomenclatures, Indices and Registries	2
NLS	1037	Pathophysiology	3



BSC	4715	Medical Transcription	3
NMR	2686	Medical Terminology IV	3
NMR	7111	Directed Practice I	3
		TOTAL HOURS	16

Third Semester

BDP	7135	Business Data Processing	3
NMR	2683	Quality, Assurance & Selected Health Record Systems	3
NMR	1325	Directed Practice II	4
BUS	2341	Personnel Management	3
		Elective	3
		TOTAL HOURS	16

Fourth Semester

NMR	2684	Legal Aspects of Med. Records	2
NMR	2345	Departmental Seminar	2
NMR	3117	Directed Practice III	5
SS	1068	Psychology	3
COM		Elective	3
		Elective	3
		TOTAL HOURS	18

Electives

15 hours to be chosen from this list:

Communications	6
Mathematics	3
Humanities	3
Natural Science	4-5
Typing	3
Social Sciences	3
Speech	3



MENTAL HEALTH TECHNOLOGY

Kansas regulations require that anyone giving therapy to patients in a state-approved mental institution be certified as a mental health technician. The State Board of Nursing specifies the general curriculum for this program. The curriculum must be nine months and contain 900 clock hours of instruction. The requirements for specific courses and semester hour/contact hour equivalents are explained in the rules and regulations for mental health technicians. The proposed curriculum below follows these rules and meets the requirements.

Nonclinical Courses at JCCC

Credits

SS	1068	Introduction to Psychology	3
SS	3546	Child Development	3
SS	3428	Social Problems	3
SS	5716	Marriage and the Family	3
NLS	6186	Human Anatomy/Physiology	5
		TOTAL HOURS	17

Clinical Courses at Rainbow Unit

NMH	8881	Mental Health Technology I	4
NMH	2883	Mental Health Technology II	6
NMH	7884	Mental Health Technology III	6
NMH	4885	Mental Health Technology IV	7
		TOTAL HOURS	23

About 480 clock hours are devoted to theory and 460 clock hours to clinic or laboratory. This is slightly in excess of the state-required minimum, but is built as much as possible around courses JCCC currently offers. An additional 20 hours of credit classes are required to receive an Associate of Arts degree from JCCC.



NURSING

JCCC's Associate Degree Nursing Program is accredited by the Kansas Board of Nursing and the National League for Nursing. When you successfully complete the sequence of courses listed below, you will be eligible to take the licensing examination to become a registered nurse. If you wish to enter the Nursing Program, you must meet the academic standards as defined in the admissions criteria. If you have not completed high school, you must have an acceptable GED score. The ability to work cooperatively and productively with others is essential. The program is difficult and requires long hours of class, laboratory and study. The ability to manage stress and stressful situations and the flexibility to meet the demands of the program are important considerations.

Suggested Sequence of Courses Credits

Summer	
NDS 6634	Principles of Chemistry** 5
First Semester	
NLS 1128	Anatomy 4
SS 1068	Psychology 3
NRN 8846	Concepts of Health 8
TOTAL HOURS 15	
Second Semester	
NLS 1144	Physiology 4
SS 3546	Child Development 3
NRN 3131	Adaptation to Change 8
TOTAL HOURS 15	
Third Semester	
NRN 2847	Short Term Health Problems 9
	Social Science Elective* 3
	Communications* 3
TOTAL HOURS 15	
Fourth Semester	
NRN 5848	Long Term Health Problems 9
	Humanities Elective* 3
	Natural Science Elective* 5
TOTAL HOURS 17	

*You may select specific courses to meet these requirements from this list:

- Social Sciences: Sociology, Social Problems
- Communications: Communications I, II, Creative Writing
- Humanities: Course should be selected in consultation with the program coordinator.

**It is recommended you take Principles of Chemistry in the summer prior to the program to satisfy prerequisites. This also satisfies fourth semester Natural Science requirements. Microbiology is optional but recommended for the program.



PARALEGAL

The Paralegal Program is designed to prepare you for a career as a paralegal or legal assistant. Through a basic understanding of the law within contemporary legal context and by means of an appropriate sequence of courses, you can become qualified to pursue a quasi-legal career with high levels of proficiency and responsibility. In a wide variety of situations related to the practice of law, the paralegal directly assists attorneys in all phases of their practice under their supervision and practice. If you are interested in a paralegal career, you need writing skills, the ability and willingness to accept responsibility, an aptitude for organizing ideas and materials, and the ability to communicate and take directions. With an attorney's supervision and direction, a paralegal can expect to:

- prepare, summarize and interpret a variety of legal documents and pleadings
- analyze, compile and utilize information from legal and technical sources, including legal research
- conduct client and witness interviews and investigations
- handle office administrative duties

The Paralegal Program offers a certificate upon completion of 30 credits, if you wish only to improve your knowledge and qualifications. Or you may obtain an Associate of Arts degree upon completion of 60 credits. The Associate of Arts degree is approved by the American Bar Association.



Associate of Arts Degree (60 credits)

Required Courses		Credits
BPL 9739	Introduction to Paralegalism 3	
BPL 7740	Legal Research and Writing 3	
BPL 5413	Seminar: Workmen's Compensation and Bankruptcy 3	
BPL 7980	Seminar: Legal Interviewing and Investigation 3	
COM 6524	Communications I 3	
CSP 4950	Interpersonal Communication 3	
	Paralegal Electives (see list) 18	
	General Electives 24	
TOTAL HOURS 60		

Certificate Program (30 Credits)

Required Courses		Credits
BPL 9739	Introduction to Paralegalism 3	
BPL 7740	Legal Research & Writing 3	
BPL 5413	Seminar: Workmen's Compensation and Bankruptcy or 3	
BPL 7980	Seminar: Legal Interviewing and Investigation 3	
COM 6524	Communications I 3	
CSP 4950	Interpersonal Communication 3	
	Paralegal Electives (see list) 12	
	General Electives 3	
TOTAL HOURS 30		

Paralegal Elective Courses

BPL	2828	Real Estate Law I	3
BPL	7826	Wills, Trusts & Probate Admin.	3
BPL	2184	Business Organizations I	3
BPL	7917	Litigation I	3
(Two of the above four courses must be taken.)			
BPL	1910	Family Law	3
BPL	2175	Law Office Systems	3
BPL	9918	Commercial Transactions	3
BPL	6090	Real Estate Law II	3
BPL	2218	Estate Planning	3
BPL	3320	Business Organizations II	3
BPL	8940	Litigation II	3

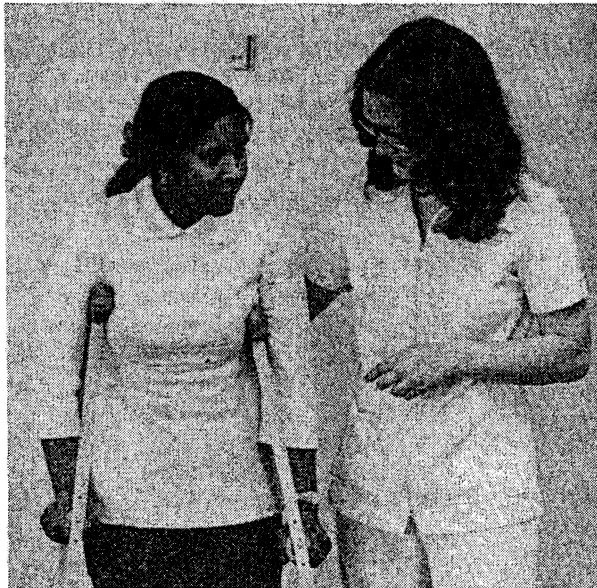


PHYSICAL THERAPY ASSISTANT

The physical therapy assistant, under the supervision of a licensed physical therapist, performs direct patient care, using physical agents such as heat, light, sound, water, cold, massage, exercise and rehabilitation techniques as prescribed by a physician.

Physical Therapy Assistant is a cooperative program between JCCC and Penn Valley Community College. You must be formally accepted by both JCCC and Penn Valley to be admitted to the program. The supportive courses will be held at JCCC and the core courses at Penn Valley and affiliate clinical agencies. Register for all courses at JCCC. You will receive an Associate of Arts degree upon graduation from JCCC.

The Physical Therapy Assistant Program at Penn Valley Community College is accredited by the American Physical Therapy Association.



Required Courses at JCCC

		Credits	
NS	5381	Medical Terminology I	2
NLS	6540	Life Science	4
SS	1068	Introduction to Psychology	3
NPS	6634	Principles of Chemistry	5
SS	3404	Sociology	3
NLS	1128	Human Anatomy	4
COM	6540	Communications I	3
CSP	4950	Interpersonal Communications	3
NLS	1144	Physiology	4
TOTAL HOURS			31

Required Courses at PVCC

NPT	9770	Introduction to Physical Therapy	2
NPT	9771	Fundamentals of Physical Therapy	3
NPT	9772	Kinesiology	4
NPT	9773	Therapeutic Modalities	5
NPT	9774	Rehabilitation	4
NPT	9775	Therapeutic Exercise	5
NPT	9776	Clinical Pathology	3
NPT	9777	Clinical Experience I	3
NPT	9778	Clinical Seminar	1
NPT	9779	Clinical Experience II	11
NPT	9780	Clinical Seminar II	2
TOTAL HOURS			43



RADIOLOGIC TECHNOLOGY

The Radiologic Technology Program (X-ray technology) consists of a continuous 27-month period. You will study areas such as radiographic exposure, positioning and anatomy and gain an understanding of the equipment used. This is a cooperative program between JCCC and Penn Valley Community College. You must formally be accepted by both JCCC and Penn Valley to be admitted to this program. Excellent employment opportunities in this field will continue to exist in the Kansas City area. Current trends show more job openings than there are qualified technicians to fill them. Most graduates will be employed in hospitals. More job openings are becoming available in health maintenance organizations and private practices.

Required Courses at JCCC

		Credits	
SS	1068	Introduction to Psychology	3
COM	6540	Communications I	3
SS	3404	Sociology	3
NPS	3308	General Physics I	4
CSP	4950	Interpersonal Communications	3
TOTAL HOURS			16

Required Courses at PVCC

NRD	9801	Medical and Radiology Terms	3
NRD	9802	Radiologic Technology I	3
NRD	9803	Radiographic Exposures I	3
NRD	9804	Radiographic Positioning I	3

NRD	9805	Clinical Training I	2
NRD	9806	Radiographic Exposures II	3
NRD	9807	Clinical Training II	2
NRD	9808	Radiographic Positioning II	3
NRD	9815	Clinical Training III	2
NRD	9809	Radiographic Positioning III	3
NRD	9816	Clinical Training IV	2
NRD	9810	Radiologic Technology II	3
NRD	9811	Physics of X-ray Equipment	4
NRD	9817	Clinical Training V	2
NRD	9812	Radiographic Anatomy	3
NRD	9813	Department Seminar	3
NRD	9814	Special Procedures	2
NRD	9818	Clinical Training VI	1
NRD	9819	Clinical Training VII	3
NRD	9820	Special Training Elective	9
		TOTAL HOURS	58



RECREATIONAL LEADERSHIP

The Recreational Leadership Program includes introduction and study of basic skills in many areas including team sports, first aid, and arts and crafts. The program emphasizes coordination of theory and knowledge acquired in the classroom with recreation and therapeutic situations in the community. The courses listed below are considered essential for job entry in the field of recreational leadership. It is equally important to select supportive courses in physical development and/or the arts to satisfy degree requirements. If you do not wish to obtain an A.A. degree, the certificate program allows you to complete requirements in one year. The program includes 23 credit hours—10 in the fall and 13 in the spring semester. You are encouraged to pursue an Associate of Arts degree and a four-year degree for better employment opportunities in the field. However, it is up to you to select the program you desire. You will gain practical experience through supervised field work at various recreation agencies throughout Johnson County and area hospitals. You also will be involved in leadership responsibilities such as planning, conducting and evaluating an activity or program.

Certificate Program

Suggested Sequence of Courses

Credits

First Semester

PD	4291	Individual Lifetime Sports (F)	2
PRL	5298	Introduction to Rec. Services (F)	3
PD	2711	First Aid	3
PD	7168	Fall Sports Officiating (F)	2
		TOTAL HOURS	10

Second Semester

PRL	7164	Outdoor Recreation (S)	3
PRL	2459	Social Recreation (S)	2

PRL	1379	Recreational Field Study	3
PD	6061	Spring Sports Officiating (S)	2
PRL	2571	Intro. to Therapeutic Recreational Services	3
		TOTAL HOURS	13

It is recommended, but not mandatory, that you take five hours of electives in the fall semester and two hours in the spring semester.

(F) offered only in the fall.

(S) offered only in the spring.

Suggested Courses for Completion of Associate of Arts Degree

HAR	1713	Introduction to Art History	3
HAR	6193	Ceramics I	3
HAR	2089	Sculpture I	2
HMU	7669	Intro. to Music Fundamentals	2
HAR	1192	Weaving I	3
BUS	2259	Personal Finance	3
COM	6524	Communications I	3
COM	1467	Communications II	3
HUM	6120	Introduction to Humanities	3
CJO	6648	Principles of Journalism	3
NLS	6540	Life Science	4
NLS	6186	Human Anatomy/Physiology	5
CSP	4950	Interpersonal Communications	3
PD	4368	Personal Health & Comm. Hygiene	3
PD	3469	Dancing (Folk, Square & Cont.)	2
PD	3458	Racquetball & Handball I	1
PD	7129	Archery I	1
SS	1068	Introduction to Psychology	3
SS	3404	Sociology	3



RESPIRATORY THERAPY

The respiratory therapist is skilled in the treatment, management and preventive care of patients with cardio-pulmonary problems. The therapist utilizes a wide range of sophisticated ventilatory and monitoring equipment, and is an essential part of the critical care team. Therapists provide many vital services in the hospital and work with people of all ages.

Respiratory Therapy is a cooperative program between JCCC and Baptist Memorial Hospital. You must complete all the prerequisite courses before entering the 12-month program of clinical training at Baptist. You must apply for this program during the fall of the year preceding the Baptist program entrance.

The need for trained respiratory therapists in the hospital setting continues to grow. Opportunities in outpatient clinics and public health agencies are increasing as the national trend away from extended hospital stays continues.

Required Courses at JCCC

NLS	1128	Human Anatomy	4
NLS	1144	Human Physiology	4
NPS	6634	Principles of Chemistry	5
NPS	1031	Physical Science	4
NLS	5593	Microbiology	3
COM	6524	Communications I	3
MTH		Algebra	3-5
NLS	6057	Microbiology Lab	2
		TOTAL HOURS	28-30

Required Courses at Baptist

NRT	3370	Beg. Princ. of Resp. Therapy	4
NRT	3371	Respiratory Therapy Equipment	4
NRT	3372	Cardiopulmonary Medicine I	1
NRT	3373	Clinical Cardiopulmonary Phys.	4
NRT	3374	Clinical Practice I	4
NRT	3375	Clinical Topics & Procedures I	3
NRT	3376	Cardiopulmonary Medicine II	2
NRT	3377	Respiratory Pharmacology	2
NRT	3378	Clinical Practice II	4
NRT	3379	Clinical Topics & Procedures II	4
NRT	3380	Cardiopulmonary Medicine III	2
		TOTAL HOURS	34



SECRETARIAL CAREERS

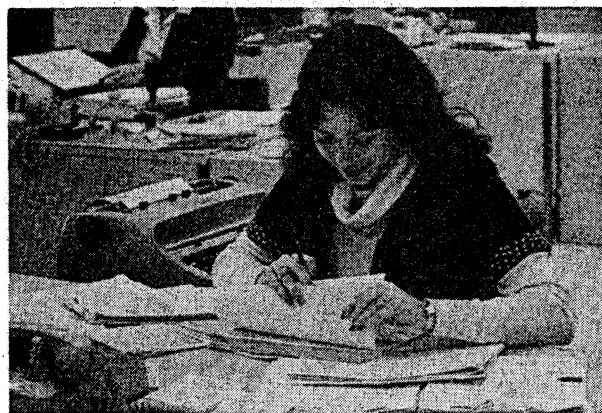
The Secretarial Careers Program is designed to prepare top-quality persons for challenging secretarial responsibilities in business, industry and government. Automation plays a large part in today's office work. At JCCC, you will be trained on the latest equipment and procedures. Laboratories contain advanced automatic typewriters such as four Memory and two Mag Card II automatic typewriters. Machine transcription is taught on the latest equipment using belt and cassette transcribing techniques. Work experience programs are available with the approval of the instructor. Legal, medical and other special options in professional work are open to qualified persons. If you are interested in preparing for the Professional Secretary Examination, consult with an instructor early into the program to satisfy both course selection and work experience requirements. You may take short courses and special programs if you want to sharpen present skills or to prepare to re-enter the job market.

Suggested Sequence of Courses

			Credits
First Semester			
BUS	4282	Introduction to Business	3
COM	6524	Communications I	3
BSC	2376	Intermediate Typing	3
BSC	4590	Shorthand II	3
BSC	5538	Secretarial Field Study	3
		TOTAL HOURS	15

Second Semester

BDP	7135	Business Data Processing	3
BSC	1342	Records Management	3
BSC	7633	Production Typing	3
		or	
BSC	5188	Automatic Typewriters	2
		and	
BSC	5190	Electronic Calculators	1
BSC	2190	Secretarial Field Study	3
		Electives	3
		TOTAL HOURS	15



Summer Session

BSC	1075	Secretarial Field Study*	3
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Third Semester

BSC	1272	Secretarial Procedures I	3
BAC	4092	Accounting I	3
		or	
BAC	2171	Small Business Accounting	3
BSC	5189	Machine Transcription	3
BSC	4492	Secretarial Field Study	3
		Electives	3

Fourth Semester

BSC	2317	Secretarial Procedures II	3
BUS	2253	Economics I	3
		or	
BUS	2004	Introduction to Economic Issues	3
BSC	3214	Secretarial Field Study	3
		Electives	3

*Business Law I may be substituted.

Recommended Electives

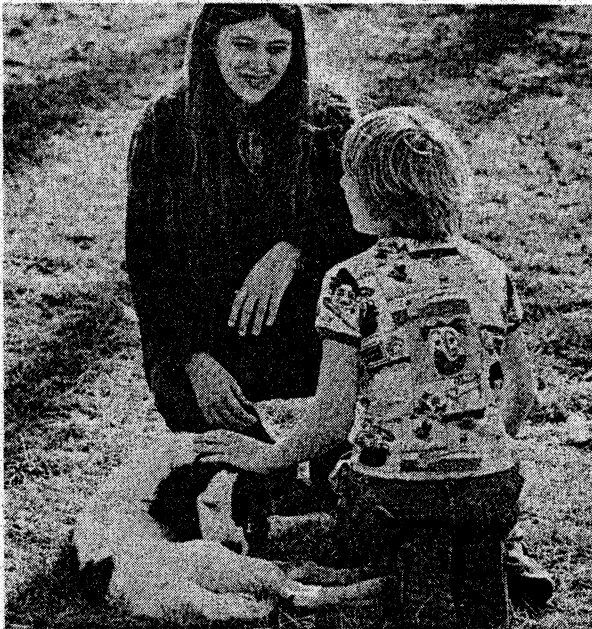
BSC	3630	Dictation and Transcription
BSC	4715	Medical Transcription
BSC	2267	Legal Secretary I
BUS	1007	Business Communications
BUS	2341	Personnel Management
BAC	5096	Accounting II
SS	1068	Psychology
BUS	2259	Personal Finance

There are five different Secretarial Field Study courses: Office Procedures, Business Math, Business Law, Management, and Human Relations. These are offered on a rotation basis.



SMALL ANIMAL HEALTH

This program is designed to provide you the skills and knowledge necessary to assist the practicing veterinarian in professional services and office routines. Employment opportunities are in laboratory care and pharmaceutical animal colonies. This program is offered in cooperation with the Animal Health Technology Program at Maple Woods Community College. You must be formally accepted by both JCCC and Maple Woods to be admitted to the program.



Courses Offered at Maple Woods		Credits
NAT	4894 Intro. to Small Animal Tech.	2
NAT	1895 Sanitation & Animal Care	2
NAT	7896 Clinical Mathematics	1
NAT	6897 Prin. of Animal Science I	3
NAT	3899 Prin. of Animal Science II	3
NAT	2901 Clinical Path. Techniques I	4
NAT	1902 Animal Health Internship	6
NAT	5903 Animal Hosp. Technology I	3
NAT	4904 Animal Tech. Anatomy	5
NAT	3905 Laboratory Animal Tech.	2
NAT	6906 Animal Hosp. Tech. II	3
NAT	7907 Clinical Path. Tech. II	5
NAT	9908 Large Animal Technology	4
NAT	8909 Radiology & Elect. Procedures	2
TOTAL HOURS		45

Courses Offered at JCCC	
NLS	4241 General Zoology
COM	6524 Communications I
BAC	2171 Small Business Accounting

NPS	4515	General Chemistry I Lecture	4
		and	
NPS	4516	General Chemistry I Lab	1
		or	
NPS	6634	Principles of Chemistry	(5)
SS		Elective	3
CSP	4950	Interpersonal Communications	3
NLS	5593	Microbiology	3
NLS	6057	Microbiology Lab	2
TOTAL HOURS			27



URBAN AGRIBUSINESS

This program will prepare you to work with plant life in a variety of settings. As a student in the program, you will study plant development, pest control, landscape principles and greenhouse construction among other topics. You also will study the business aspects of urban agribusiness and will receive on-the-job training in field placements. Urban Agribusiness is a cooperative program between JCCC and Longview Community College. Supportive courses will be held at JCCC and essential career courses at Longview. You should register at JCCC for all courses. When you successfully complete the program, you will receive an Associate of Arts degree from JCCC or an Associate degree in Applied Science from Longview Community College.

Required Courses at JCCC

NLS	5402	General Botany	5
COM	6524	Communications I	3
BAC	4092	Accounting I	3
BUS	7007	Marketing	3
CSP	4950	Interpersonal Communications	3
BUS	1121	Business Law I	3
		Business Elective	3
		Elective	3
TOTAL HOURS			26

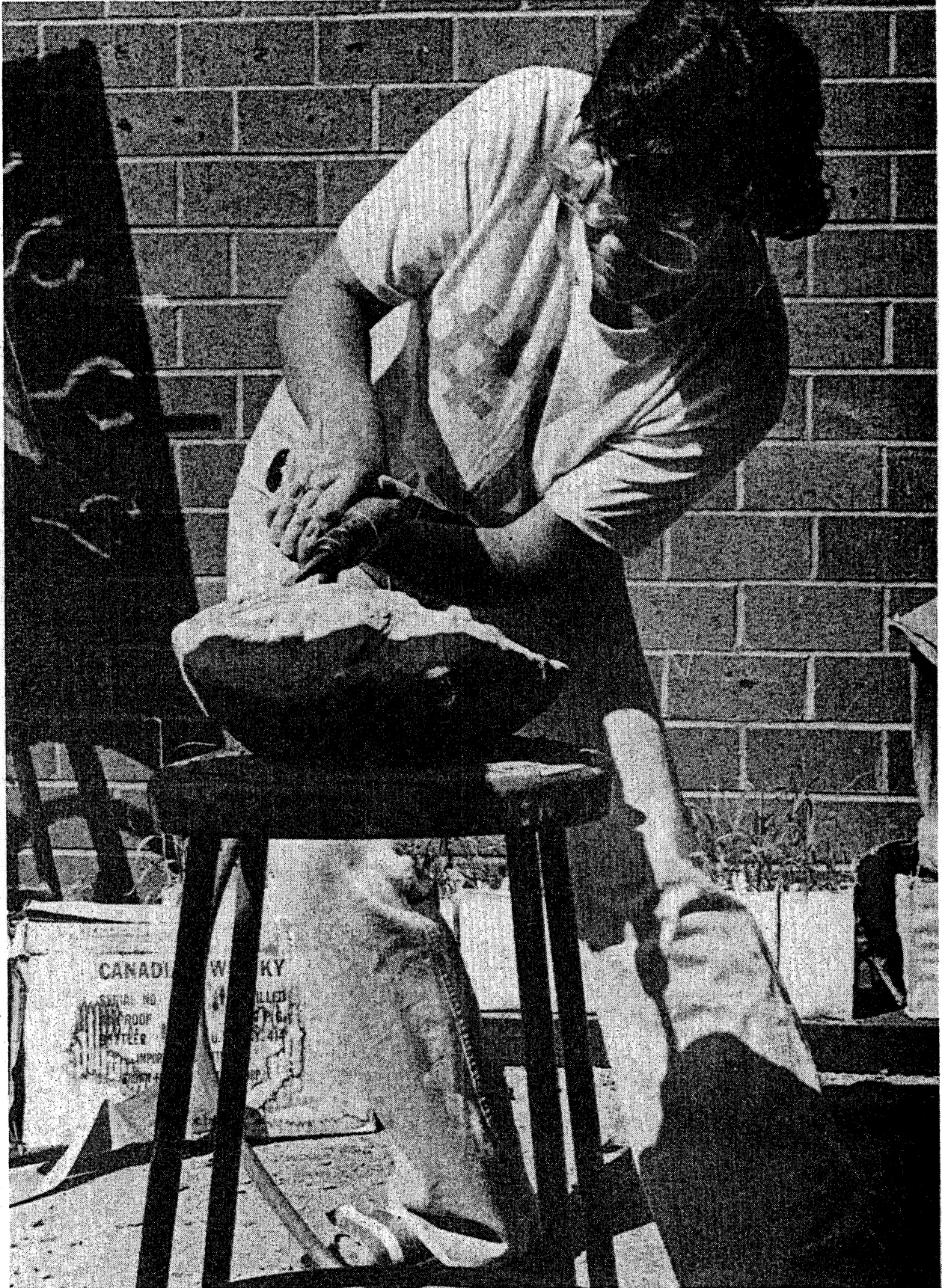
Required Courses at Longview

NUA	9886	Principals of Supervision	3
NUA	8887	Horticulture I	5
NUA	6888	Intro. to Urban Agribusiness	1
NUA	3889	Horticulture II	5
NUA	5890	Work Experience I	3
NUA	2891	Plant Materials I	3
NUA	7892	Work Experience II	3
NUA	8893	Plant Materials II	3
TOTAL HOURS			26

Elective Courses at Longview

(Any 3 of the following courses)

NUA	2930	Landscape Horticulture	3
NUA	8937	Special Topics I	3
NUA	4007	Grounds Establishment	3
NUA	2938	Special Topics II	3
NUA	6009	Special Topics III	3



Course Descriptions

ACCOUNTING

FEDERAL INCOME TAXES BAC 2360

Procedures for reporting federal income taxes with emphasis on income and deductions for individuals. Practice is given in preparing Federal Income Tax Returns. Class meets three hours a week. Three credits.

SMALL BUSINESS ACCOUNTING BAC 2171

Introduction to various aspects of starting and operating a small business with emphasis on the basic accounting procedures needed to maintain daily records for the small firm. Designed to meet the needs of the individual operating a firm with occasional help of an outside accountant. Does not prepare the student for Accounting II (BAC 5096). Class meets three hours a week. Three credits.

ACCOUNTING I BAC 4092

Introduction to accounting fundamentals. Emphasis on the recording and analysis of transactions and the use of journals, ledgers and financial statements. Class meets three hours a week. Three credits.

ACCOUNTING II BAC 5096

Prerequisites: BAC 4092 or by permission. Continuation of BAC 4092 (Accounting I) with increased emphasis on interpretation and use of accounting data by management. Accounting theory application in business organizations including preparation and use of financial statements. Class meets three hours a week. Three credits.

COST ACCOUNTING BAC 2436

Prerequisite: BAC 5096. Allocation of production costs to determine unit costs of goods manufactured and sold and the utilization of such data by management. Class meets three hours a week. Three credits.

INTERMEDIATE ACCOUNTING I BAC 6299

Prerequisite: BAC 5096. Application of accounting theory to the valuation of balance sheet accounts and fund flow analysis. Emphasis on cash and receivables, inventories, fixed assets and liabilities. Class meets three hours a week. Three credits.

INTERMEDIATE ACCOUNTING II BAC 6294

Prerequisite: BAC 5096. A continuation of the study of accounting concepts and technical procedures as applied to capital structure, earnings and dividends. Study will include long-term investment and debts, leases, pensions, analysis of financial reports, and price-level and fair-value accounting and reporting. Class meets three hours a week. Three credits.

MANAGERIAL ACCOUNTING BAC 4063

Prerequisite: BAC 5096. Development and use of



accounting information as an instrument of management control. Material includes financial statement analysis, cost application and budgeting reports to management. Class meets three hours a week. Three credits.

ACCOUNTING FOR NONPROFIT ORGANIZATIONS BAC 4218

Prerequisite: BAC 4092. Continuation of the accounting concepts and technical procedures as applied to nonprofit organizations. Study will include budgetary processes, operating and non-profit operating funds as well as interfund and intrafund accounting procedures. Class meets three hours a week. Three credits.

FIELD STUDY ACCOUNTING SEMINAR

. BAC 5099

Prerequisite: BAC 5096 (Accounting II). The student must be employed in an accounting or related position for a minimum of 15 hours a week. The seminar is a course designed for review of accounting principles and practice through the completion of several accounting cycles with the aid of practice sets. Class meets two hours a week. Three credits.

FIELD STUDY: BUSINESS MATH BAC 3111

The student will become involved with a supervised work experience in an approved office situation for a minimum of 15 hours a week. The class content will be mathematical aspects of accounting and clerical work. Weekly class discussions focus on relating math content to on-the-job training. Three credits.

FIELD STUDY: HUMAN RELATIONS BAC 2036

Students must work an average of 15 hours a week in an approved situation. Emphasis is placed on human relations, communications and decision-making. Weekly class discussions focus on relating human relations content to current work experience. Class meets two hours a week. Three credits.

BOOKKEEPING/ACCOUNTING I: SHORT COURSE BAC 1450

Introduction to journals, ledgers, working sheets and financial statements. Class meets two hours a week. Two credits.

ADMINISTRATION OF JUSTICE/ LAW ENFORCEMENT

INTRO. TO ADMIN. OF JUSTICE SLE 2080

Participation in field and classroom experiences designed to explore career opportunities within the criminal justice system. Examination of law enforcement processes, minimum entry-level requirements for local, state and federal agencies. Class meets three hours a week. Three credits.

POLICE AND THE PUBLIC SLE 6432

Identification and analysis of conflicts arising between police and the community they serve. Function of the police as a social institution within a free society. Class meets three hours a week. Three credits.

STUDY OF THE CRIMINAL JUSTICE SYSTEM SLE 7108

Analysis and identification of the subsystems of the criminal justice system. Class meets three hours a week. Enrollment open to all students. Three credits.

READINGS IN POLICE SCIENCE SLE 1174

Prerequisite: 15 hours credit in Law Enforcement. Selected readings in police science, such as police administration, criminal investigation, criminology, corrections, juvenile problems, evidence. Hours by arrangement. Three credits.

BASIC POLICE TRAINING COURSE SLE 3045

Prerequisite: Must be currently employed full-time by a participating law enforcement agency. Basic patrol procedures: traffic investigation and control, arrests, search and seizures. Fulfills and exceeds requirements of the Kansas Minimum Standards Training Act. May be applied as credit to satisfy requirements of the associate degree program in Administration of Justice. A minimum of 480 clock hours. Class meets five days a week, eight hours a day for twelve weeks. One to fifteen credits.

JUVENILE CODE AND PROCEDURES . . . SLE 1160

Analysis of detention procedures, disposition, custody and treatment of juvenile offenders throughout the United States, with a specific interest in area systems. Origin and development of juvenile agencies, organization functions and jurisdiction of juvenile courts. Class meets three hours a week. Enrollment open to all students. Three credits.

CRIMINAL LAW SLE 4588

Kansas Criminal Code with emphasis on elements of crimes and criminal procedure. Class meets three hours a week. Three credits.

FUNDAMENTALS OF CRIMINAL INVESTIGATION SLE 5137

Prerequisite: SLE 7108. Investigative techniques for crime scene search; collection and preservation of evidence; interviewing; and logical reconstruction of crime. Class meets three hours a week. Three credits.

SUPERVISORY TECHNIQUES FOR POLICEMEN SLE 7161

Prerequisite: SLE 7108. Current theory and practice of the supervisor's role in the police service. Class meets three hours a week. Three credits.

MOTOR VEHICLE LAW SLE 2461

Standard traffic ordinances for Kansas cities. Emphasis on fundamentals of traffic regulation and control as related to law enforcement, courts and other governmental functions. Class meets three hours a week. Three credits.

INTRODUCTION TO CRIMINALISTICS SLE 7292

Prerequisite: SLE 5137 or by permission. Skill training in techniques and methods to establish the identity and individualization of persons and things in a criminalistic laboratory. Class meets three hours a week. Three credits.

POLICE ORGANIZATION AND MANAGEMENT SLE 7454

Contemporary methods and techniques used in the organization of a modern police department. Practical application of procedures used in management of people, money and materials to achieve departmental objectives. Class meets three hours a week. Three credits.

TRAFFIC SAFETY AND ACCIDENT INVESTIGATION SLE 6653

Identification and analysis of the accident and investigative function of the police through the pre-crash and post-crash syndrome. Preparation of scale diagrams of accident situations. Class meets three hours a week. Three credits.

CONSTITUTIONAL CASE LAW SLE 4418

In-depth analysis of important Supreme Court decisions concerning questions of constitutional law which have significant impact on law enforcement techniques and procedures. Class meets three hours a week. Enrollment open to all students. Three credits.

CRIME PREVENTION SLE 4263

The emerging philosophy and basic concepts of crime prevention programs. Emphasis is placed on operational techniques utilized by public service agencies to operate crime prevention programs and how to provide technically accurate, cost effective security recommendations to members of the community. Class meets three hours a week. Enrollment open to all students. Three credits.

CRIMINOLOGYSLE 1585

Manifestations of crime and theories of criminal behavior. Process and purpose of treatment, correction, crime prevention and control. Contemporary trends. Class meets three hours a week. Enrollment open to all students. Three credits.

PATROL PROCEDURESSLE 4033

Prerequisites: SLE 2080 or SLE 7108. Analysis of basic techniques of the police patrol function. Emphasis on report writing, traffic law enforcement, arrest, search and seizure, patrol and peacekeeping. Class meets three hours a week. Three credits.

DEFENSIVE TACTICS FOR POLICESLE 7288

Prerequisites: Fifteen hours credit in SLE courses. Proficiency in the use of the baton and service revolver as offensive and defensive weapons. Constitutional limitations on the use of force. Student required to furnish sufficient ammunition for qualification with service revolver. Class meets three hours a week. Three credits.

FUND. OF PRIVATE SECURITYSLE 5006

An overview of the private security field, including organization and management of the security function in industry, business, government and institutions. The protection of personnel, facilities and other assets will be analyzed. Class meets three hours a week. Enrollment open to all students. Three credits.

EMERGENCY DISPATCHER FIELD STUDY

.SLE 5063
Prerequisite: Only students in appropriate programs will be accepted. On-the-job apprentice training under the supervision of a qualified dispatcher in Law Enforcement, Fire Protection or Emergency Medical Services. Affords the apprentice an opportunity to learn dispatching techniques and to apply the knowledge and skills acquired on-the-job and in theory-related courses. The field study will be conducted at an approved dispatching station and arranged by the JCCC program coordinator. Class meets by arrangement. Three credits.

EMERGENCY SERVICES AND THE PUBLIC

.SLE 2588
Prerequisite: none. Identification and analysis of conflicts arising between emergency services personnel and the community they serve. Function of the emergency services as social institutions within a free society. Class meets three hours a week. Three credits.

AGRICULTURE

INTRODUCTION TO AGRICULTURE . . NAS 3102

A survey of the options available to the student in agriculture. Various transfer and career choices will be

presented. Job availability, educational requirements, typical entry salaries and transfer possibilities will be presented to assist the student in planning a career in agriculture. One credit, one contact.

PRINCIPLES OF ANIMAL SCIENCE NAS 3103

Basic principles which apply to animal agriculture; survey of the industry; types, purposes and products of livestock; principles of breeding, selection, nutrition, lactation, reproduction, management and marketing. Class meets three hours a week. Three credits.

ART

INTRODUCTION TO ART HISTORY . . . HAR 1713

Historical study of art, tracing its development from prehistoric times to the 18th century. Emphasis on the study of the growth and development of art forms and movements, leading to an understanding of the relationship of art to the historical periods. Class meets three hours a week. Three credits.

MODERN ART HISTORY HAR 3878

An advanced art history course. Students will gain more experience in identification and study of 18th, 19th and 20th century American and European artists and their works. Class meets three hours a week. Three credits.

ELEMENTARY ART METHODS HAR 4099

Exploration of art activities appropriate for children from preschool through sixth grade. Emphasis on relating activities to the child's patterns of growth and development. Three hours of class and three hours of laboratory a week. Three credits.

ART FUNDAMENTALS HAR 1608

An intensive exploration of the visual arts. Designed to acquaint students with art forms and applications. Class meets six hours a week. Three credits.

AMERICAN ART SINCE 1945 HAR 3008

A study of American painting and drawing. Traces the development from 1945 to the present. Students will visit major museums and important commercial galleries in New York City. One hour lecture and one hour lab each week. One credit.

DIRECTED READING IN CONTEMPORARY AMERICAN ART HAR 3333

Prerequisite: Permission of the instructor. This course will explore the technical and philosophical points of view of contemporary American artists. A wide variety of styles will be considered. Class meets one hour a week. One credit.

DESIGN, 2D HAR 2880

An introductory study of the basic principles of visual

perception, two-dimensional space organization and the visual elements of line, shape and texture. Class meets six hours a week. Three credits.

DESIGN, COLOR HAR 7209

A study of the nature of color, including its physical properties and visual qualities. Problems relating to color as light and as pigment will be explored. Class meets six hours a week. Three credits.

DESIGN, 3D HAR 6021

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. Class meets eight hours a week. Four credits.

LIFE DRAWING I HAR 2021

Prerequisite: HAR 7576. Fundamentals of figure drawing. Working from models, students study the structure of the human form as seen in action, stationary and as part of the environment. A variety of media is used in rapid gesture drawing, long poses, memory work and portraiture. Class meets six hours a week. Three credits.

LIFE DRAWING II HAR 6662

Prerequisite: HAR 2021. Advanced figure drawing. Working from models, students study the human figure as an expressive source for drawing as a work of art, as well as for future works of art in other media (painting, sculpture). Class meets six hours a week. Three credits.



DRAWING I HAR 7576

Introductory course with emphasis on the development of fundamental drawing skills, increased power of observation and an awareness of the personally expressive and compositional aspects of drawing. Class meets six hours a week. Three credits.

DRAWING II HAR 3033

Prerequisite: HAR 7576. Concentration on figure drawing and freehand drawing with emphasis on the conceptual approach. Students will complete projects, including work from models, still life, set-ups and landscapes. A variety of media will be explored. Class meets six hours a week. Three credits.

PAINTING I HAR 5004

Emphasis on developing visual perception. Still life, landscape and human form studied through a variety of media. Concentration on awareness of creative responsibility and expression. Class meets six hours a week. Three credits.

PAINTING II HAR 6011

Prerequisite: HAR 5004. Awareness of historical and contemporary painting. Advanced painting with emphasis on personal direction and the development of a consistent body of work. Class meets six hours a week. Three credits.

STUDIO WORKSHOP HAR 6879

Prerequisites: HAR 5004 or HAR 7576 and permission of instructor. Emphasis will be on individual studio activity in painting or drawing. Course content to be determined by the student under supervision of a faculty member. Three credits.

INTRODUCTION TO PRINTMAKING . . HAR 3564

Introduction to a variety of traditional and contemporary printmaking processes, including on- and off-the-press techniques. Class meets six hours a week. Three credits.

SILKSCREEN HAR 4028

An exploration of silkscreen techniques ranging from the use of simple paper stencils to photographic processes. Class meets six hours a week. Three credits.

RAKU CERAMICS HAR 7666

Raku Ceramics deals with the oriental process of making and firing Raku pottery—a spontaneous low-fire approach to a finished product involving the rapid firing and cooling of the pottery. Hand formed (pinched and slab) as well as wheel thrown forms will be researched. Emphasis is on non-wheel manipulation of form. Class meets six hours a week. Three credits.



CERAMICS I HAR 6193

A basic course in wheel-throwing techniques. Studio experiences acquaint the students with firing and glazing techniques. Optional techniques include hand-building, stacking and other kiln-firing procedures, as well as other methods of surface enrichment in decorative research. Class meets six hours a weeks. Three credits.

CERAMICS II HAR 2211

Prerequisite: HAR 6193 or by permission. Course deals with more advanced methods of research with studio experiences in pottery wheel techniques and glaze research. Class meets six hours a week. Three credits.

SILVERSMITHING HAR 1620

Course in basic metalsmithing techniques of casting and constructing brass, copper and silver with the utilization of buffing, sawing, filing and soldering processes. Class meets six hours a week. Three credits.

SILVERSMITHING II HAR 4638

Prerequisite: HAR 1620. Advanced metalsmithing techniques of casting, constructing and etching, utilizing copper, brass, bronze, silver and other metals. Class meets six hours a week. Three credits.

SCULPTURE I HAR 2089

Course designed to study and explore natural and synthetic sculptural forms and to help the student create a unique, personal body of work through a variety of traditional or contemporary media and techniques. Class meets six hours a week. Three credits.

SCULPTURE II HAR 3094

Prerequisite: HAR 2089 or by permission. Continuation of Sculpture I (HAR 2089). Focus on advanced methods and techniques. Emphasis on sculptural materials and forms. Class meets six hours a week. Three credits.

WEAVING I HAR 1192

Introductory weaving course. Techniques ranging from macrame through more complex procedures involving the use of large floor looms and the creation of three-dimensional woven forms. Class meets six hours a week. Three credits.

WEAVING II HAR 4020

Prerequisite: HAR 1192. Advanced problems in structural weaving. Multi-harness, draft analysis, comprehensive research. Notebook required. Class meets six hours a week. Three credits.

SMALL LOOM TECHNIQUES HAR 1866

A study of the art of textile construction methods. Course work will deal with fiber properties, spinning and dyeing, single element construction (wrapping, coiling, netting, looping, crocheting), double element construction (braiding, knotting, weaving with a frame, cards, weighted warp or shaped board). Class meets six hours a week. Three credits.

BIOMEDICAL EQUIPMENT TECHNOLOGY

BIOMEDICAL EQUIPMENT TECHNOLOGY I

EMT 6824

Prerequisites: NLS 6186, EET 7604, EET 7643 or concurrent enrollment. Students will examine in detail the special electronic circuits used in biomedical equipment. Introduction to the use of electronics in the health care field. Class meets for two hours lecture and three hours lab each week. Fall, three credits.

BIOMEDICAL EQUIPMENT TECHNOLOGY II

EMT 9824

Prerequisite: EMT 6824. Students will examine and work on actual biomedical equipment used in major hospitals. Specific repair and maintenance problems will be discussed. The problems facing the biomedical equipment technician, not related to electronics, will be discussed. Class meets for two hours of lecture and three hours of laboratory each week. Spring, three credits.

BIOMEDICAL ELECTRICAL SAFETY EMT 4504

Prerequisite: EET 4289. A study of microshock and associated problems, testing procedures and practices, and safety standards. Class meets two hours a week. Two credits.

BIOMEDICAL INTERNSHIP EMT 4505

Prerequisite: EMT 6824 (Biomedical Equipment Technology I). *Corequisite:* EMT 9824 (Biomedical Equipment Technology II). Six hours each week will be spent in an assigned hospital or related position. Learning will be

under actual working conditions on actual equipment students will work on when permanently employed. The biomedical department of the institution, in cooperation with the biomedical program coordinator, will evaluate and supervise. One hour lecture, six hours intern each week. Three credits.

BUSINESS

INTRODUCTION TO BUSINESS BUS 4282

The nature and scope of business, its component parts and how business is organized and managed; responsibility of business, government and consumers for improving the environment; multinational character of business; external and internal forces that constitute the business and economic system. Class meets three hours a week. Three credits.

PERSONAL FINANCE BUS 2259

Understanding the role consumers play in the American economic system in the production of goods and services and an understanding of the American economic system. Techniques of money management and the preparation of a spending plan. Use of consumer credit and computing cost computations in using credit; necessary understanding of procedures and costs in buying and selling owner-occupied real estate; understanding calculation of interest on savings accounts and time deposits and the concept of compound interest; insurance - life, automobile, property, medical and disability; general estate and annuity planning; common tax shelters; consumer protection from a consumer responsibility point of view; auto buying or leasing; food planning and shopping. Class meets three hours a week. Three credits.

BUSINESS LAW I BUS 1121

Basic principles of law that apply to business transactions in the present business environment and legal system. Material is related to Uniform Commercial Code and includes introduction to the study of law, crimes and torts, contracts, sales and commercial paper. Case studies are used. Class meets three hours a week. Three credits.

BUSINESS LAW II BUS 5134

Prerequisite: BUS 1121. Continuation of BUS 1121 (Business Law I). Includes agency and partnership, personal property, real property, secured transactions and corporations. Case studies are used. Class meets three hours a week. Three credits.

INTRO. TO ECONOMIC ISSUES BUS 2004

Basic principles governing the economy are studied in the context of current social issues. Designed for students planning to take only a single course in economics and for those who want a nontechnical in-

roduction to the subject. Topics include resource allocation, income distribution, price determination, unemployment, inflation and international problems. Class meets three hours a week. Three credits.

ECONOMICS I BUS 2253

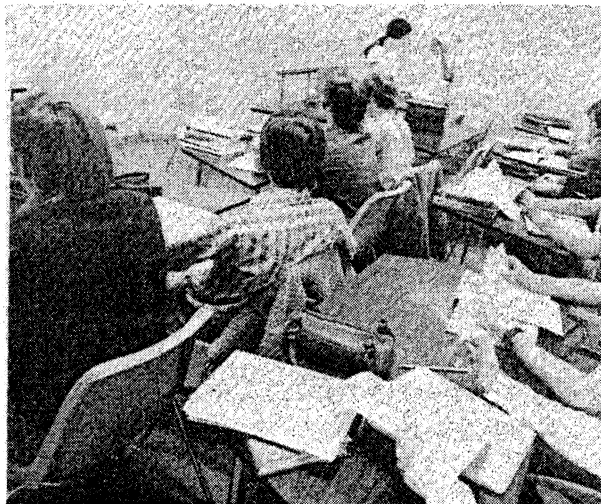
Fundamental problems of economics and contemporary approaches to them. Topics include the basic elements of supply and demand; prices; national income determinations; money and banking; monetary and fiscal policy. Class meets three hours a week. Three credits.

ECONOMICS II BUS 3093

Prerequisite: BUS 2253 or by permission. Continuation of BUS 2253 (Economics I) with emphasis on supply and demand, theory of the firm and market structures. Class meets three hours a week. Three credits.

MARKETING BUS 7007

Study of all marketing activities that direct the flow of goods and services from the producer to the ultimate consumer. Emphasis on the problems and policies of manufacturers, wholesalers and retailers in the distribution of goods and services. Class meets three hours a week. Three credits.



PERSONNEL MANAGEMENT BUS 2341

Personnel functions as they relate to management philosophy in employee procurement, placement, training, retention, job evaluation, wage administration, performance rating and welfare services. Class meets three hours a week. Three credits.

PRINCIPLES OF MANAGEMENT BUS 7822

This course presents the basic fundamentals of management aimed at the middle management level. Emphasis will be on the behavioral aspects of modern management, MBO/MBR, and the functions of planning, organizing, directing and control. Class meets three hours a week. Three credits.

PRINCIPLES OF SUPERVISION BUS 5360

This course covers the various techniques of successful supervision of rank and file employees. Supervision means achieving desired results with the efforts of others and involves the planning, organizing and directing of non-management personnel. Class meets three hours a week. Three credits.

SAVINGS AND INVESTMENT BUS 6038

Investment techniques and procedures to give a broad overview of savings and investment instruments and tools for general estate planning. Basic investment principles, risk and return, developing individual or family investment objectives, compound interest, capital gains and the taxation of capital gains, savings accounts, time deposits and other short- and long-term media, pension planning through tax-sheltered programs, Social Security and individual plans, financial analysis in making stock, bond and other security investments, real estate investments for both owner-occupied and non-owner occupied, and estate planning relating to legal requirements and tax planning. Tax shelters will be stressed. Class meets three hours a week. Three credits.

BUSINESS COMMUNICATIONS BUS 1007

Prerequisite: Communications I. This course encompasses four basic areas: (1) reading skills, (2) listening skills, (3) verbal and nonverbal communications and (4) written communications including memos, letters and reports. Class meets three hours a week. Three credits.

PRINCIPLES OF REAL ESTATE BUS 1039

Review and analysis of institutional environment facing the real estate business. Methods of analyzing real estate, financial procedures and operations with emphasis on management. Class meets three hours a week. Three credits.

REAL ESTATE SALES PROCEDURES BUS 1040

Establishing confidence with the prospect through the initial interview and qualifying; selecting and showing properties; recognizing buying signals and knowing when to close; how to overcome objections; presenting offers; appraisals; financing and follow-up. Class meets three hours a week. Three credits.

REAL ESTATE CONTRACTS BUS 1065

An introduction to the categories and types of contracts and the application of the Statute of Frauds in the real estate profession. Class meets three hours a week. Three credits.

INTRO. TO WORLD FOOD PROBLEMS BUS 5002

The course examines factors influencing both the supply and demand for food throughout the world, focusing on population growth and nutritional requirements. It also considers how such natural

resources as soil, energy and climate affect the world food situation; which alternative food sources are available and whether people will accept them; problems of food distribution; and the economic implications of a food shortage. Class meets two hours each week. Two credits.

GENERAL INSURANCE BUS 1390

Designed primarily for students who have had no college course in insurance and risk. Covers basic terminology, principles and contracts and all lines of insurance, including life, health, property and casualty. Class meets three hours a week. Three credits.

KANSAS REAL ESTATE PRE-LICENSE INSTRUCTION BUS 5027

Designed to prepare individuals to take the Kansas Real Estate Examination. The course is divided into two parts: a uniform portion dealing with general information about real estate and a statutory part covering Kansas license laws and rules and regulations. A review of real estate mathematics is included. Class meets three hours a week. Three credits.

COMMERCIAL ART

VISUAL COMMUNICATIONS I HCA 1689

Prerequisite: Permission of coordinator. An exploration of the techniques and imagery used in symbolic visual communication, focusing on the conversion of verbal concepts into persuasive visual images. Studio assignments will deal with problems relating directly to social, industrial and commercial needs. Class meets eight hours a week. Four credits.

VISUAL COMMUNICATIONS II HCA 9689

Prerequisite: HCA 1689. A continuation of Visual Communications I focusing on in-depth research and requiring the application of the student's total design capability to problems of professional scope and complexity. Class meets eight hours a week. Four credits.

VISUAL TECHNOLOGY I HCA 4679

Prerequisite or corequisite: HCA 1861. A practical exploration of the materials, tools and processes required for graphic reproduction. Emphasis will be placed on the acquisition of skills relating to the production methods and techniques necessary for the preparation of camera-ready art. Class meets eight hours a week. Four credits.

VISUAL TECHNOLOGY II HCA 6688

Prerequisite: HCA 4679. A continuation of Visual Technology I with additional practical experience in the production of camera-ready art. Requires the application of production skills to problems of professional scope and complexity. Class meets eight hours a week. Four credits.

COMMERCIAL ART FIELD STUDYHCA 5691

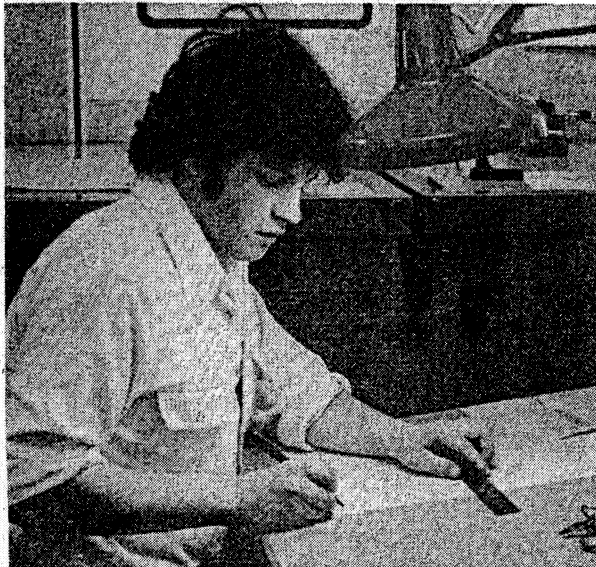
Prerequisite: Permission of coordinator. Students work an average of 15 hours a week in an approved professional studio under instructional staff supervision. Emphasis is placed on an increased understanding of the kind and quality of work done in a professional environment. Class meets two hours a week. Three credits.

PREPARATION OF PORTFOLIOHCA 7690

Prerequisite: Permission of coordinator. This course will focus on the selection and mounting of student work for inclusion in professional portfolios. Two- and three-dimensional examples will be included. Class meets four hours a week. Two credits.

LETTERINGHCA 7205

A study of the evolution of the alphabet, the development of letter forms and of lettering techniques focusing on contemporary typographic design. Hand and transfer lettering as well as mechanically-produced letter forms will be explored. Class meets six hours a week. Three credits.



LAYOUTHCA 1861

Prerequisite: HAR 2880. Corequisite: HCA 7205. Introduction to advertising and editorial layout. Information and techniques necessary to the effective composition of verbal and visual messages designed for publication. Class meets six hours a week. Three credits.

BASIC REPRESENTATION IHCA 6862

An introduction to basic pictorial representation as it is applied in commercial art. Emphasis is placed on the accurate rendering of objects using the tools, materials and techniques of the advertising artist and on the development of visual communications skills. Class meets six hours a week. Three credits.

BASIC REPRESENTATION IIHCA 5863

Prerequisite: HCA 6862. A continuation of Basic Representation I, emphasizing the analysis and rendering of more complex forms, as well as the application of additional and more sophisticated tools, equipment, materials and processes commonly used by the commercial artist. Class meets six hours a week. Three credits.

AIRBRUSH TECHNIQUESHCA 8853

Prerequisite: HCA 6862. An introduction to basic airbrush techniques and materials and to their application in both fine and commercial art. Emphasis will be placed on commercial applications. Class meets six hours a week. Three credits.

COMMUNICATIONS

FUNDAMENTALS OF WRITINGCOM 5035

Basic written communications. Emphasis on grammar, sentence structure, organization, idiomatic usage, spelling and vocabulary, leading to clear written composition. Class meets three hours a week. Three credits.

COMMUNICATIONS ICOM 6524

An introduction to writing, focusing on sentence style, paragraph development and essay format. Guided practice in developing form and content of clear and interesting composition. Class meets three hours a week. Three credits.

COMMUNICATIONS IICOM 1467

Prerequisite: COM 6524. Course emphasizes organization and development of expository essays, written in response to assigned readings. Related research projects. Class meets three hours a week. Three credits.

POETRY AND DRAMACOM 4444

Prerequisite: COM 1467. Introduction to poetry and drama for insight and appreciation. Selected plays and poetry of all types and styles will be read. Class meets three hours a week. Three credits.

STUDIES IN THE NOVELCOM 2779

Prerequisite: COM 1467. Introduction to novels from different countries and eras, emphasizing fictional techniques and themes. Students will read, discuss and write about the assigned novels. Class meets three hours a week. Three credits.

AMERICAN WRITERSCOM 5271

Prerequisite: COM 1467. Readings of complete works of selected American writers, with related writing projects. Course focuses on important works of the various writers and emphasizes the relationship between their lives and times to their art. Class meets three hours a week. Three credits.

ADVANCED COMPOSITION COM 3694

Prerequisite: COM 1467. Further practice in effective writing for students who wish to continue their study beyond the two semesters of Communications I and II. Focus on the writing of expository and argumentative essays, study and practice in the selection of subjects, organization, methods and style. Class meets three hours a week. Three credits.

TECHNICAL WRITING COM 1260

Prerequisite: COM 6524. Technical Writing emphasizes various methods of written communication relevant to manufacturing and engineering, including short reports, letters, abstracts, resumes and portfolios. Class meets three hours a week. Three credits.

CREATIVE WRITING COM 2618

Prerequisite: COM 1467. Principles and practice in narrative writing, including the short story, novel and play. Emphasis on planning and plotting. Consideration given to poetry and non-fiction, depending on the interests of the students. Examination of recommended models. Final projects are selected by students; manuscripts are submitted to professional editors for evaluation. Class meets three hours a week. Three credits.

CREATIVE WRITING WORKSHOP COM 1695

Prerequisite: COM 2618. Advanced practice in writing the short story, novel, essay, article, play, poetry. For students with serious writing aspirations. All students are furnished with printed copies of manuscripts submitted and function as critics of one another's writing. Class meets three hours a week. Three credits.

WORLD MASTERPIECES COM 6024

Prerequisite: COM 1467. Readings of complete works of selected Western World writers who have influenced Western literature and civilization. Course focuses on important works of various writers and traces their influence on later writers. Includes writing projects. Class meets three hours a week. Three credits.

THE SHAKESPEARE PLAYS COM 5025

An introduction to the plays of Shakespeare through reading and viewing selected plays on television. Historical background of England will be examined. Three credits.

MASTERPIECES OF THE CINEMA COM 1051

Prerequisite: COM 1467. Viewing and discussion of selected films, with emphasis on themes, genres and styles. In addition to viewing films provided by the College, students will also be required to attend selected films at local theaters. Related reading and writing assignments. Class meets three hours a week. Three credits.

CHILDREN'S LITERATURE COM 1015

Prerequisite: COM 1467. An exploration of what is

best and most exciting in children's literature, both past and present. Emphasis on children's needs, criteria used in selecting children's books, various types of children's literature and the most famous of children's authors and illustrators. Class meets three hours a week. Three credits.

ADOLESCENT LITERATURE COM 2778

Prerequisite: COM 1467. An exploration of what is best and most exciting in adolescent literature, both past and present. Emphasis will be on needs and interests of the "young adults," criteria used in selecting books for them and various themes and styles of these selections. Class meets three hours a week. Three credits.

DATA PROCESSING

BUSINESS DATA PROCESSING BDP 7135

Primarily a nontechnical course. Consideration of social and economic implications of computers in government and business. Students operate the keypunch and time-sharing terminal in learning to write and run simple computer programs. Class meets three hours a week. Three credits.

PROGRAMMING FUNDAMENTALS BDP 6699

Prepares an individual for enrollment in any programming language course. Primarily a technical course. Keypunch and terminal usage are covered at an advanced level. Exposure to selected pieces of unit record equipment. Flowcharting and writing BASIC computer programming are stressed. Digital computer equipment is used to run the programs; data coding and numbering systems are covered. Class meets three hours a week. Laboratory by arrangement. Four credits.

TELEPROCESSING BDP 7224

Prerequisite: BDP 6699. A form of information handling in which a data processing system utilizes communication equipment. Concerned with that part of the system external to the central computer. Class meets three hours a week. Fall, three credits.

COBOL I BDP 4700

Prerequisite: BDP 6699. Use of COBOL programming language in solving typical problems. Emphasis on function and use of statements in the four divisions of ANSI COBOL. Computer used in compiling and executing the programs. Class meets three hours a week. Laboratory by arrangement. Four credits.

COBOL II BDP 1702

Prerequisite: BDP 4700. Advanced COBOL programming techniques; use of ANSI COBOL to solve problems with data on a direct access device. Methods of building, maintaining and using files in a sequential,



random and indexed manner. Sort and Report Writer features are also studied. Computer used in compiling and executing programs. Class meets three hours a week. Laboratory by arrangement. Four credits.

FORTRAN BDP 6703

Prerequisite: MTH 3001. Use of FORTRAN programming language in solving typical problems. Emphasis on the vocabulary and grammar of ANSI FORTRAN. Computer used in compiling and executing the programs. Class meets three hours a week. Laboratory by arrangement. Four credits.

ASSEMBLER LANGUAGE I BDP 1698

Prerequisite: BDP 6699. Use of Assembler language in solving typical problems. Emphasis on the statements used in ALC. Computer used in compiling and executing the programs. Class meets three hours a week. Laboratory by arrangement. Fall, four credits.

ASSEMBLER LANGUAGE II BDP 1684

Prerequisite: BDP 1698. Advanced features of Assembler language for IBM 370. Covers Macros, subprograms, table handling, the complete set of ALC instructions and the different methods of file access. Class meets three hours a week. Laboratory by arrangement. Spring, four credits.

OS/VS JOB CONTROL LANGUAGE BDP 6005

Prerequisites: BDP 4700 (COBOL I) or BDP 1698 (ALC I) or equivalent work experience. Use of OS/VS JCL with typical applications. Emphasis on Rules of Coding JCL, optimizing resources, overriding statements, use of symbolic parameters etc. Computer applications of JCL. Class meets three hours a week. Fall, three credits.

PL/1 BDP 4701

Prerequisite: BDP 6699. Use of PL/1 language in solving typical problems. Emphasis on function and use of

the various statements and procedures of PL/1. Computer used in compiling and executing the programs. Class meets three hours a week. Laboratory by arrangement. Four credits.

RPG II BEGINNING BDP 7683

Prerequisite: BDP 6699. Use of various approaches to RPG II problem solving. Define, code, test, debug and document RPG II programs. Class meets three hours a week. Laboratory by arrangement. Spring, four credits.

RPG II ADVANCED BDP 5832

Prerequisite: BDP 7683. Use of advanced features in the RPG II language. Study of disk file techniques, disk utilities, tables and array methodology. Sequential, indexed and direct access methods are covered. Computer used in compiling and executing programs. Class meets three hours a week. Laboratory by arrangement. Fall, four credits.

DATA FILE MANAGEMENT BDP 1036

Prerequisite: BDP 1698, 4700, 7683, 6703 or equivalent work experience. Comprehensive coverage of data management techniques. Data items are discussed in relation to records, files and data bases. File organizations and access methods are discussed. Concepts are integrated into the development of an inquiry data base. Techniques and potential uses of data base systems in industry and business are also included. Class meets three hours a week. Spring, three credits.

INTRO. TO SYSTEM DESIGN AND ANALYSIS

..... BDP 4551

Prerequisites: BDP 4700, 6703, 1698 or 7683. Basic philosophy and techniques in development and use of business information systems. Emphasis on the human elements and people involvement necessary in systems design and implementation. Addresses the use of specific technical approaches available in relation to information processing. Class meets three hours a week. Fall, three credits.

OPERATING SYSTEMS BDP 6451

Prerequisite: BDP 1698 or concurrent enrollment. Basic concepts and principles of a digital computer operating system. Interrelationships between hardware and software, and how they are controlled, developed and illustrated through study of a typical digital computer system. Class meets three hours a week. Spring, three credits.

APPLICATION PROGRAMMING: APPLICATIONS BDP 7300

Prerequisite: By permission. Corequisites: BDP 4700, 6703, 7683 or 1698. Computer operations or directly related work experience. A minimum of 15 hours supervised on-the-job training a week, or recognition and formalization of experience for those already employed. Hours by arrangement. Fall, three credits.

FUNDAMENTALS OF BASICBDP 4049

Primarily a technical course that gives individuals an understanding of the BASIC programming language. Key punch and data coding are covered. Terminals are used to enter and debug programs in the BASIC language. Emphasis is on the micro computer. This course is not a substitute for BDP 6699 (Programming Fundamentals). Class meets three hours a week. Three credits.

APPLICATION PROGRAMMING: DATA PROCESSING TOPICSBDP 6514

Prerequisite: By permission. *Corequisites:* BDP 4700, 6703, 7683 or 1698. Programming or directly related work experience. A minimum of 15 hours supervised on-the-job training a week, or recognition and formalization of experience for those already employed. Hours by arrangement. Spring, three credits.

STATISTICS FOR RESEARCH AND MANAGEMENTBDP 3009

Prerequisite: MTH 2084. Students study the statistical capabilities and operations of the Statistical Package for the Social Sciences programming language. Methods of coding data for input into the SPSS system will be introduced and applied. Computers used in compiling and executing programs. Class meets three hours a week. Laboratory by arrangement. Spring, four credits.

DENTAL ASSISTING

FUNDAMENTALS OF DENTISTRY I . . . NDA 2041

Prerequisite: Admission to Dental Assisting Program. The student will be introduced to the functions of the dental health team and the scope of service of the dental assistant. Dental materials, advanced first aid, cardiopulmonary resuscitation will be covered. Class meets seven hours a week. Five credits.

FUNDAMENTALS OF DENTISTRY II . . . NDA 1044

Prerequisite: NDA 2041. The student will be introduced to patient psychology with emphasis on maturation, emotion and personality, fundamentals of dental radiography, techniques of dental radiographs and the use of dental materials. Class meets six hours a week. Four credits.

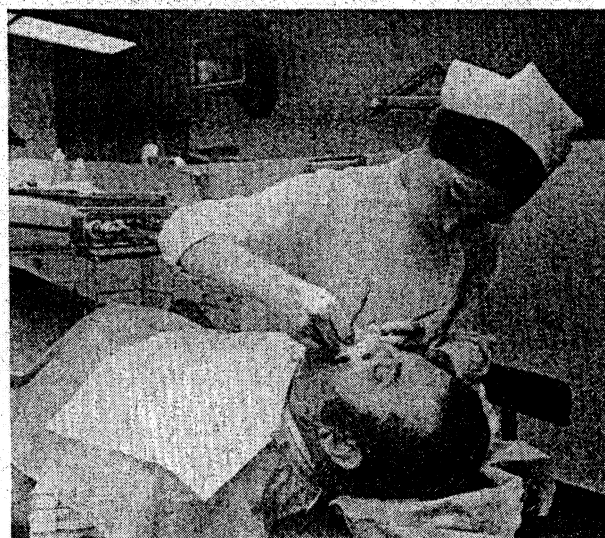
FUNDAMENTALS OF DENTISTRY III . . NDA 2855

Prerequisite: NDA 1044 and 1052. The student will record and maintain accurate dental records, identify and describe dental diseases and learn concepts and perform techniques related to chairside assisting. Class meets six hour a week. Four credits.

FUNDAMENTALS OF DENTISTRY IV . . NDA 5048

Prerequisite: NDA 3045. The student will identify drugs associated with dental treatment, demonstrate

usage, care and dosage of medicine with emphasis placed on the Dental Code of Ethics and apply the principles of business administration to the dental office. Class meets three hours a week. Three credits.



PRECLINICAL PRACTICENDA 1052

Prerequisite: NDA 1044. The student will participate in the orientation and identification of the various operative procedures, including chairside assisting, instrumentation and maintenance of equipment, with special study of the expanded functions governed by the Missouri Dental Practice Act. Class meets five hours a week. Four credits.

CLINICAL PRACTICE INDA 1047

Prerequisite: NDA 1044 and 1052. The student will adapt and successfully apply the knowledge and techniques acquired in the classroom to the clinical environment. Evaluations of all operative and specialty procedures will be made. Class meets ten hours a week by arrangement. Three credits.

CLINICAL PRACTICE IINDA 6050

Prerequisite: NDA 1047. The student will receive advanced training in dental operative and specialty procedures including performance evaluations. Fifteen hours a week by arrangement. Five credits.

DENTAL HYGIENE

CLINICAL DENTAL HYGIENE INDH 7252

Corequisites: NDH 2339, NPS 6634, NDH 7253. History, development, current status and future implications of dental hygiene profession. Introduction to dental hygiene techniques and instrumentation, patient evaluation, primary preventive treatment, auxiliary procedures and aseptic techniques. Class meets thirteen hours a week, including two hours of lecture and eleven hours of lab. Six credits. *Prerequisite:* Admission to the Dental Hygiene Program.

DEVELOPMENTAL DENTISTRY NDH 7253

Corequisites: NDH 2339, NPS 6634, NDH 7252. Study of embryology, oral histology and dental morphology and occlusion. Description of normal and abnormal growth and development of the face, oral cavity and related structures. Identification and description of deciduous and permanent dentitions. Utilization of dental nomenclature in identification and classification of occlusion. Explanation of protective function and forms of teeth and supporting structures and description of dental anomalies. Class meets four hours a week, including three hours of lecture and one hour of lab. Three credits.

CLINICAL DENTAL HYGIENE II NDH 7254

Prerequisites: NDH 7252, NDH 7253, NDH 2339, NPS 6634 with no grade below a "C." *Corequisites:* NDH 6266, NLS 6152, NLS 1144, NDH 7255, NDH 7256. Clinical application of dental hygiene techniques and instrumentation, oral physiotherapy, patient motivation and education techniques, diet analysis and counseling. Emergency procedures for medical and dental emergencies which may be encountered in the dental office. Class meets ten hours a week, including two hours of lecture and eight hours of clinic. Five credits.

PERIODONTICS NDH 7255

Prerequisites: NDH 7252, NDH 7253, NDH 2339, NPS 6634 with no grade below a "C." *Corequisites:* NDH 6266, NLS 6152, NLS 1144, NDH 7254, NDH 7256. Description of the inflammation process and its relationship to the pathogenesis of periodontal disease. Recognition and identification of the various periodontal diseases, their etiology, signs and symptoms. Lecture only. Class meets one hour a week. One credit.

DENTAL HEALTH EDUCATION NDH 7256

Prerequisites: NDH 7252, NDH 7253, NDH 2339, NPS 6634 with no grade below a "C." *Corequisites:* NLS 1144, NLS 6152, NDH 6266, NDH 7255, NDH 7254. A study of the principles of educational methods and their use in health education as they apply to both individual and group development, with particular attention to psychological, social and economic factors. Class meets two hours a week. Lab only. One credit.

CLINICAL DENTAL HYGIENE III NDH 7257

Prerequisites: NDH 7256, NDH 7252, NDH 7254, NDH 2339, NDH 6266, NDH 7253, NDH 7255, NLS 1144, NLS 6152, NPS 6634 and no grade below a "C." *Corequisites:* NDH 7258, 7259, 7260, 5250. Continued development of proficiency in clinical techniques including preparation and application of dental hygiene treatment plans and expanded functions. Class meets eighteen hours a week, including two hours of lecture and 16 hours of clinic. Seven credits.

PATHOLOGY AND PERIODONTOLOGY

NDH 7258
Prerequisites: NDH 7252, NDH 7254, NDH 2339, NDH 6266, NDH 7253, NDH 7256, NDH 7255, NLS 1144, NLS 6152, NPS 6634 and no grade below a "C." *Corequisites:* NDH 7257, 7259, 7260, 5250. Description of periodontal treatment and therapy with emphasis on root planing and soft tissue curettage. Basic pathological processes and identification of common oral conditions, their etiology and treatment. Class meets three hours a week. Lecture only. Three credits.

DENTAL THERAPEUTICS NDH 7259

Prerequisites: NDH 7256, NDH 7252, NDH 7254, NDH 2339, NDH 6266, NDH 7253, NDH 7255, NLS 1144, 6152, NPS 6634 and no grade below a "C." *Corequisites:* NDH 7258, 7257, 7260, 5250. An introduction to basic principles of drug actions, interactions, practical application and familiarization and appropriate selection of professional products. Although the course will emphasize dental-related therapeutics, it will also provide information related to drugs associated with common system disorders. Also included is the study of factors which are necessary to properly administer local anesthesia. Class meets three hours a week. Three hours of lecture (one hour of lab for eight weeks). Three credits.

COMMUNITY DENTAL HEALTH NDH 7260

Prerequisites: NDH 7252, NDH 7254, NDH 2339, NDH 6266, NDH 7253, NDH 7256, NDH 7255, NLS 1144, NLS 6152, NPS 6634 and no grade below a "C." *Corequisites:* NDH 7257, 7258, 7259, 5250. Study of public health agencies and their functions, application of basic statistical procedures in critiquing scientific literature, identification of dental needs of people of different ages, socioeconomic backgrounds and mental and physical abilities, application of dental indices. Recognition of factors involved in planning dental health education programs within school systems. Field experience is included. Class meets four hours a week, including one hour of lecture and three hours of lab. Two credits.



CLINICAL DENTAL HYGIENE IVNDH 7261

Prerequisites: NDH 7252, NDH 7254, NDH 7257, NDH 2339, NDH 7253, NDH 7256, NDH 7260, NDH 7255, NDH 7258, NDH 7259, NDH 6266, NDH 5250, NLS 1144, NLS 6152, NPS 6634 and no course below a "C." Continued development of proficiency in clinical techniques and current procedural practices of the dental hygienist with emphasis on self evaluation. Principles of dental hygiene ethics and jurisprudence, methods of efficient dental office management and current dental hygiene issues are included. Class meets eighteen hours a week, including two hours of lecture and sixteen hours of clinic. Seven credits.

HEAD AND NECK ANATOMYNDH 2339

Corequisites: NDH 7252, NDH 7253. Basic concepts of gross anatomy with detailed emphasis on the head and neck. Embryology of head and neck is included. Class meets five hours a week, including two hours of lecture and three hours of lab. Three credits.

DENTAL MATERIALSNDH 5250

Prerequisites: NDH 7252, NDH 7254, NDH 2339, NDH 6266, NDH 7253, NDH 7256, NDH 7255, NLS 1144, NLS 6152, NPS 6634 and no grade below a "C." *Corequisites:* NDH 7257, 7258, 7259, 7260. Components of restorative, prosthetic and preventive materials utilized in dentistry with emphasis on manipulation and utilization. Expanded functions in the laboratory. Class meets four hours a week, including one hour of lecture and three hours of lab. Two credits.

DENTAL RADIOLOGYNDH 6266

Prerequisites: NDH 7252, NDH 2339, NDH 7253, NPS 6634 and no grade below a "C." *Corequisites:* NDH 7254, NLS 6152, NLS 1144, NDH 7255, NDH 7256. Theory of exposing, processing, mounting and evaluating oral radiographs. Paralleling and bisected angle techniques. Emphasis on radiation protection for patient and operator. Class meets four hours a week, including one hour of lecture and three hours of lab. Two credits.

CLINICAL DENTAL HYGIENE IVNDH 5109

Prerequisite: NDH 7338. *Corequisite:* NDH 6027. Continued development of proficiency in clinical techniques including preparation and application of dental hygiene treatment plans and expanded functions. Class meets thirteen hours a week. Fall, five credits.

CLINICAL DENTAL HYGIENE VNDH 3101

Prerequisite: NDH 5109. Continued development of proficiency in clinical techniques and current procedural practices of the dental hygienist with emphasis on self evaluation. Principles of dental hygiene ethics and jurisprudence, and methods of efficient dental office management. Class meets twelve hours a week. Spring, six credits.

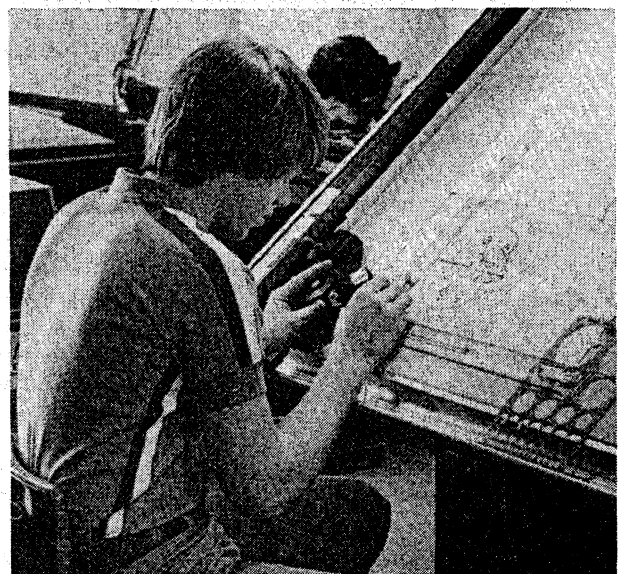
DRAFTING TECHNOLOGY

GRAPHIC COMMUNICATIONSEDT 7674

Activities available for individual student interests whether experienced or inexperienced in drafting. Students may use this course for exploration or to determine aptitudes in the field of drafting with credits earned applicable to the drafting technology program. Two hours of laboratory a week per credit hour. One to seven credits.

TECHNICAL DRAFTING IEDT 5810

Industrially structured to provide activities and experiences typical of those encountered by drafting technicians: applied and descriptive geometry, orthographic projection, sketching, lettering, U.S. and metric measurement, basic conventions and dimensioning, production drawings, detail, section, auxiliary and assembly. Class/lab meets ten hours a week. Fall, five credits.



TECHNICAL DRAFTING IIEDT 2811

Prerequisite: EDT 5810 or equivalent as determined by program coordinator. Continuation of Technical Drafting I with emphasis on developments, fasteners, precision dimensioning, tolerancing, specifications and manufacturing processes. Class/lab meets ten hours a week. Spring, five credits.

PICTORIAL DRAFTINGEDT 7812

Prerequisite: EDT 5810 or equivalent as determined by program coordinator. Theory and practical applications of three-dimensional pictorial views; axonometric, obliques and perspectives. Use of time-saving devices and applications, i.e., templates, proportional dividers, shading film, photo drafting. Class/lab meets four hours a week. Spring, two credits.

REPROGRAPHICS IEDT 1813

Prerequisite: EDT 5810 or concurrent enrollment. Reproduction processes and techniques typically used by industry. Diazo-white printing, sepia intermediates, wash-off film. Practical applications of photodrafting, microfilming, metal plate making, electrostatic copy machines and scissor drafting. Class/lab meets four hours a week. Fall, two credits.

REPROGRAPHICS IIEDT 4010

Prerequisite: EDT 1813 (*Reprographics I*) Advanced applications of photo reproduction used for engineering documentation; halftones, screening, overlays, "second originals" and product photography—use of 35 mm, view, industrial and process cameras. Class/lab meets four hours a week. Spring, two credits.

ARCHITECTURAL DRAFTINGEDT 2915

Prerequisite: EDT 5810. Applications of architectural drawings used for commercial and industrial construction. Emphasis on techniques, terminologies and methods of construction. Class/lab meets six hours a week. Fall, three credits.

INTERPRETING ARCHITECTURAL DRAWINGSEDT 4011

A beginning course in the fundamentals of interpreting architectural type drawings (blueprints). Involves basic theory of engineering drawings and the use of actual plans for residential, commercial and industrial construction. Class/lab meets four hours a week. Fall, two credits.

STRUCTURAL DRAFTINGEDT 1916

Prerequisite: EDT 2915. Emphasis on the development of drafting practice and knowledge required for drafting technicians working in structural fabrication shops or engineering and design firms. Terminologies, materials and structural systems for concrete and steel. Class/lab meets six hours a week. Spring, three credits.

ELECTRICAL DRAFTINGEDT 5924

Prerequisites: EDT 5810 and 2811 or concurrent with 2811. Introduction to electrical drafting practices in such areas as signaling systems, lighting, power generation, transmission and distribution. Drawing activities oriented to those prescribed by local engineering and design firms. Terminologies, abbreviations, symbols, specifications, use of vendor catalogs. Class meets six hours a week. Spring, three credits.

PROCESS PIPING IEDT 4014

Prerequisites: EDT 5810 and 7812 or equivalent as determined by program coordinator. Introduction to the drawings required in fabrication and erection of process piping systems. Emphasis on symbols, termi-

nologies, specifications, types of valves and fittings. Practical applications of floor diagrams, site plans, isometric spool drawings, dimensioning and material lists. Class/lab meets six hours a week. Fall, three credits.

TECHNICAL ILLUSTRATIONEDT 2297

Application of techniques used by technical illustrators. Conversion of engineering drawings to three-dimensional isometric, dimetric, trimetric and perspective views using various drawing media and graphic aids. Training in the use of technical illustration equipment and photoeducation process. Class/lab meets six hours a week. Fall, three credits.

TOOL DESIGNEDT 7407

Prerequisite: EGR 1243. Problems in the design, construction and operation of dies, jigs and fixtures. Six hours of laboratory a week. Three credits.

INTERPRETATION OF WELDING DRAWINGSEDT 6016

The study of symbols, abbreviations, sectioning and dimensioning as they apply to welding drawings. Sketching and the use of reference materials are included in the course. Class/lab meets four hours a week. Fall, two credits.

INTERPRETING MACHINE DRAWINGSEDT 4012

A basic course designed to provide a practical knowledge in reading machine drawings from actual blueprints. Involves the fundamentals of sketching, orthographic projection, dimensioning, standard symbols and sections as they apply to machine drawings. Class/lab meets four hours a week. Spring, two credits.

BUILDING CONSTRUCTION ESTIMATINGEDT 1229

Introduction to the basic and fundamental principles of taking off quantities of building materials as required by the building construction contractor using working drawings, reference books and tables to perform estimates. Class meets three hours a week. Spring, three credits.

CARTOGRAPHY AND LAND SURVEYINGEDT 4015

Prerequisites: MTH 2942 or MTH 2594 and EDT 5810 or permission of coordinator. Introduction to basic applications of map drafting and methods of land surveying typically used by engineering firms. Includes profiles, map plotting and layout from notes, operation and care of equipment, record keeping and field problems. Class meets six hours a week. Spring, three credits.

ELECTRONICS TECHNOLOGY

INTRODUCTORY ELECTRONICS EET 5290

Familiarization with laboratory instruments, circuit components and basic measurement techniques. Introduction to basic circuits. One hour of class and six hours of laboratory a week. Three credits.

RESISTIVE CIRCUITS EET 2322

Prerequisites: EET 5290 or concurrent enrollment and MTH 9000 or concurrent enrollment or equivalent. Fundamental AC and DC circuit concepts—such as Kirchoff's Laws, Ohm's Law, Thevenin's Theorem—as they apply to resistive circuits. Two hours of class and three hours of laboratory a week. Three credits.

CAPACITIVE AND INDUCTIVE CIRCUITS EET 5056

Prerequisites: EET 2322 and MTH 9001 or concurrent enrollment in MTH 9001 or equivalent. Capacitors and inductors are introduced as circuit elements. AC circuit analysis using complex algebra. Two hours of class and three hours of laboratory a week. Spring, three credits.

NETWORK ANALYSIS EET 1255

Prerequisites: EET 5056 and MTH 9001 or equivalent. Application of mathematical techniques to the analysis of complex electrical circuits or networks. Class meets three hours a week. Fall, three credits.

RESISTIVE ELECTRONICS EET 4289

Prerequisites: EET 5290, MTH 9000 and EET 2322 or equivalent. Resistive circuits in which electronic devices are employed. Introduction to volt-ampere characteristics and physics of diodes, transistors and practical circuits using these devices. Two hours of class and three hours of laboratory a week. Spring, three credits.

LINEAR ELECTRONICS EET 7604

Prerequisites: EET 4289 and 5056. Electronic circuits operating under linear or small signal conditions. Covers wide band amplifiers, power amplifiers and field effect transistors. Two hours of class and three hours of laboratory a week. Fall, three credits.

NONLINEAR ELECTRONICS EET 7490

Prerequisite: EET 7604. Analysis of transistor circuitry. Integrated circuits, negative feedback, oscillators, modulation, frequency effects and voltage regulators. Two hours of class and three hours of laboratory a week. Three credits.

SYSTEMS ANALYSIS EET 7535

Prerequisites: EET 7604 and 1255. Electronic systems including communications, telemetry and controls.

Two hours of class and three hours of laboratory a week. Spring, three credits.

BASIC ELECTRONIC COMMUNICATIONS EET 7039

Prerequisite: EET 5290. Theory of operation of the building blocks of a communications system. Includes devices such as the transistor; circuits, such as oscillators and amplifiers; and terms such as AM and FM. Two hours of class and three hours of laboratory a week. Spring, three credits.

ELECTRONIC COMMUNICATION SYSTEMS EET 2468

Prerequisite: EET 7039 or concurrent enrollment in EET 7490. Theory of electronic communication systems, including AM and FM radio receivers and transmitters, antennas, broadcast stations, television and microwave. Three hours of class a week. Spring, three credits.

ADVANCED COMMUNICATION SYSTEMS EET 1179

Prerequisite: EET 7604. Principles and problems involved in communications. Includes antennas, transmission lines, receiver design and transmitter principles. Two hours of class and three hours of laboratory a week. Spring, three credits.

ALIGNMENT TECHNIQUES EET 2100

Prerequisites: EET 7039 and concurrent enrollment in EET 2468. Service and alignment of radio frequency equipment, black and white television, color television, AM and FM radios, and transmitters. One hour of class and six hours of laboratory a week. Fall, three credits.

MEASUREMENTS AND INSTRUMENTATION EET 2367

Prerequisite: EET 5290. Techniques and equipment used in industrial control and precision-measuring situations. Two hours of class and three hours of laboratory a week. Fall, three credits.

SYSTEMS MAINTENANCE EET 3557

Prerequisites: EET 2468, 2367 or 7604. Principles of fault location and correction. Techniques applied to communications equipment. Two hours of class and three hours of laboratory a week. Spring, three credits.

DIGITAL ELECTRONICS EET 7643

Prerequisite: EET 4289 or by permission. Introduction to the principles and application of digital electronics. Study of the basic digital devices, such as gates, counters, latches, adders. D/A converters, registers and ROMs. Two hours of class and three hours of laboratory a week. Fall, three credits.



MICROPROCESSORS EET 4503

Prerequisite: EET 7643 (Digital Electronics). Introduction to the microprocessor and to microprocessor architecture. An overview of microprocessor programming and applications. Emphasis on laboratory experience with the microprocessor. Two hours of lecture and three hours of lab each week. Three credits.

BASIC CONTROL SYSTEMS EET 6034

Prerequisite: EET 5290. Theory and application of electromagnetic, electromechanical and other transducers and associated circuitry in basic control systems. Two hours of class and three hours of laboratory a week. Spring, three credits.

BASIC COMPUTER COMPONENTS EET 4065

Prerequisite: EET 7643. Review of basic digital principles as applied to computers. Introduction to computer architecture and machine language programming. Introduction to the data base concept. Class meets three hours a week. Spring, three credits.

AVIONICS EET 7194

Introduction to aircraft electrical systems and airborne avionics equipment. Class meets three hours a week. Three credits.

EMERGENCY MEDICAL TECHNOLOGY

EMERGENCY MEDICAL TECHNICIAN . NET 6441

Classroom instruction includes basic anatomy and physiology and patient assessment and treatment of medical and trauma-related conditions. Practical skills such as CPR are taught in lab sessions. In addition, students will have ten hours of in-hospital observation. Students successfully completing this course will meet the prerequisite for taking the EMT-A registry exams. Five credits.

CPR I—BASIC RESCUER NET 2140

Overview of the cardiovascular and respiratory systems. Techniques of one-person, two-person and infant CPR, and management of an airway obstruction are taught. Upon successful completion of this course, the student will be certified by the American Heart Association as a Basic Rescuer. Class meets two hours a week for eight weeks. One credit.

CPR II—BASIC CPR INSTRUCTOR NET 2141

Prerequisite: NET 2140 or current Basic Rescuer certification by the American Heart Association. Review of techniques taught in CPR I. Methodology of teaching. Designing and implementing CPR courses. Demonstration of mastery performance and mini-lectures. Upon successful completion of this course, the student will be certified by the American Heart Association as a Basic CPR Instructor. Class meets two hours a week for eight weeks. One credit.

BASIC CARDIOLOGY AND EKG RECOGNITION NET 2142

Prerequisite: Consent of the program coordinator. Basic anatomy and physiology and electrophysiology of the cardiac system. Introduction to EKG monitoring equipment. Provides students with the ability to recognize normal and abnormal EKG tracings. Overview of coronary artery disease and pharmacological intervention is reviewed. Class meets two hours a week. Class limited to 30. Two credits.

ENGINEERING

ENGINEERING GRAPHICS I EGR 1243

Principles of graphics and design processes. Practical problems relating to interpretation of drawings, interrelation of points, lines and planes, intersections and developments, graphical solutions by charts and graphs, orthographic projection. Use of instruments and lettering. Emphasis on visualization. Class meets six hours a week. Three credits.

ENGINEERING GRAPHICS II EGR 2276

Advanced study and application of detail and assembly drawings, dimensioning, auxiliary views, sectioning and developments. Additional emphasis on creative design processes and visualization. Class meets six hours a week. Three credits.

INDUSTRIAL SCIENCE I EGR 5269

Prerequisite: MTH 4354 or 2942 or equivalent. Introduction to principles of mechanics, work, power and energy. Class meets three hours a week. Three credits.

INDUSTRIAL SCIENCE II EGR 3315

Prerequisite: MTH 5387 or 9004 or equivalent. Introduction to the mechanical and thermal properties of matter, sound and light. Class meets three hours a week. Three credits.

STATICS.....EGR 6082

Prerequisite: MTH 3268 or concurrent enrollment. Vectors, force systems, friction, centroids and moments of inertia. Class meets three hours a week. Three credits.

PROGRAMMING FOR ENGINEERING AND SCIENCE.....EGR 7724

Prerequisite: MTH 3427 or equivalent. Use of the FORTRAN programming language in developing programming techniques for solving scientific and engineering problems on digital computers. Emphasis is on the vocabulary and grammar of FORTRAN. Class meets three hours a week. Minimum of three hours of laboratory a week by arrangement. Four credits.

DYNAMICS.....EGR 5517

Prerequisite: EGR 6082 and MTH 4313 or concurrent enrollment in MTH 4313. Unbalanced force systems and the resulting motion, work and energy, impulse, momentum and impact. Class meets three hours a week. Three credits.

MECHANICS OF MATERIALS.....EGR 7389

Prerequisite: EGR 6082. Theory of simple stress and strains in elastic materials, torsion, beams and columns. Class meets three hours a week. Three credits.

MECHANISMS.....EGR 6198

Prerequisite: EGR 1243. Studies motion of machine parts and methods of transmission of motion by links, cams, gears and belts. Class meets six hours a week. Three credits.

PROCESSES AND MATERIALS OF MANUFACTURING.....EGR 4661

Basic principles and theory of production processes for metal and plastics. Class meets three hours a week. Three credits.

BUILDING MATERIALS AND CONSTRUCTION.....EGR 7118

Study of principal materials used in buildings. Emphasis on properties and applications in building construction. Use of construction specifications, building codes, trade association publications and other standards. Class meets three hours a week. Spring, three credits.

PROJECT LABORATORY.....EGR 4580

Prerequisites: EET 5290 and by permission. Construction or design and construction of equipment agreed upon by instructor and student. Laboratory and shop by arrangement. One to four credits.

EQUINE STUDIES

STABLE MANAGEMENT.....SES 1216

Survey of methods in caring for horses. Feeding, grooming, barn sanitation and upkeep will be emphasized. Two hours of classroom instruction and two hours of practical exercises in the stable a week. Three credits.



BASIC HORSE TRAINING.....SES 2352

This course covers halter breaking, leading, handling, biting, loughing, saddling and bridling, methods of restraint, and actual riding of young horses. Class meets four hours a week. Two credits.

ADVANCED HORSE TRAINING.....SES 3784

Prerequisite: SES 2352. A continuation of Basic Horse Training with emphasis on systems of training horses for specialized events. Areas to be covered are English and Western Pleasure, Hunters, first and second level dressage, Working Cowhorse and speed event. Class meets four hours a week. Two credits.

EQUINE ANATOMY AND PHYSIOLOGY

.....SES 2335

A study of the structure and development of the circulatory, nervous, skeletal, muscular, digestive and respiratory systems of equines. Class meets four hours a week. Four credits.

ENGLISH EQUITATION.....SES 1880

An introduction to English equitation. Position of rider, control of horse and basic movements will be stressed on a beginning to intermediate level. Hard hats and boots are required. Four hours of riding a week. Two credits.

INTERMEDIATE ENGLISH EQUITATION

.....SES 4140

A continuation of SES 1880 (English Equitation) with emphasis on development of intermediate skill level in riding and showing. Four contact hours. Two credits.

ADVANCED ENGLISH EQUITATION . . . SES 3762

Prerequisites: SES 1880 and 4140 or permission of instructor. A continuation of English Equitation with emphasis on development of advanced skill level in riding and showing. Class meets four hours a week. Two credits.

WESTERN EQUITATION SES 1395

An introduction to Western equitation. Position of the rider, control of horse and basic movements will be stressed on a beginning to intermediate level. Four hours of riding a week. Two credits.

INTERMEDIATE WESTERN EQUITATION

. SES 4139

A continuation of SES 1395 (Western Equitation) with emphasis upon development of intermediate skill level in riding and showing. Four contact hours. Two credits.

ADVANCED WESTERN EQUITATION . . . SES 2430

Prerequisite: SES 1395 and 4139 or permission of the instructor. A continuation of Western Equitation with emphasis on development of advanced skill level in riding and showing. Four hours of riding a week. Two credits.

EQUINE JUDGING SES 1308

Equine selection, class placings and evaluation techniques are primary topics covered. Class meets four hours a week. Two credits.

EQUINE NUTRITION SES 1350

A study of the digestive system, classes of feeds, feeding requirements, composition of feeds, systems of feeding, commercial feeds and supplements, and vitamin, mineral and water requirements of the horse. Class meets four hours a week. Four credits.

TECHNIQUES OF RIDING INSTRUCTION I

. SES 1184

Prerequisite: SES 1880 or SES 1395. Designed for students who intend to specialize in riding instruction. Practical demonstration of teaching methods, skill development and oral presentations. Class meets four hours a week. Three credits.

TECHNIQUES OF RIDING INSTRUCTION II

. SES 1237

Prerequisite: SES 1184. Planning camp programs and public lessons with emphasis on safety as a primary factor. Rider problems and maintenance of the school horse are taken into special consideration along with practice in planning and teaching elementary and intermediate level riding. Class meets four hours a week. Three credits.

EQUINE SHOWMANSHIP SES 1103

Prerequisite: SES 1880 or SES 1395. Showing rules and etiquette and practical knowledge of horseshows. Proper turn-out of horse and rider is emphasized. Class meets four hours a week. Two credits.

BASIC HORSESHOEING SES 1156

Horseshoeing skills, pulling shoes, trimming hooves, preparing feet and driving nails are practiced. Corrective shoeing techniques. Hot and cold shoeing. Basic foot anatomy. Class meets six hours a week. Three credits.

EQUINE BREEDING AND MANAGEMENT

. SES 3029

Anatomy, reproductive physiology, genetics, breeding diseases, congenital and hereditary problems, selection and management of breeding stock. Class/lab meets five hours a week. Four credits.

EQUINE HEALTH, DISEASE AND DISORDERS

. SES 3820

A study of general health care and routine procedures, preventive health care, restraint of horse, horse owner's basic treatments, equine obstetrics and foal care, equine ailments, some special treatments and procedures and the use of drugs and related substances. Class/lab meets five hours a week. Four credits.

BASIC DRESSAGE SES 4141

Instruction in the classical form of riding and training horses known as dressage. Covers terminology, equitation and rules for competition. Class meets four hours a week. Two credits.

ADVANCED EQUITATION PROJECT . . . SES 3489

Student is given the opportunity to develop an individual project under the direct supervision of Equine Studies instructors. Equitation projects are intended to develop skills not fostered by the standard course offerings. Projects must have clearly stated performance objectives and be approved by the program coordinator. Class meets four hours a week. Two credits.



FASHION MERCHANDISING

FASHION FUNDAMENTALS I BFM 7013

The total concept of fashion—what makes it, changes it and sells it. Covers the fashion industry from the designer to the manufacturer to the distributor. Concludes with consumer and merchandising trends within the industry. Class meets three hours a week. Fall, three credits.

FASHION FUNDAMENTALS II BFM 1019

Prerequisite: BFM 7013 or by permission. Technical aspects of merchandising, personnel policies, principles of management, role of the buyer, buying principles and merchandising mathematics. Class meets three hours a week. Fall, three credits.

TEXTILES BFM 1195

Natural and synthetic textile fibers, weaves, finishes and their comparative characteristics. Emphasis on selling techniques, care and use of textiles. Class meets three hours a week. Three credits.

HISTORY OF DRESS BFM 2568

Historical evolution of dress in the Western World from Egypt to 1980. The fashion cycle and the elements that affect it: economic, political, social and technological advancements. Class meets three hours a week. Spring, three credits.

FASHION DISPLAY BFM 1054

Practical exercises in the visual merchandising of fashion products. Creating effective interior and window displays using appropriate materials, colors, lighting and signs. Class meets three hours a week. Fall, three credits.

FASHION ILLUSTRATION I BFM 5294

Application of basic sketching techniques to the human figure and clothing designs for the development of newspaper and magazine advertising. Class meets three hours a week. Three credits.

FASHION ILLUSTRATION II BFM 1926

Prerequisite: BFM 5294 or approval of instructor. An in-depth study of fashion illustration as a visual selling technique. Strong emphasis on developing an individual style resulting in an attractive portfolio geared to the career objectives of the individual student. Class meets three hours a week. Spring, three credits.

FASHION PROMOTION BFM 4655

Planning and implementing activities to influence the sale of merchandise, services or ideas through publicity, special events, fashion shows, personal selling, advertising and display. Students will do the planning

necessary for a successful fashion show such as choosing themes, merchandise, location, music and commentary. Class meets three hours a week. Spring, three credits.

FASHION IN SOCIETY BFM 3046

A study of the interrelationship of the psychological, economic and sociological aspects of clothing. Relates wardrobe management and artistic expression to personal clothing choices and the cultural interpretation of clothing symbolism within various cultures. Class meets three hours a week. Three credits.

INTERIOR DESIGN I BFM 5149

A basic course in interior design emphasizing the elements and principles of design for practical application in today's home. Design is creative and productive, so the class will offer not only knowledge but use. Actual materials will be used in the development of numerous interior design projects while relating them to scaled furniture arrangements. Class meets three hours a week. Three credits.

INTERIOR DESIGN II BFM 2925

Prerequisite: BFM 5149 or by permission. This course enables students with basic interior design fundamentals to increase their knowledge and practical application of interior design elements. Class meets three hours a week. Three credits.

MERCHANDISE EVALUATION BFM 3503

Evaluation of textile and nontextile products, ranging from lingerie to handbags, crystal to china. Student will gain understanding in chosen classification by preparing product manual and conducting a simulated departmental meeting to train staff in selling that merchandise. Class meets three hours a week. Spring, three credits.



FASHION SEMINAR: HUMAN RELATIONS

..... BFM 2017
Prerequisite: Admission to the Fashion Merchandising Program. Work experience in an approved training situation under instructional supervision. Emphasizes employee-employer-customer relations, job applications, interviews, job orientation and sources of product information. Class meets two hours a week with a minimum of fifteen hours a week on-the-job training by arrangement. Fall, three credits.

FASHION SEMINAR: SUPERVISORY DEVELOPMENT

..... BFM 2204
Prerequisite: Admission to the Fashion Merchandising Program. Work experience in an approved training situation under instructional supervision. Designed to develop competency in modern techniques of effective supervisory practices in business. Getting ideas across, obtaining teamwork, determining goals, assessing promotability, techniques of getting results through group effort and key problems in supervision. A minimum of 15 hours on-the-job training a week by arrangement. Class meets two hours a week. Spring, three credits.

FASHION SEMINAR: CAREER OPTIONS

..... BFM 7552
Prerequisite: Admission to the Fashion Merchandising Program. Work experience in an approved training situation under instructional supervision. Emphasis on developing career goals by exploring many career options in fashion. Class meets two hours a week. A minimum of 15 hours on-the-job training a week by arrangement. Fall, three credits.

FASHION SEMINAR: MARKET RESEARCH

..... BFM 1665
Prerequisite: Admission to the Fashion Merchandising Program. Work experience in an approved training situation under instructional supervision. Emphasis on marketing research and problem-solving techniques. Simple statistical measurements, their use and application to specific business problems. Class meets two hours a week. A minimum of 15 hours on-the-job training a week by arrangement. Spring, three credits.

FIRE PROTECTION AND PUBLIC SAFETY

INTRODUCTION TO FIRE SCIENCE EFS 1743

An introduction to the fire service and fire protection; career opportunities in fire protection and related fields; history of fire protection; fire loss analysis; public, quasi-public and private fire protection services; specific fire protection functions; fire chemistry and physics. Class meets three hours a week. Three credits.



FUNDAMENTALS OF FIRE PREVENTION

..... EFS 1745
Organization and function of fire prevention; inspections, surveying and mapping procedures; recognition of fire and life hazards; engineering a solution of a fire hazard; enforcing the solution of a fire hazard; and public relations as affected by fire prevention. Class meets three hours a week. Three credits.

FIRE HYDRAULICS EFS 1748

Review of applied mathematics, hydraulics laws as applied to the fire service and application of formulas and mental calculation to hydraulics and water supply problems. Class meets three hours a week. Three credits.

FIRE HYDRAULICS LABORATORY EFS 2577

Prerequisite: EFS 1748 (Fire Hydraulics) or concurrent enrollment. Experimentation and application of hydraulic laws, formulas and mental calculation of hydraulic and water supply problems. National and state certification standards related to water flow, and water supply and motor pump operation. Class meets three hours a week. One credit.

FIRE COMPANY ORGANIZATION AND MANAGEMENT EFS 1752

Review of fire department organization, planning, organizing and supervising to meet the needs of the fire department, with emphasis on the company officer's role. Class meets three hours a week. Three credits.

BUILDING CONSTRUCTION FOR FIRE PROTECTION EFS 3744

Fundamentals of building construction as they relate to fire protection. Classification by occupancy and types of construction with emphasis on fire protection features including building equipment, facilities, fire resistive materials and high-rise considerations. Class meets three hours a week. Three credits.

HAZARDOUS MATERIALS I EFS 2742

An introduction to basic fire chemistry and physics. Problems of flammability as encountered by fire fighters when dealing with fuels and oxidizers. Elementary fire fighting practices pertaining to hazardous materials in storage and transit. Class meets three hours a week. Three credits.

FIRE APPARATUS AND EQUIPMENT . . . EFS 3757

Fire apparatus design, specifications and performance capabilities; effective utilization of apparatus in fire service emergencies. Class meets three hours a week. Three credits.

FIRE INVESTIGATION EFS 4750

Determining cause of fires (accidental, suspicious and incendiary); types of fires; related laws; introduction to arson and incendiarism; recognizing and preserving evidence; interviewing witnesses and suspects; arrest and detention procedures; court procedures; and giving court testimony. Class meets three hours a week. Three credits.

FIRE PROTECTION EQUIPMENT AND SYSTEMS EFS 4751

A study of portable fire extinguishing equipment, protection systems for special hazards, sprinkler systems, fire detection and alarm systems. Class meets three hours a week. Three credits.

FIRE SERVICE COMMUNICATIONS SYSTEMS EFS 4754

An introduction to the basic fire alarm operator's area of specialized knowledge; duties and performance objectives. A general course on the installation, operation and testing of fire alarm and communication systems. Operators and potential alarm operators. Class meets three hours a week. Three credits.

FIRE SERVICE RECORDS AND REPORTS EFS 5746

Course designed for all members of the fire service in the use of typical records and report systems. Involves knowledge and understanding of fire department records systems, principles of report writing, applications in the area of prefire survey, postfire reporting, research and planning. Class meets three hours a week. Three credits.

FIRE TACTICS AND STRATEGY EFS 5756

Principles of fire control through the utilization of manpower, equipment and extinguishing agents on the fireground. Class meets three hours a week. Three credits.

FIRE VEHICLE MAINTENANCE FOR OPERATORS AND MECHANICS EFS 6747

A survey course in the fundamentals of all vehicle structure. Basic construction of the vehicles, including

the main powering systems (fire pumps excluded), and techniques of maintenance. Class meets three hours a week. Three credits.

HAZARDOUS MATERIALS II EFS 6749

A second-semester course in hazardous materials covering handling, identification and fire fighting practices involving explosive, toxic and radioactive materials in storage and transit. Class meets three hours a week. Three credits.

RELATED CODES AND ORDINANCES . . . EFS 6753

Familiarization and interpretation of national, state and local codes, ordinances and laws which influence the field of fire prevention. Class meets three hours a week. Three credits.



RESCUE PRACTICES EFS 6755

Rescue problems and techniques, emergency rescue equipment, toxic gases, chemicals and diseases, radiation hazards, care of victims, including emergency childbirth, respiration and resuscitation, extrication and other emergency conditions. Class meets three hours a week. Three credits.

SEMINAR: FIRE PROTECTION AND PUBLIC SAFETY EFS 2415

Course consists of eight different units that require approximately 22 hours of instruction (including review and test). Each unit consists of a directed slide-tape presentation and a Student Performance Manual. Performance-based objectives are used for students at each unit's introduction. The time allotment for each unit depends on the amount of material to be covered by each topic area. One credit.

FOREIGN LANGUAGE

ELEMENTARY SPANISH I CFL 3285

Basic course in Spanish language, including grammar study, conversation, composition and an introduction to the culture of Spanish-speaking countries. Class meets five hours a week. Five credits.

ELEMENTARY SPANISH II CFL 1239

Prerequisite: CFL 3285 or one year of high school Spanish. Continuation of CFL 3285 (Elementary Spanish I). Graded reading selections added as basis for conversation and composition in the discussion periods. Class meets five hours a week. Five credits.

INTERMEDIATE SPANISH CFL 7221

Prerequisite: CFL 1239 or two years of high school Spanish. A reading course to build vocabulary, further understanding of Hispanic culture and speaking fluency. Composition and conversation in Spanish. Grammar review. Class meets three hours a week. Three credits.

ADVANCED SPANISH CFL 6626

Prerequisite: CFL 7221 or three years of high school Spanish. Continuation of CFL 7221 (Intermediate Spanish) with extensive study of Hispanic literature. Advanced reading. Grammar review continues. Class meets three hours a week. Three credits.

ELEMENTARY FRENCH I CFL 4570

Basic course in the French language includes vocabulary building, grammar study, conversation, and introduction to the French culture and civilization. Emphasis on the spoken language. Cassette tapes of all lessons in French are available for each student to take home. Class meets five hours a week. Five credits.

ELEMENTARY FRENCH II CFL 2293

Prerequisite: CFL 4570 or one year of high school French. Continuation of CFL 4570 (Elementary French I) with graded reading selections to be used as basis for conversation. Cassette tapes of all lessons in French are available for each student to take home. Class meets five hours a week. Five credits.

CONVERSATIONAL FRENCH CFL 2447

Prerequisite: CFL 2293 or two years of high school French. An intermediate course to build spontaneous speaking ability. Topics revolving around everyday life situations and current events are discussed in class. Class meets two hours a week. Two credits.

INTERMEDIATE FRENCH CFL 1442

Prerequisite: CFL 2293 or two years of high school French. Intermediate reading course to build vocabulary, comprehension and increase the speaking ability acquired

in Elementary French I and II. The reading of numerous newspaper articles from leading French magazines is integrated with a grammar review, conversation and composition in French. Class meets three hours a week. Three credits.

ADVANCED FRENCH CFL 5574

Prerequisite: CFL 1442 or three years of high school French. Continuation of CFL 1442 (Intermediate French). Advanced reading, with study of newspaper articles taken from "Match," "Elle," "L'Express." Complete grammar review. Conversation and composition in French. Class meets three hours a week. Three credits.

ELEMENTARY GERMAN I CFL 3196

Presentation of the sounds, vocabulary and basic structural patterns of elementary German, with development of listening comprehension, speaking, reading and writing skills. Cultural material is integrated into all German courses. Class meets five hours a week. Five credits.

ELEMENTARY GERMAN II CFL 6207

Prerequisite: CFL 3196 or one year of high school German. Continuation of CFL 3196 (Elementary German I) with further practice and development of listening comprehension, speaking, reading and writing skills. Class meets five hours a week. Five credits.

INTERMEDIATE GERMAN CFL 3401

Prerequisite: CFL 6207 or two years of high school German. Vocabulary building and grammar review primarily through extensive reading of German texts, with additional practice in listening, speaking and writing. Class meets three hours a week. Three credits.

ADVANCED GERMAN CFL 5199

Prerequisite: CFL 3401 or three years of high school German. Further expands the mastery of German vocabulary and structure through extensive reading of more advanced texts. Class meets three hours a week. Three credits.

BEGINNING CHINESE CFL 2646

Introduction to the Chinese language known as "The Common Language" as spoken natively in the Peking area. Class meets five hours a week. Five credits.

BEGINNING JAPANESE CFL 5783

Emphasis on the spoken language, its syntax and grammar. Short introduction to the Japanese syllabary, hiragana and some ideographs (Kanji). Includes, through language drills, an introduction to Japanese culture. Class meets five hours a week. Five credits.

GENERAL STUDIES

STUDY SKILLS MINI COURSE LC 3003

Small group sessions to help develop study skills in test taking; taking notes and using your textbook; critical reading and memory recall; effective listening and classroom strategies; and library and counseling resources. Students will read and discuss basic information. Practice exercises will be provided for use in the General Studies Lab. Class meets one hour each week. One credit.

ENGLISH AS A SECOND LANGUAGE LC 7032

Basic written communication for those whose native language is not English. Emphasis on grammar, sentence structure, organization, idiomatic usage, spelling and vocabulary, leading to clear written and oral communication. Class meets three hours a week. Three credits.

INDIVIDUALIZED STUDIES

ALGEBRA PREPARATION LC 8837

Diagnostic test results place a student at the appropriate level in programmed materials dealing with sets, counting numbers, integers, rational numbers, equations involving two variables, polynomials, factoring, quadratics and absolutes, graphing, exponents and logarithms. Class meets by arrangement. One credit.

CHEMISTRY PREPARATION LC 1838

Diagnostic test results place a student at the appropriate level in programmed materials, including but not limited to valences, chemical equations, solubility, ionic structures and complexes, the metric system, the atomic theory, thermochemistry, kinetic theory, nuclear structure and chemical equilibrium. Class meets by arrangement. One credit.

ENGLISH GRAMMAR REVIEW LC 4840

Diagnostic test results place a student at the appropriate level in programmed materials dealing with parts of speech, sentence structure, verb forms, modifiers, pronoun choice, avoiding sentence fragments and run-ons, punctuation and capitalization. Class meets by arrangement. One credit.

READING COMPREHENSION LC 8841

Individualized instruction in sequenced kits emphasizing general comprehension skills through use of survey technique and related vocabulary development. Class meets by arrangement. One credit.

READING RATE LC 6833

Students work toward increased reading rate by adapting materials of their choice to use with reading pacers. Skimming and scanning techniques also are used. Class meets by arrangement. One credit.

SPELLING IMPROVEMENT LC 1834

Through systems of tapes, kits or programmed texts, students learn to correct specific kinds of spelling errors. Class meets by arrangement. One credit.

VOCABULARY DEVELOPMENT LC 6835

Students work toward improved vocabulary by concentrating on techniques of unlocking meaning through context clues and knowledge of roots, prefixes and suffixes. Class meets by arrangement. One credit.

BASIC MATH REVIEW LC 4836

Diagnostic test results place a student at the appropriate level in programmed materials dealing with addition, subtraction, multiplication, division, fractions, decimals and percents. Class meets by arrangement. One credit.

STUDY SKILLS LC 6839

Diagnostic test results place a student at the appropriate level in books and taped programs dealing with previewing study-type reading, notetaking while reading, listening and taking class notes, preparing for and taking examinations, planning time and physical setting. Class meets by arrangement. One credit.

INDIVIDUALIZED STUDY LC 7606

Individualized instruction in areas of special need and interest prescribed on the basis of diagnostic evaluation. Programs of study are tailored to abilities, learning style, interests and degree of self-discipline. Students proceed at own pace and level on self-motivating materials and projects. Areas of study include reading rate and comprehension, study skills, communications, mathematics, spelling, and vocabulary. Three credits.

INDIVIDUALIZED STUDY LC 4466

One credit.

INDIVIDUALIZED STUDY LC 5549

Two credits.

HEARING IMPAIRED

BASIC ENGLISH FOR HEARING IMPAIRED PERSONS (HIP) COM 6133

Basic skills in written communications, including sentence structure, the system of language, its characteristics and functions. Emphasis on vocabulary and the effect of words. Class meets five hours a week. Three credits.

BASIC ENGLISH FOR HIP II COM 7488

Prerequisite: COM 6133. Continuation of COM 6133 (Basic English I). Emphasis on grammar, organization, idiomatic usage, spelling and vocabulary, leading to

clear written composition. Class meets five hours a week. Three credits.

BASIC ENGLISH FOR HIP III COM 5030

Prerequisite: COM 7488. Practice in expression through written compositions. Emphasis on organization, clarity of expression and style. Class meets five hours a week. Three credits.

BASIC MANUAL COMMUNICATIONS . . . LC 7029

Basic American sign language used to communicate with deaf adults. Subject material related to language, psychological and social aspects of the deaf person. Class meets three hours a week. Three credits.

LAB FOR BASIC MANUAL COMMUNICATIONS

. LC 1818

A laboratory to aid the student with Basic Manual Communications. Provides opportunity to practice the signs taught in the basic course with both deaf and hearing students. Class meets by arrangement. One credit.

INTERMEDIATE MANUAL COMMUNICATIONS

. LC 4488

Prerequisite: LC 7029. A study in American sign language and a continuation of LC 7029. A continuation of new signs with an emphasis on body language and expression. Class meets three hours a week. Three credits.

SPEECH THERAPY LC 6815

The individualized speech therapy program is designed to meet the student's needs. Communication disorders related to hearing loss, disfluency, resonance, voice and articulation problems are treated. By arrangement. Three credits.



ADJUSTMENTS INTO ADULT LIVING (HIP)

. LC 3024

Teaches daily living skills as an aid in the mainstreaming process of the college. The study of college survival skills, including study habits, money management, employer-employee relationships, introduction to college facilities and support services, career exploration and clarification of personal values. Class meets three hours a week. Three credits.

HUMANITIES

INTRO. TO THE HUMANITIES HUM 6120

This interdisciplinary study of the arts begins with the study of artistic form and the technical elements of several art forms including painting, music and drama. The expression of major themes in human existence through these art forms is also examined. Class meets three hours a week. Three credits.

COMPARATIVE CULTURES HUM 5431

Interdisciplinary study of cultures. The course emphasizes development of the humanities in selected cultures as a background to the arts in contemporary society. Two European cultures and one non-European culture are studied. The concept of culture and the role of the humanities in culture in general is investigated. Class meets three hours a week. Three credits.

INTRODUCTION TO PHILOSOPHY . . . HUM 7520

Examines basic issues of philosophy, such as the nature of being, methods of acquiring knowledge and the foundations of moral, religious and political beliefs. Emphasis is placed on the value philosophical inquiry has for contemporary living. Class meets three hours a week. Three credits.

PHILOSOPHY OF CURRENT CIVILIZATION

. HUM 2532

A systematic and critical analysis of selected major current issues in American civilization and the philosophies presupposed by these issues. Analysis through relevant philosophical articles and news media. Class meets three hours a week. Three credits.

ETHICAL ISSUES IN AMERICAN HEALTH CARE

. HUM 4000

This course focuses on ethical concerns and dilemmas which arise in health care settings. Attention is given to frameworks for analyzing ethical dilemmas and the value implications underlying models of patient treatment. Issues concerning patients' rights, life and death, scarce resources and cost are considered from varying ethical frameworks. Professional roles in health care and alternate forms of health care are also considered. Course meets one hour a week. One credit.

HISTORY OF ANCIENT PHILOSOPHY

HUM 5966

Greek and Roman thought, which ranges from speculation about the universe and theories of natural selection and atomism to carefully thought out treatises on the nature of people and society. Selections from ancient texts will be used, with commentary where appropriate. Class meets three hours a week. Three credits.

PHILOSOPHY OF RELIGION

HUM 2541

Rather than study the forms and documents of any specific religion, this course attempts to deal with the following questions: What is religion? Do we need religion and, if so, why? What are the differences between the claims made by religion and science? All readings are from contemporary theological and philosophical sources. Class meets three hours a week. Three credits.

LOGIC

HUM 6392

Emphasis on improved ability to reason, clear thinking for effective expression, deductive and inductive arguments, and informal fallacies. Class meets three hours a week. Three credits.

ETHICS

HUM 3080

Study of the great problems of ethics, including free will and determinism, relativism and absolutism, the relationship between individuals and between individuals and society. Explanation of traditional positions enabling the student to better understand contemporary social and moral issues. Class meets three hours a week. Three credits.

HOSPITALITY MANAGEMENT

BASIC FOOD PREPARATION

BHM 7028

Prerequisite: Admission to the Hospitality Management Program. Basic quantity food preparation; theory of grilling, frying, broiling and sauteeing with a thorough understanding of the use and maintenance of equipment and duties performed at each station. Special emphasis on meat cuts, basic salad dressings and sauces. Class meets three hours a week. Three credits.

HOTEL-MOTEL OPERATIONS

BHM 4203

Coordinated management, administration and controls specific to public lodging establishments with emphasis on management functions. Front office procedures and techniques in the rental of rooms, reception of guests, handling of reservations, guest requests and complaints, convention and meeting procedures and requirements, guest records, mail and other routine procedures are studied. Class meets three hours a week. Three credits.



HOSPITALITY MANAGEMENT FUNDAMENTALS

BHM 6037

General overview of organization and departmental functions of food service and public lodging industries; positions of the industries in the American economic system; functions and limitations of the types of establishments. Class meets three hours a week. Three credits.

FOOD MANAGEMENT

BHM 3006

Prerequisite: Admission to the Hospitality Management Program. Menu planning and meal service for all phases of food service. Proper table service for various occasions. Buffet service, French service, American service and waiter/waitress training. Actual operation of an on-campus dining room including profit and loss statements, sales promotions and competitiveness studies. Class meets four hours a week. Three credits.

SUPERVISORY MANAGEMENT

BHM 4489

Supervision and motivation of employees in the hospitality industry with emphasis on human relations, delegation, training, evaluation and communication. Class meets three hours a week. Three credits.

SEMINAR IN HOSPITALITY MANAGEMENT:

PURCHASING

BHM 1287

Prerequisite: Admission to the Hospitality Management Program. Supervised work experience within an approved area in the hospitality field. Purchasing techniques and specification writing for items used in the hotel-motel food service field. Class meets two hours a week. A minimum of 15 hours on-the-job training a week by arrangement. Three credits.

SEMINAR IN HOSPITALITY MANAGEMENT:

ACCOUNTING BHM 5008

Prerequisite: Admission to the Hospitality Management Program. Supervised work experience within an approved area in the hospitality field. Principles and techniques of operating front offices, posting machines and front desks. Preparation of actual operation statements for food service operators, inventory preparation and control systems. Class meets two hours a week. Three credits.

SEMINAR IN HOSPITALITY MANAGEMENT:

INTERNSHIP BHM 2640

Prerequisite: Admission to the Hospitality Management Program. Supervised work experience within an approved area in the hospitality field. Class meets by arrangement. Summer, three credits.

SEMINAR: ADVANCED HOSPITALITY

MANAGEMENT BHM 1388

Prerequisites: BHM 4489, 5008, 6037. Emphasis on application of skills in menu planning, food service, supervision, front office procedures, design techniques and beverage control enabling students to assume managerial responsibility in the hospitality field. Class meets three hours a week. Three credits.

SEMINAR IN MENU PLANNING AND SALES

PROMOTION BHM 4805

Concepts of planning menus for every type of service and facility. Menu layout, selection and development will be combined with operational impact projections. The effects of various price structures will be studied. The theory of menu design prior to construction will be developed. A minimum of 15 hours on-the-job training a week by arrangement. Class meets two hours a week. Three credits.

DESIGN TECHNIQUES BHM 3804

Prerequisite: BHM 7028. A course in which food service design is studied in detail in relation to the menu, the location and the type of clientele expected. Layout, design and equipment specification will be included. Class meets two hours a week. Two credits.

ADVANCED FOOD PREPARATION BHM 7803

Prerequisite: BHM 7028 and 3006. Allows students with fundamental food skills to increase their knowledge of the culinary arts by implementing advanced skills required in the preparation of international cuisine. Class meets four hours a week. Four credits.

SEMINAR IN BEVERAGE CONTROL . . . BHM 4807

A course in beverage control for all types of operations. A study of the history of wines, their uses and storage procedures. An in-depth study of spirits, inter-

nal control systems as well as local and state alcoholic beverage control laws. Class meets two hours a week. Three credits.

FOOD SPECIALTIES—GARDE-MANGER BHM 2166

Prerequisite: BHM 7028. A study of basic food preparation for the hospitality industry. Course will include soups, stocks, sauces, garde-manger section, chaud-froid pieces, buffets. Class meets three hours a week. Three credits.

FUNDAMENTALS OF BAKING BHM 2163

Lecture and participation in basic baking procedures. Ingredients, measurements, mixing procedures, equipment use, proofing procedures, baking and final presentation of the product will be covered. Class meets three hours a week. Three credits.

CULINARY ARTS PRACTICUM I BHM 2913

Prerequisite: Acceptance into the American Culinary Federation Chef Apprenticeship Training Program. On-the-job apprentice training under the supervision of a qualified chef. An opportunity to learn food preparation and presentation techniques and to apply the knowledge and skills acquired on the job and in theory-related courses. The assignments in the operation will provide experience and training in all aspects of food service operation. The practicum will be conducted by a staff member of Johnson County Community College and supervised by an appointed member of the Greater Kansas City Chefs Association. Three credits.

CULINARY ARTS PRACTICUM II BHM 4941

Prerequisite: BHM 2913. A continuation of Culinary Arts Practicum I. Three credits.

CULINARY ARTS PRACTICUM III BHM 5942

Prerequisite: BHM 4941. A continuation of Culinary Arts Practicum II. Three credits.

CULINARY ARTS PRACTICUM IV BHM 7943

Prerequisite: BHM 5942. A continuation of Culinary Arts Practicum III. Three credits.

CULINARY ARTS PRACTICUM V BHM 6944

Prerequisite: BHM 7943. A continuation of Culinary Arts Practicum IV. Three credits.

CULINARY ARTS PRACTICUM VI BHM 9945

Prerequisite: BHM 6944. A continuation of Culinary Arts Practicum V. Three credits.

HOSPITALITY LAW BHM 2177

Prerequisite: BHM 6037. Designed to familiarize the student with major legal problems which occur in the hotel-restaurant industry. Class meets three hours a week. Three credits.

INTERPRETER TRAINING

ORIENTATION TO INTERPRETING LC 5166

An overview of interpreting as an occupation. Topics include interpersonal skills, professional ethics, parameters of responsibility of the paraprofessional, examination of community resources, and legal ramifications. Class meets three hours a week. Three credits.

UNDERSTANDING DEAFNESS LC 5169

Study of the various causes of deafness; how impaired hearing affects physical, emotional, psychological, sociological and mental development patterns; how the deaf deal with society and how society deals with the deaf. Provides information in areas of testing, employment and counseling of deaf individuals. Class meets three hours a week. Three credits.

INTERPRETING I LC 5170

Prerequisites: LC 5167 and LC 6053. Introduction to interpreting principles with emphasis on American Sign Language (ASL) expressive interpreting and building translating skills. Class meets three hours a week. Three credits.

INTERPRETING II LC 5171

Prerequisites: LC 5168 and LC 5170. Advanced course with concentration on reverse interpreting, translating and interpreting ethics. Introduction to technical and vocational sign language. Class meets three hours a week. Three credits.

COMMUNICATION SYSTEMS OF DEAFNESS I

Prerequisite: LC 7029. Study of the historical emergence of American Sign Language (ASL), ASL sign principles and the linguistic structure of the language, and the application of these principles in building expressive and receptive ASL signing skills. Class meets three hours a week. Three credits.

COMMUNICATION SYSTEMS OF DEAFNESS II

Prerequisites: LC 5167 and LC 6053. Introduction to the different systems used to communicate with the deaf person such as ASL, S.E.E., L.O.V.E., Oral, Rochester, Cued Speech and M.C.E. Class meets three hours a week. Three credits.

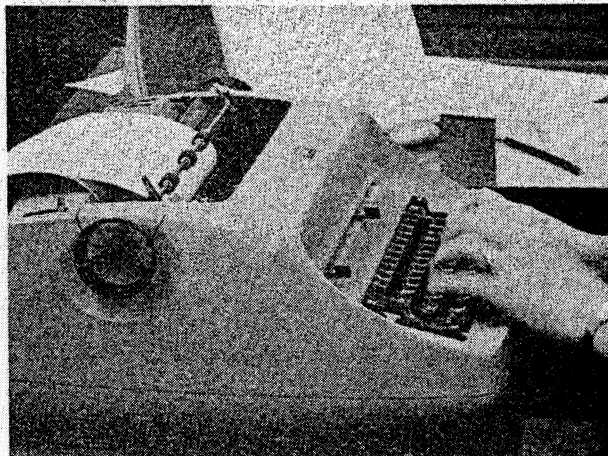
INTERPRETING PRACTICUM LC 5172

Prerequisites: LC 5168 and concurrent enrollment in LC 5171. Introductory field experience involving observation and interaction totaling 45 credit hours a semester. Discussion of current literature in the field. Class/lab meets six hours a week. Three credits.

JOURNALISM

PRINCIPLES OF JOURNALISM CJO 6648

Prerequisite: Basic typing skills or concurrent enrollment in BSC 1263. A study of journalism, its role in our society and the social responsibilities of the press. Various types of news and feature stories and the elements of style are emphasized. Students cover a news beat and write articles, which are submitted to the campus newspaper. Class meets three hours a week. Three credits.



NEWS GATHERING AND NEWS WRITING

. CJO 1343

Prerequisite: Beginning typing or equivalent or concurrent enrollment in BSC 1263. An evaluation of news, how news is gathered, written and published. Practical experience includes the development of interview techniques, in-depth writing and submission of stories to the campus newspaper. Class meets three hours a week. Three credits.

FUNDAMENTALS OF ADVERTISING . . . CJO 2136

The role of advertising in today's business world. A study of various forms of advertising and the media involved. Class meets three hours a week. Three credits.

ADVERTISING COPYWRITING CJO 7139

Prerequisite: CJO 2136 or by permission. Principles of advertising copywriting with practice in developing copy for a variety of tangible and intangible products. Each class member conducts an advertising campaign. Class meets three hours a week. Three credits.

JOURNALISM FIELD STUDY I CJO 7464

Prerequisite: By permission. Work experience at an approved training center under staff supervision. Emphasis is placed on the application of writing techniques needed to produce news and/or advertising copy. Students receive a minimum of 15 hours of on-the-job training a week by arrangement. Class meets two hours a week. Three credits.

JOURNALISM FIELD STUDY II CJO 3251

Prerequisite: By permission. Work experience at an approved training center under staff supervision. The student is expected to develop copy for news and/or advertising and have it published. Students receive a minimum of 15 hours of on-the-job training a week by arrangement. Class meets two hours a week. Three credits.

JOURNALISM FIELD STUDY III CJO 5453

Prerequisite: By permission. Work experience at an approved training center under staff supervision. Emphasis on producing a portfolio of published materials sufficient for students to use in pursuing their careers. Students receive a minimum of 15 hours of on-the-job training a week by arrangement. Class meets two hours a week. Three credits.

LIFE AND HOME MANAGEMENT

HOUSING AND EQUIPMENT BLH 2858

Emphasis on consumerism, home safety, maintenance and energy conservation as applied to the use of household products, appliances and equipment. Large and small appliances for kitchen, laundry, clean-up and utility area will be studied. New ideas in housing materials and equipment will be observed by field trips and demonstration. Class meets three hours a week. Three credits.

NUTRITION AND MEAL PLANNING . . BLH 2859

Study of food and basic nutrition as it applies to personal and family living. Emphasis on the principles of human nutrition and their application to the selection, preparation and storage of food. Consideration will be given to special diets, current trends in eating patterns, food fads and life cycle nutritional needs. Class meets three hours a week. Three credits.

FAMILY COMMUNICATIONS BLH 7003

The interpersonal relationships of family members and factors contributing to effective communications will be studied. Strategies are developed for coping with stressful situations. The adult and family life cycle will be explored as a means of analyzing change. Class meets three hours a week. Three credits.

HOME MANAGEMENT BLH 7004

Emphasis will be on practical management techniques utilizing human and material resources. Value clarification and goal setting will be applied to individuals and families. Skills will be gained in managing time, energy and money through a process based on sequential decision making. Class meets three hours a week. Three credits.

LIFE SCIENCE

LIFE SCIENCE NLS 6540

The fundamental laws, theories and principles of biology are used to study living organisms and their relationships to the nonliving world. Course is taught using audio-visual materials. Six hours of class/lab a week. Four credits.

GENERAL BOTANY NLS 5402

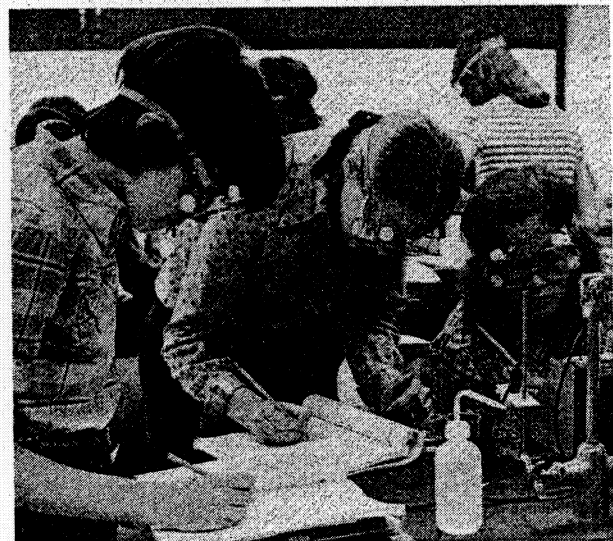
Basic introduction to plant structure and function. Plant divisions are covered with emphasis on life cycles and evolutionary relationships from the simplest to the most complex plants. Three hours of lecture and four hours of lab each week. Five credits.

GENERAL ZOOLOGY NLS 4241

A survey of animal taxonomies, systematics and ecology of animal populations. Identification of representative members of the animal phyla using their structural characteristics. Interpretation of anatomical and physiological features in terms of adaptation. Three hours of lecture and four hours of lab each week. Five credits.

PRINCIPLES OF BIOLOGY NLS 5020

Explores selected basic concepts and principles that are important in understanding the operation of biological systems. The world of living organisms is examined. Class meets for lecture three hours a week. Three credits.



PRINCIPLES OF BIOLOGY LAB NLS 5091

Corequisite: NLS 5020 (Principles of Biology) or its equivalent. A laboratory experience that provides a varied selection of activities to enhance the material presented in class. This introductory laboratory involves the structures and functions of plants and animals. Class will meet once a week for three hours. One credit.

GENERAL GENETICS NLS 4248

Fundamental principles of heredity and variation. Concepts of Mendelian and non-Mendelian genetics. Plant, animal and human variations are covered. Class meets three hours a week. Three credits.

MICROBIOLOGY NLS 5593

Prerequisite: NPS 6634 or one year of high school chemistry. The study of microorganisms: their cell structure, physiology, antimicrobial agents, immunology and host-parasite relationships. Class meets three hours a week. Three credits.

MICROBIOLOGY LABORATORY NLS 6057

Corequisite: NLS 5593. Students transfer and grow microorganisms using sterile techniques, observe the effects of various environmental conditions and antibiotics on the growth of organisms, and run tests for the identification of microorganisms. Class meets four hours a week. Two credits.

HUMAN ANATOMY / PHYSIOLOGY NLS 6186

Analysis of the relationship of structure to function in the organ systems of the human body. Emphasis on location of anatomical features and interpretations of their functional morphology. Three hours of lecture and four hours of lab each week. Five credits.

HUMAN ANATOMY NLS 1128

Gross and microscopic aspects of cells, tissues and organ systems of the human body. Concentration is on detailed analysis of the structure of each body region. Three hours of lecture and three hours of lab each week. Four credits.

HUMAN PHYSIOLOGY NLS 1144

Prerequisite: NPS 6634. Emphasis on the activities of human cells, tissues, organs and systems in terms of the physical and chemical processes. Living organisms and physiological tools are used to demonstrate the principles of general physiology. Three hours of lecture and three hours of lab each week. Spring, four credits.

PATHOPHYSIOLOGY NLS 1037

An introduction to the physiology of disease. Various health problems of the body, their causes, symptoms and treatment will be studied. An emphasis is placed on accurate use of terminology and accuracy in spelling in the study of these diseases. Class meets three hours a week. Three credits.

GENERAL PHARMACOLOGY NLS 1264

Prerequisite: NLS 1144. Identification and classification of therapeutic agents according to mechanism of action, therapeutic and toxic effects, and relation of physiological actions to clinical and experimental practices. Class meets three hours a week. Three credits.

GENERAL NUTRITION NLS 6152

Corequisite: NLS 1144. Principles of nutrition. Sources and utilization of essential nutrients and evaluation of various diets. Recommended diet alterations for the prevention of various pathologies. Class meets three hours a week. Three credits.

ENVIRONMENTAL SCIENCE NLS 6719

An ecological approach to the study of human population growth and its technology. Present influence on the environment and directions for the future will be discussed. Class meets three hours a week. Three credits.

ENVIRONMENTAL SCIENCE LAB NLS 4720

Corequisite: NLS 6719. Laboratory work involves sampling the local environment for various types and levels of pollution. Samples of air are collected and filtered to determine the amount and size of particles. Water samples are collected and analyzed for bacteria, physical and chemical factors. Another experiment examines factors which influence noise pollution from traffic. Various field trips include visiting a local industry, a water treatment plant and a sewage treatment plant to observe pollution control. Class meets three hours a week. One credit.

MARKETING MANAGEMENT

RETAIL BMM 1206

Retail store organization and operation, location and layout, retail buying techniques, human relations, employee supervision, and pricing and merchandising. Class meets three hours a week. Three credits.

RETAIL ADVERTISING AND DISPLAY

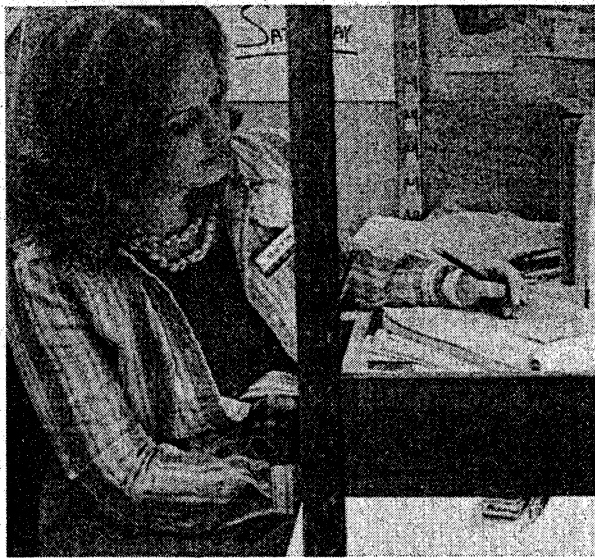
BMM 1303
Modern techniques of advertising and display. Emphasis on media selection and use, copywriting, ad layout and illustration, showcard writing, display techniques, sales promotion, budgeting and scheduling. Class meets three hours a week. Three credits.

SALESMANSHIP BMM 5026

Preparation of simulated presentations in specialty, wholesale and industrial areas of selling. Personality development and training materials are reviewed through projects, case problems and speakers. Class meets three hours a week. Three credits.

CREATIVE RETAIL SELLING BMM 2407

Emphasis on the fundamentals of retail selling. An analysis is made of the techniques of the sale. Case problems presented include sales presentations and demonstrations, handling objections and customer complaints, suggestive selling and closing the sale. Class meets three hours a week. Three credits.



SALES MANAGEMENTBMM 2370

Prerequisite: BMM 2407 or 5026 or one year's successful selling experience. Emphasis on problems and solutions in managing the sales force including recruitment and selection of salespeople, training, compensation and motivation. Sales forecasting, sales planning and ethics are reviewed within different fields of selling. Class meets three hours a week. Three credits.

**MARKETING AND MANAGEMENT SEMINAR:
SALES PROMOTION/MANAGEMENT
.....BMM 2155**

Prerequisite: Admission to the Marketing and Management Program. Supervised work experience at an approved business establishment in the community. Application of selling methods to the preparation of an advertising promotional campaign relating to the student's ultimate career objective. Sales management concepts are incorporated in personal selling and mass sales promotion. Class meets two hours a week. A minimum of 15 hours on-the-job training a week by arrangement. Spring, three credits.

**MARKETING AND MANAGEMENT SEMINAR:
MANAGEMENT DECISION MAKING
.....BMM 1283**

Prerequisite: Admission to the Marketing and Management Program. Supervised work experience at an approved business establishment in the community. Management decision making in areas of supervisory human relations and merchandising problems. Sales and related training meetings in areas of marketing and management. Class meets two hours a week. A minimum of 15 hours on-the-job training a week by arrangement. Fall, three credits.

**MARKETING AND MANAGEMENT SEMINAR:
MARKETING RESEARCH BMM 6072**
Prerequisite: Admission to the Marketing and Manage-

ment Program. Supervised work experience at an approved business establishment in the community. Principles and techniques of market research for finding, identifying and determining needs and desires of individuals and organizations for potential business. Class meets two hours a week. A minimum of 15 hours on-the-job training a week by arrangement. Spring, three credits.

**MARKETING AND MANAGEMENT SEMINAR:
ORGANIZATION AND OPERATION
.....BMM 1060**

Prerequisite: Admission to the Marketing and Management Program. Supervised work experience at an approved business establishment in the community. Preparation of a series of training reports based on employer's operation policies and internal organization and structure. Class meets two hours a week. A minimum of 15 hours on-the-job training a week by arrangement. Fall, three credits.

**MARKETING AND MANAGEMENT SEMINAR
FINANCIAL ANALYSIS BMM 7076**

Prerequisite: Admission to the Marketing and Management Program. Supervised work experience at an approved business establishment in the community. Course content includes the examination of the basic fundamentals of business math with emphasis on ratio analysis, pricing, payroll and distribution costs. Class meets four hours a week. Minimum of 30 hours a week on-the-job training by arrangement. Summer, three credits.

MATHEMATICS

FUNDAMENTALS OF MATHMTH 2122
Review of fractions, decimals and whole numbers. Numeration. Practical applications of percent, dimensions and linear equations. Class meets three hours a week. Three credits.

INTRODUCTION TO ALGEBRAMTH 7246
For those who have less than one year of high school algebra or whose training is not current. Includes fundamental algebraic operations, fractions, first and second degree equations, graphs, exponents and radicals. Class meets three hours a week. Three credits.

ALGEBRAMTH 6079
Prerequisite: MTH 3001 or 9009 or one and one-half years of high school algebra or equivalent. A college algebra course with extensive review of the fundamental algebraic operations followed by a study of polynomial, rational, exponential and logarithmic functions; systems of equations; matrices and determinants; sequences and series; and the binomial theorem. Class meets five hours a week. Five credits.

GEOMETRYMTH 3000

Prerequisite: MTH 7246 (may be taken concurrently) or one year of high school algebra. Intuitive approach to basics of geometry for those students who have not had geometry in high school. Lines, polygons, area, volume, circles, similarity, congruence and coordinate geometry. Class meets two hours a week. Two credits.

INTRODUCTION TO ALGEBRA AND GEOMETRY

.....MTH 9009

A beginning course in algebra and the basics of geometry. Fundamental algebraic operations, fractions, exponents, radicals, coordinate geometry, first and second degree equations, lines, circles, polygons, area, volume, similarity and congruence. Class meets five hours a week. Five credits.

INTERMEDIATE ALGEBRAMTH 3001

Prerequisite: MTH 7246 or one year of high school algebra and geometry. Geometry may be taken concurrently. Polynomials, rational expressions, radicals, equations and inequalities, graphing, relations, functions and systems of equations. Class meets three hours a week. Three credits.

COLLEGE ALGEBRAMTH 3427

Prerequisite: MTH 3001 or two years of high school algebra or equivalent. A study of polynomial, rational, exponential and logarithmic functions, systems of equations, conics, determinants, sequences and series, combinations, binomial theorem. Class meets three hours a week. Three credits.

TRIGONOMETRYMTH 2594

Prerequisite: MTH 6079 (Algebra) or concurrent enrollment in MTH 3427 (College Algebra). Not recommended for the student with high school credit in trigonometry. Trigonometric functions, identities, graphs, equations, inverse trigonometric functions, polar coordinates, complex numbers and applications. Class meets three hours a week. Three credits.

ALGEBRA-TRIGONOMETRYMTH 7091

Prerequisite: MTH 3001 or two years of high school algebra or equivalent. An intensive study of both college algebra and trigonometry for well-prepared students. Will cover topics included in both MTH 3427 and MTH 2594. Class meets five hours a week. Five credits.

ANALYTIC GEOMETRY-CALCULUS IMTH 3268

Prerequisite: MTH 7091 or equivalent. The first course of a three-semester sequence in analytic geometry and calculus. Elements of plane analytic geometry, differentiation of algebraic functions, integration of polynomial functions with applications of each. Class meets five hours a week. Five credits.

ANALYTIC GEOMETRY-CALCULUS IIMTH 4313

Prerequisite: MTH 3268 or equivalent. The second course of a three-semester sequence in analytic geometry and calculus. Trigonometric and exponential functions, parametric equations, polar coordinates, vectors in a plane, techniques of integration and applications. Class meets five hours a week. Five credits.

ANALYTIC GEOMETRY-CALCULUS IIIMTH 6357

Prerequisite: MTH 4313 or equivalent. The third course in a three-semester sequence in analytic geometry and calculus. Solid analytic geometry, vectors in space, infinite series, partial differentiation, multiple integration and limits. Class meets five hours a week. Five credits.

DIFFERENTIAL EQUATIONSMTH 3675

Prerequisite: MTH 6357 or equivalent. Standard types of ordinary equations, second and higher order linear equations, systems of linear equations, solutions by series, the Laplace transform, and applications. Class meets three hours a week. Spring, three credits.

STATISTICSMTH 2084

Prerequisite: MTH 6079 or equivalent. Introduces descriptive statistics, probability models, sampling distribution, hypothesis testing, chi-square test, regression and correlation. Class meets three hours a week. Three credits.

FUNDAMENTALS OF MATRICES AND LINEAR PROGRAMMINGMTH 5564

Prerequisite: MTH 3427 or equivalent. An introduction to the fundamental concepts of linear algebra with emphasis on computational methods and problem solving. Application of the concepts and methods to linear programming. Class meets three hours a week. Three credits.

FINITE MATHEMATICSMTH 2642

Prerequisite: MTH 7246 or 9009 or one year of high school algebra or equivalent. Mathematics for the elementary education or liberal arts student. Includes topics selected from logic, geometry, probability, metric system, consumer mathematics, sequences, number systems, statistics, flow-charting and computers. Class meets three hours a week. Three credits.

MODERNIZED METRIC SYSTEMMTH 3609

Background for understanding the international metric system. Experiences concentrate on length, mass, volume, temperature and appropriate prefixes. Class meets one hour a week. One credit.

INDUSTRIAL MATHEMATICS I MTH 2942

Industrial computations using basic mathematical ideas concerning whole numbers, fractions, decimals, percents and integers. Procedures for solving industrial problems involving algebraic, geometric and trigonometric formulas. Class meets five hours a week. Five credits.

INDUSTRIAL MATHEMATICS II MTH 2943

Prerequisite: MTH 2942 or equivalent. Industrial computations using basic mathematical ideas developed in MTH 2942. Procedures for solving trade and industrial problems involving algebraic, geometric and trigonometric formulas. Class meets five hours a week. Five credits.

MATH FOR ELECTRONICS I MTH 9000

The theory and application of algebra as it is used in solving and understanding electronic circuits. Class meets five hours a week. Five credits.

MATH FOR ELECTRONICS II MTH 9001

Prerequisite: MTH 9000. The theory and application of trigonometry as applied to AC circuits, computer number systems and digital math concepts. Class meets five hours a week. Five credits.

CALCULUS I MTH 6463

Prerequisite: MTH 3427 or equivalent. The first course of a two-semester sequence in calculus. Differentiation and integration of algebraic, exponential and logarithmic functions with applications in business, biology and the social sciences. Class meets three hours a week. Three credits.

CALCULUS II MTH 5329

Prerequisite: MTH 6463. The second course of a two-semester sequence in calculus. Techniques of integration, differential equations and functions of several variables with applications in business, statistics, biology and the social sciences. Class meets three hours a week. Three credits.

TECHNICAL MATHEMATICS I MTH 4354

Simplification of algebraic expressions, graphing of linear equations, solving of linear equations, factoring of quadratic expressions, solving quadratic equations and evaluating determinants. Engineering technology applications. Class meets five hours a week. Five credits.

TECHNICAL MATHEMATICS II MTH 5387

Prerequisite: MTH 4354. Application of trigonometric laws to solve right and oblique triangles, perform arithmetic on complex numbers and evaluate logarithms. Finding derivatives of functions, utilizing derivatives to find maximums and minimums, integrals of functions and integrations to find areas. Engineering technology applications. Class meets five hours a week. Five credits.

MEDICAL LABORATORY TECHNOLOGY

DIAGNOSTIC PARASITOLOGY AND MYCOLOGY

. NLT 9759

Prerequisite: Completion of the first year of the MLT program or completion of Biology 208 and consent of the instructor. The student will study the morphological features, clinical collection and diagnosis of the pathological parasitic and mycotic infections in humans. These fungi and parasites will be closely integrated with the specific disease process and treatment. Sixteen hours a week. One credit.

INTRODUCTION TO THE CLINICAL LAB

. NLT 9760

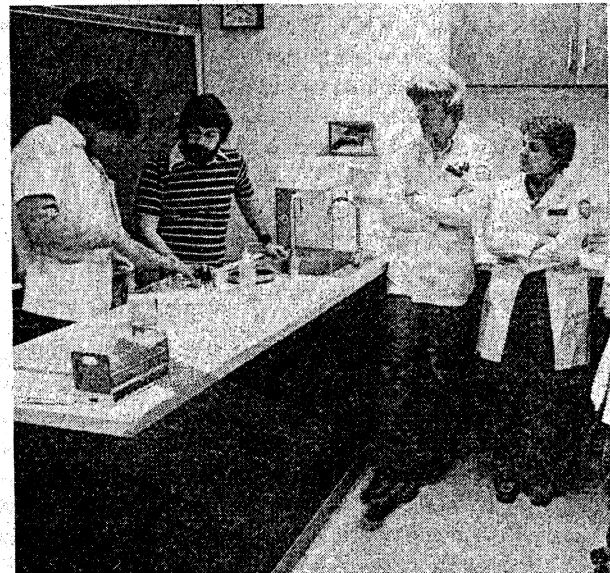
Prerequisite: High school algebra. Study of the organization and career roles in the laboratory. Students will examine and use laboratory calculations. Class meets one hour a week. One credit.

FUNDAMENTAL TECHNIQUES AND PROCEDURES NLT 9761

Students will study and perform fundamental procedures used in the clinical laboratory. They will study pathologic disease states, and study and apply the principles of quality control to clinical procedures. Class meets four hours a week. Three credits.

DIAGNOSTIC MICROBIOLOGY NLT 9762

Prerequisite: Completion of the first year of the MLT program or consent of the instructor. The student will study the morphology, growth characteristics and pathological implications of bacteria. They will correlate this with findings in various disease states. Class meets three hours a week. Three credits.



CLINICAL PRACTICUM I NLT 9763

The student will observe, practice and apply techniques of diagnostic microbiology. Class meets three hours a week. Five credits.

CLINICAL CHEMISTRY NLT 9764

The student will review and integrate specific pathologic conditions with chemical procedures. Class meets three hours a week. Four credits.

HEMATOLOGY NLT 9765

Prerequisite: Completion of first year of MLT program or consent of instructor. The student will study the formation, morphology and functions of the formed blood cell elements. These findings will be integrated with specific pathologic processes. Hemostasis and coagulation will also be included. Three credits.

CLINICAL PRACTICUM II NLT 9766

The student will observe, practice and apply techniques of hematology and clinical chemistry, both manual and automated. Class meets thirty hours a week. Ten credits.

DEPARTMENTAL SEMINAR NLT 9767

The student will review pathologic conditions of the kidney and urinary tract and will integrate these conditions with laboratory findings. The student will review specialized areas of laboratory medicine. Class meets three hours a week. Three credits.

APPLIED IMMUNOLOGY NLT 9768

Prerequisite: Completion of first year of MLT program or consent of instructor. The student will study the immunological and immuno-hematological functions and will integrate them with in vivo and in vitro conditions. Class meets three hours a week. Three credits.

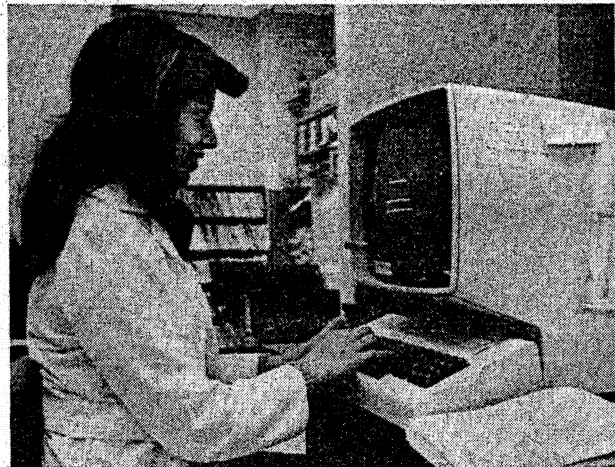
CLINICAL PRACTICUM III NLT 9769

The student will observe, practice and apply techniques of applied immunology, urinalysis and the other specialty areas of the clinical laboratory. Class meets thirty hours a week. Ten credits.

MEDICAL RECORDS TECHNOLOGY

INTRO. TO THE MEDICAL RECORD PROFESSION NMR 1135

Orientation to the medical record profession, the language of medicine, and medical ethics in professional relationships. An introduction to the history of medicine, hospital and medical staff organization, and function and roles of health professionals. Class meets two hours a week. Two credits.



HEALTH RECORD SYSTEMS: ANALYSIS AND CONTROLS NMR 2681

Prerequisite: NMR 2680 or by permission. An in-depth study of storage, retrieval and control of various medical record systems. The content, use and preservation of medical records. Accrediting, licensing and approval agencies' requirements on documentation and information systems. Class meets three hours a week. Three credits.

CLASSIFICATIONS, NOMENCLATURES, INDICES AND REGISTRIES NMR 2682

Prerequisites: NMR 2681, NLS 6186. Corequisite: NS 2686. Study of the various nomenclatures of diseases and operations, indices and registries, and methods of retrieval and presentation of data for research purposes. Class meets three hours a week. Two credits.

QUALITY ASSURANCE AND SELECTED HEALTH RECORD SYSTEMS NMR 2683

Prerequisite: NMR 2682 or by permission. Study of health records and services of long-term and ambulatory care. Emphasis on quality assurance requirements or regulatory agencies and the methodology and procedures in assessing quality of care. Class meets four hours a week. Three credits.

LEGAL ASPECTS OF MEDICAL RECORDS NMR 2684

Prerequisite: NMR 2682. An investigation of relevant aspects of federal and state judicial opinions, statutes, rules and regulations. Methods and procedures for disclosure of confidential information as applied to medical records. Class meets two hours a week. Two credits.

HEALTH STATISTICS AND RESEARCH METHODS NMR 2685

Prerequisite: NMR 2681 or by permission. Vital and health statistics, their uses and values. How to abstract and analyze data from a medical record and other sources. Class meets three hours a week. Two credits.

DIRECTED PRACTICE I NMR 7111

Prerequisites: NMR 2680, NMR 2681. *Corequisite:* NMR 2685. Students develop skills in laboratory and perform procedures in medical record departments in health facilities associated with the program. Assignments related to numbering and filing systems, health data collection and presentation, medical record processing and patient registration. Hours by arrangement. Three credits.

DIRECTED PRACTICE II NMR 1325

Prerequisites: NMR 7111, NMR 2682, BSC 4715. *Corequisite:* NMR 2683. Experience in a variety of procedures performed in the laboratory and clinical setting. Clinical experience is gained in coding and abstracting health information, tumor registry, medical transcription and quality assurance. Hours by arrangement. Four credits.

DIRECTED PRACTICE III NMR 3117

Prerequisite: NMR 2683, NMR 1325. Continuation of supervised laboratory and clinical experience in medical record departments affiliated with the MRT program. Procedures relate to classroom-acquired knowledge of functions of medical record technicians. Hours by arrangement. Five credits.

DEPARTMENTAL SEMINAR NMR 2345

Prerequisite: NMR 2683. This course is a forum for medical record principles and practices. Affiliation experiences and research projects are shared with the class. Supervisory and management principles are applied to functions and activities of medical record department. Class meets twice a week. Two credits.

MEDICAL TERMINOLOGY

MEDICAL TERMINOLOGY I NS 5381

Self-instructional approach to learning medical terminology. A handbook and tapes are designed to give the student a start on building a medical vocabulary, stressing definition, spelling and pronunciation of terms. Student selects systems to be studied from six areas: respiratory, circulatory, digestive, musculoskeletal, genitourinary and nervous systems. Class meets by arrangement. Two credits.

MEDICAL TERMINOLOGY II NS 6476

Prerequisite: NS 5381. Continuation of NS 5381. Student may choose any two areas not previously studied. Class meets by arrangement. One credit.

MEDICAL TERMINOLOGY III NS 4165

Prerequisite: NS 6476. Continuation of NS 6476. Student may choose any two areas not previously studied. Class meets by arrangement. One credit.

MEDICAL TERMINOLOGY IV NS 2686

Prerequisites: NS 5381 and NLS 6186. Review of anatomical roots, prefixes and suffixes. Further study of descriptive terms, laboratory tests, diseases and operations for each system of the body. Class meets three hours a week. Three credits.

MENTAL HEALTH TECHNOLOGY

MENTAL HEALTH TECHNOLOGY I . . NMH 8881

Basic concepts necessary for the maintenance of physical health. A supervised clinical practicum integrates basic procedures, such as assessing normal body functioning; measures of comfort, safety and hygiene; observing and recording; nutrition; pharmacology; life-saving measures and health teaching measures. This course includes requirements for certification in first aid and cardiopulmonary resuscitation. Class meets six hours a week. Four credits.

MENTAL HEALTH TECHNOLOGY II . . NMH 2383

Corequisite: NMH 8881. A broad overview of basic psychiatric concepts. Study of patterns of behavior commonly associated with mental illness is incorporated in the clinical practicum. The clinical practicum provides experience with young and adult psychiatric patients, the elderly, mental retardation and substance abuse. Class meets eleven hours a week. Six credits.

MENTAL HEALTH TECHNOLOGY III . NMH 7884

Prerequisites: NMH 8881 and NMH 2383. An in-depth study of the patterns of behavior and treatment modalities associated with mental illness. A clinical practicum will provide experience with the common psychiatric disorders as well as emergency social problems. Class meets ten hours a week. Six credits.

MENTAL HEALTH TECHNOLOGY IV . NMH 4885

Prerequisites: NMH 8881, 2383, 7884. Signs, symptoms and care of physical health problems. Specific treatment and principles are integrated in a clinical practicum which provides experience with adults and children in physical distress. Class meets thirteen hours a week. Seven credits.

MUSIC

INTRO. TO MUSIC LISTENING HMU 8927

An introductory survey of the development of music as an art with emphasis on listening. Recorded music including medieval, non-Western, classical and contemporary will be presented. Class meets three hours a week. Three credits.

INTRO. TO MUSIC FUNDAMENTALS . HMU 7669

Basic study of notation of melody, rhythm and meter as well as musical terminology. For the elementary classroom teacher or music student without sufficient background for theory. Class meets two hours a week. Two credits.

INTRO. TO JAZZ LISTENING HMU 2777

An introduction to the history of jazz in America, with an emphasis on listening. Course will focus on trends, periods and styles. Class meets three hours a week. Three credits.

SIGHT-SINGING AND EAR TRAINING I HMU 7656

Course presents the melodic, harmonic and rhythmic elements of music by integrating aural and sight-reading skills. Class meets two hours a week. Two credits.

SIGHT-SINGING AND EAR TRAINING II HMU 5107

Prerequisite: HMU 7656. Course presents an advanced study of the melodic, harmonic and rhythmic elements of music by integrating aural and sight-reading skills. Class meets two hours a week. Two credits.

SIGHT-SINGING AND EAR TRAINING III HMU 3628

Prerequisite: HMU 5107. Continued advanced study of the melodic, harmonic and rhythmic elements. Class meets two hours a week. Two credits.

SIGHT-SINGING AND EAR TRAINING IV HMU 7563

Prerequisite: HMU 3628. Continued advanced study and improvement of aural and sight-reading skills with melodic and harmonic dictation. Class meets two hours a week. Two credits.

MUSIC THEORY: HARMONY I HMU 5010

Review of the fundamentals of music. Introduction to melodic line construction, triads and the connection of chords in four-part music writing. Class meets two hours a week. Two credits.

MUSIC THEORY: HARMONY II HMU 3559

Prerequisite: HMU 5010. Continuation of work with melodic line, triads and connection of chords in four-part music writing. Emphasis on inverted triads and submedial triads. Introduction to elementary modulation. Class meets two hours a week. Two credits.

MUSIC THEORY: HARMONY III HMU 6014

Prerequisite: HMU 3559. Continuation of work with modulation, nonharmonic tones and inverted triads in four-part music writing. Introduction of less com-

mon chord progressions, diatonic seventh chords, altered chords and borrowed chords. Emphasis on original student composition as vehicle for study of materials. Class meets two hours a week. Two credits.

MUSIC THEORY: HARMONY IV HMU 2270

Prerequisite: HMU 6014. Continuation of work with original compositions. Introduction to augmented triads. Neopolitan, French and German sixth chords, chords at the ninth, eleventh, thirteenth, advanced modulation and basic counterpoint. Class meets two hours a week. Two credits.

CHORUS I HMU 3515

Open to all students. Rehearsal and performance of vocal music. Occasional joint performances with chamber choir. Ensemble will perform some contemporary jazz and pop materials. Class meets three hours a week. One credit.

CHORUS II HMU 4113

Prerequisite: HMU 3515. Continuation of Chorus I. Class meets three hours a week. One credit.

CHORUS III HMU 4249

Prerequisite: HMU 4113. Continuation of Chorus II. Class meets three hours a week. One credit.

CHORUS IV HMU 2399

Prerequisite: HMU 4249. Continuation of Chorus III. Class meets three hours a week. One credit.

CHAMBER CHOIR I HMU 6529

Prerequisite: By permission. Rehearsal and performance of vocal music. Choir performs at various student and community activities. Class meets three hours a week. One credit.

CHAMBER CHOIR II HMU 2305

Prerequisite: HMU 6529 or by permission. Continuation of Chamber Choir I. Class meets three hours a week. One credit.



CHAMBER CHOIR III.....HMU 7542

Prerequisite: HMU 2305. Continuation of Chamber Choir II. Class meets three hours a week. One credit.

CHAMBER CHOIR IVHMU 1208

Prerequisite: HMU 7542. Continuation of Chamber Choir III. Class meets three hours a week. One credit.

JAZZ LAB BAND I.....HMU 4005

Prerequisite: By audition. Performances of jazz and popular music at public concerts and college functions. Class meets three times a week, two hours a meeting. Two credits.

JAZZ LAB BAND IIHMU 2220

Prerequisite: By audition. Continued performance of jazz and popular music at public concerts and College functions. Class meets three times a week, two hours a meeting. Two credits.

JAZZ LAB BAND IIIHMU 1672

Prerequisite: By audition. Continued performance of jazz and popular music at public concerts and College functions. Class meets three times a week, two hours a meeting. Two credits.

JAZZ LAB BAND IVHMU 2533

Prerequisite: By audition. Continued performance of jazz and popular music at public concerts and College functions. Class meets three times a week, two hours a meeting. Two credits.

JAZZ IMPROVISATION IHMU 2262

Prerequisite: High school playing experience. Fundamental approach to rhythm and melodic lines involved in creative improvisation. Basic procedures in analyzing chords and chord structures as an outline for organized spontaneous playing. Class meets two hours a week. Two credits.

JAZZ IMPROVISATION IIHMU 1245

Prerequisite: HMU 2262 or by permission. Continuation of Jazz Improvisation I. Creative improvisation and basic procedures in analyzing chord structures as an outline for organized spontaneous playing. Class meets two hours a week. Two credits.

CONCERT BAND IHMU 6018

Prerequisite: High school playing experience. This organization draws its literature from the concert band repertoire with emphasis on early works and original contemporary selections. Class meets three hours a week. One credit.

CONCERT BAND IIHMU 7022

Prerequisite: HMU 6018 or by permission. Continuation of Concert Band I. Class meets three hours a week. One credit.

CONCERT BAND III.....HMU 6676

Prerequisite: HMU 7022 or by permission. Continuation of Concert Band II. Class meets three hours a week. One credit.

CONCERT BAND IV.....HMU 5009

Prerequisite: HMU 6676 or by permission. Continuation of Concert Band III. Class meets three hours a week. One credit.

ORCHESTRA I.....HMU 3671

Prerequisite: By audition. Rehearse and perform with the Overland Park Civic Orchestra. Class meets one evening a week for two hours. One credit.

ORCHESTRA IIHMU 1374

Prerequisite: HMU 3671 or by audition. Rehearse and perform with the Overland Park Civic Orchestra. Class meets one evening a week for two hours. One credit.

ORCHESTRA IIIHMU 1049

Prerequisite: HMU 1374 or by audition. Rehearse and perform with the Overland Park Civic Orchestra. Class meets one evening a week for two hours. One credit.

ORCHESTRA IVHMU 2534

Prerequisite: HMU 1049 or by audition. Rehearse and perform with the Overland Park Civic Orchestra. Class meets one evening a week for two hours. One credit.

CHAMBER ENSEMBLE IHMU 3146

Prerequisite: High school playing experience. The study and performance of standard literature for ensembles: brass, woodwind and percussion. Class meets two hours a week. One credit.

CHAMBER ENSEMBLE IIHMU 4166

Prerequisite: HMU 3146 or by permission. Continued study and performance of standard literature for ensembles, brass, woodwind and percussion. Class meets two hours a week. One credit.

CHAMBER ENSEMBLE III.....HMU 5202

Prerequisite: HMU 4166 or by permission. Continued study and performance of standard literature for ensembles, brass, woodwind and percussion. Class meets two hours a week. One credit.

CHAMBER ENSEMBLE IV.....HMU 6213

Prerequisite: HMU 5202 or by permission. Continued study and performance of standard literature for ensembles: brass, woodwind and percussion. Class meets two hours a week. One credit.

APPLIED GUITAR I (PRIVATE)HMU 6787

Private instruction on guitar. Lesson time by arrangement, one-half hour a week. One credit.



APPLIED GUITAR II (PRIVATE) HMU 1788
Prerequisite: HMU 6787.

APPLIED GUITAR III (PRIVATE) HMU 6789
Prerequisite: HMU 1788.

APPLIED GUITAR IV (PRIVATE) HMU 5790
Prerequisite: HMU 6789.

APPLIED GUITAR I (CLASS) HMU 4771
 Class instruction with emphasis on learning to play the guitar from the beginning stages. Classes meet one hour a week. One credit.

APPLIED GUITAR II (CLASS) HMU 2772
Prerequisite: HMU 4771.

APPLIED GUITAR III (CLASS) HMU 1773
Prerequisite: HMU 2772.

APPLIED GUITAR IV (CLASS) HMU 5774
Prerequisite: HMU 1773.

APPLIED CLASSICAL GUITAR I (PRIVATE)
 **HMU 1791**
 Private instruction on classical guitar. Lesson time by arrangement, one-half hour a week. One credit.

APPLIED CLASSICAL GUITAR II (PRIVATE)
 **HMU 3792**
Prerequisite: HMU 1791.

APPLIED CLASSICAL GUITAR III (PRIVATE)
 **HMU 1793**
Prerequisite: HMU 3792.

APPLIED CLASSICAL GUITAR IV (PRIVATE)
 **HMU 2794**
Prerequisite: HMU 1793.

APPLIED PIANO I (CLASS) HMU 8767
 Class instruction with emphasis on learning to play the piano from the early stages. Classes meet one hour a week. One credit.

APPLIED PIANO II (CLASS) HMU 4768
Prerequisite: HMU 8767.

APPLIED PIANO III (CLASS) HMU 8769
Prerequisite: HMU 4768.

APPLIED PIANO IV (CLASS) HMU 5770
Prerequisite: HMU 8769.

APPLIED PIANO I (PRIVATE) HMU 6783
 Private instruction on piano. Lesson time by arrangement, one-half hour a week. One credit.

APPLIED PIANO II (PRIVATE) HMU 1784
Prerequisite: HMU 6783.

APPLIED PIANO III (PRIVATE) HMU 4785
Prerequisite: HMU 1784.

APPLIED PIANO IV (PRIVATE) HMU 8786
Prerequisite: HMU 4785.

APPLIED PERCUSSION I (PRIVATE) HMU 1799
 Private instruction on percussion instrument of student's choice. Lesson time by arrangement, one-half hour a week. One credit. (Music majors)

APPLIED PERCUSSION II (PRIVATE) HMU 6800
Prerequisite: HMU 1799.

APPLIED PERCUSSION III (PRIVATE) HMU 4801
Prerequisite: HMU 6800.

APPLIED PERCUSSION IV (PRIVATE) HMU 1802
Prerequisite: HMU 4801.

APPLIED BRASS I (PRIVATE) HMU 5795
 Private instruction on a brass instrument of the student's choice. Lesson time by arrangement, one-half hour a week. One credit. (Music majors)

APPLIED BRASS II (PRIVATE) HMU 7796
Prerequisite: HMU 5795.

APPLIED BRASS III (PRIVATE) HMU 9797
Prerequisite: HMU 7796.

APPLIED BRASS IV (PRIVATE) HMU 6798
Prerequisite: HMU 9797.

APPLIED VOICE I (CLASS) HMU 1763
 Class instruction with emphasis on learning to sing from the beginning stages. Class meets one hour a week. One credit.

APPLIED VOICE II (CLASS)HMU 2764
Prerequisite: HMU 1763.

APPLIED VOICE III (CLASS)HMU 4765
Prerequisite: HMU 2764.

APPLIED VOICE IV (CLASS)HMU 5766
Prerequisite: HMU 4765.

APPLIED VOICE I (PRIVATE)HMU 3779
Private instruction in vocal music. Lesson time by arrangement, one-half hour a week. One credit.

APPLIED VOICE II (PRIVATE)HMU 5780
Prerequisite: HMU 3779.

APPLIED VOICE III (PRIVATE)HMU 6781
Prerequisite: HMU 5780.

APPLIED VOICE IV (PRIVATE)HMU 4782
Prerequisite: HMU 6781.

APPLIED WOODWIND I (CLASS)HMU 7759
Class instruction on a wind instrument of the student's choice. Emphasis on learning to play from the fundamental stages. Classes meet one hour a week. One credit.

APPLIED WOODWIND II (CLASS)HMU 8760
Prerequisite: HMU 7759.

APPLIED WOODWIND III (CLASS)HMU 2761
Prerequisite: HMU 8760.

APPLIED WOODWIND IV (CLASS)HMU 5762
Prerequisite: HMU 2761.

APPLIED WOODWIND I (PRIVATE) . . .HMU 2775
Private instruction on a woodwind instrument of the student's choice. Lesson time by arrangement, one-half hour a week. One credit. (Music majors)

APPLIED WOODWIND II (PRIVATE) . . .HMU 8776
Prerequisite: HMU 2775.

APPLIED WOODWIND III (PRIVATE) . .HMU 7777
Prerequisite: HMU 8776.

APPLIED WOODWIND IV (PRIVATE) . .HMU 1778
Prerequisite: HMU 7777.

NURSING

NURSING CARE OF THE INDIVIDUAL:

CONCEPTS OF HEALTHNRN 8846
Prerequisite: Admission to the Nursing program. *Corequisite:* NLS 1128. This is the first of four sequential courses and will serve as an introduction to nursing

with emphasis on the maintenance and promotion of physical and mental health in the individual of any age group. Role of the nurse as a member of the health team. Effects of interpersonal relationships and utilization of communications skills. Clinical laboratory is an integral part of the course. Four hours of class and twelve hours of lab a week. Fall, eight credits.

NURSING CARE OF THE INDIVIDUAL:

ADAPTATION TO CHANGENRN 3131
Prerequisite: NRN 8846. *Corequisite:* NLS 1144. This is the second of four sequential nursing courses and provides an opportunity for students to explore the impact of stress on the individual, family and community. NRN 3131, the second clinical nursing course, offers students an opportunity to apply the nursing process in meeting adaptive needs of individuals. Clinical laboratory practice is an integral part of the course. Four hours of class and twelve hours of clinical lab a week. Spring, eight credits.

NURSING CARE OF THE INDIVIDUAL: SHORT-TERM HEALTH PROBLEMS

.NRN 2847
Prerequisite: NRN 3131 and SS 3546. The third in a sequence of four courses in the nursing sequence focuses on the individual whose optimum state of well-being has been altered by a temporary, acute, disruptive problem, which requires implementation of the nursing process. Pathophysiology and the application of basic scientific principles in the problem-solving process are stressed. Clinical laboratory experience in health care agencies is an important part of the course. Four hours of class and fifteen hours of clinical lab a week. Fall, nine credits.



NURSING CARE OF THE INDIVIDUAL: LONG-TERM HEALTH PROBLEMS NRN 5848

Prerequisite: NRN 2847. The fourth in a sequence of four nursing courses focusing on the individual whose optimum state of well-being has been altered by chronic, progressive disruptive problem(s) which require implementation of the nursing process. Emphasis is on the concept of (re)habilitation, adaptation to a permanently altered lifestyle, and the development and/or reestablishment of independence. The role of the AD graduate seeking employment in the community is stressed. Four hours of class and fifteen hours of clinical lab a week. Spring, nine credits.

PARALEGAL

INTRODUCTION TO PARALEGALISM . . BPL 9739

Introductory study of the legal system with special emphasis on the role of the paralegal within that system. Students will be exposed to the operation and structure of the state and federal court systems, administrative agencies, private law firms and public sector law offices. Procedural and substantive aspects of the law will be discussed with consideration given to the education and training of paralegals. Class meets three hours a week. Three credits.

LEGAL RESEARCH AND WRITING BPL 7740

Prerequisite: BPL 9739 or concurrent enrollment or consent of coordinator of Paralegal program. A practical approach to legal research problems normally encountered in the practice of law. The student will become familiar with legal publications and will be trained in their use in solving legal problems through research projects. The course will cover the methods and various forms of legal writing. Class meets three hours a week. Three credits.

BUSINESS ORGANIZATIONS I BPL 2184

Prerequisite: BPL 9739 or consent of coordinator of Paralegal program. The study of the legal organizations of various business entities such as corporations, partnerships and sole proprietorships. Emphasis is on the function of the lawyer and the legal assistant in the formation and operation of business organizations. This includes a practical review of the fundamental legal concepts applicable to each type of business organization studied and preparation of related documents. Class meets three hours a week. Three credits.

BUSINESS ORGANIZATIONS II BPL 3320

Prerequisite: BPL 2184 or consent of coordinator of Paralegal program. Study of the various business entities with emphasis on the function of a paralegal in a law office in connection with the organization and operation of business organizations. This will be a continuation of Business Organizations I and will in-

clude a further review and preparation of related documents. Class meets three hours a week. Three credits.

REAL ESTATE LAW I BPL 2828

Prerequisite: BPL 9739 or consent of coordinator of Paralegal program. Study of the law of real property and the common types of real estate transactions and conveyances. Various legal instruments such as deeds, contracts, leases, deeds of trust and mortgages are studied with emphasis on their preparation. Study activities include projects and practice in retrieving and recording information. Class meets three hours a week. Three credits.

REAL ESTATE LAW II BPL 6090

Prerequisite: BPL 2828 or consent of coordinator of Paralegal program. Detailed study of real estate transactions, with emphasis on leases, sale leasebacks, land financing, closings, commissions and the real estate transaction as a whole. This course will be a continuation of Real Estate Law I and will include document preparations by the student for a real estate transaction from inception to conclusion. Class meets three hours a week. Three credits.

WILLS, TRUSTS AND PROBATE

ADMINISTRATION BPL 7826

Prerequisite: BPL 9739 or consent of coordinator of Paralegal program. The study of the basic legal concepts applicable to wills, trusts and procedures for the administration of trusts and estates. Included are techniques for fact gathering, inheritance and estate tax principles, use of trusts, will drafting and probate procedures. Emphasis is on standard procedures used in the assistance of lawyers in these matters. Class meets three hours a week. Three credits.

ESTATE PLANNING BPL 2218

Prerequisite: BPL 7826 or consent of coordinator of Paralegal program. Study of estate planning with emphasis on estate tax considerations. Includes the preparation of federal estate tax forms, state inheritance forms, fiduciary income tax returns and the drafting of trust provisions as they relate to estate planning matters. Class meets three hours a week. Three credits.

SEMINAR: LEGAL INTERVIEWING AND

INVESTIGATION BPL 7980

Prerequisites: BPL 9739 and at least nine credits in other paralegal specialty courses. Work experience in an approved training situation under instructional supervision. Designed to provide practical experience in the use of skills acquired in prerequisite courses with classroom emphasis on interviewing, investigation and preparation of legal checklists. A minimum of fifteen hours on-the-job training a week by arrangement. Class meets two hours a week. Three credits.

SEMINAR: WORKMEN'S COMPENSATION AND BANKRUPTCY BPL 5413

Prerequisites: BPL 9739 and at least nine credits in other paralegal specialty courses. Work experience in an approved training situation under instructional supervision. Designed to provide practical experience in the use of skills acquired in prerequisite courses. Classroom emphasis on the use of forms and procedures in the areas of bankruptcy and workmen's compensation. A minimum of fifteen hours on-the-job training a week by arrangement. Class meets two hours a week. Three credits.

LITIGATION I BPL 7917

Prerequisite: BPL 9739 and BPL 7740 or consent of coordinator of Paralegal program. Analysis and discussion of the civil litigation process with emphasis on the practice aspects involved in the trial of a civil lawsuit. Includes the study of various types of litigation; Kansas, Missouri and federal civil procedures; trial preparation; trial and post-trial matters. Class meets three hours a week. Three credits.

LITIGATION II BPL 8940

Prerequisite: BPL 7917 or consent of coordinator of Paralegal program. This course is a continuation of the principles studied in Litigation I with emphasis on the trial and appellate stages of civil litigation. Includes in-depth preparation of pleadings and related documents. Class meets three hours a week. Three credits.

FAMILY LAW BPL 1910

Prerequisite: BPL 9739 or consent of coordinator of the Paralegal program. Basic substantive law in the area traditionally known as family law will be covered. Specific subjects will be adoption, guardianships, child custody and support, name changes, contested and uncontested divorces. Emphasis on use of court forms, preparation of pleadings and settlement agreements and use of interviewing checklists. Class meets three hours a week. Three credits.

LAW OFFICE SYSTEMS BPL 2175

Prerequisite: BPL 9739 or consent of coordinator of the Paralegal program. Study of the internal functions of the law office or legal department, including personnel matters, office systems such as docketing and time controls, law library maintenance, filing systems, financial and accounting management and office equipment. Class meets three hours a week. Three credits.

COMMERCIAL TRANSACTIONS BPL 9918

Prerequisite: BPL 9739 or consent of coordinator of Paralegal program. Study of the basic principles of personal property and contracts with emphasis on documents and forms related to sales and credit transactions. Includes preparation of business and commercial documents and the application of provi-

sions of the Uniform Commercial Code. Class meets three hours a week. Three credits.

PHOTOGRAPHY

PHOTOGRAPHY I HPH 5555

Basic processes and principles. Theory and practice of photography as an essential tool of the visual communicator. Emphasis on development of competence in the use of photographic equipment and materials. Topics include cameras, light meters, films, developing negatives, printing, filters, chemicals and presentation. Students must provide their own camera with adjustable focus, shutter speeds and aperture. Class meets for three hours of lecture/demonstration and three hours of lab each week. Three credits.

PHOTOGRAPHY II HPH 6666

Prerequisite: HPH 5555. Emphasis will be on the development of professional standards of photographic technique and image quality. Topics include view camera, "zone system" of exposure and development control, natural light photography, architectural photography, advanced darkroom techniques, chemistry and toning. Class meets for three hours of lecture/demonstration and three hours of lab each week. Three credits.



PHOTOGRAPHY III HPH 3880

Prerequisite: HPH 5555. Emphasis on commercial photography applications, including artificial light, theory and techniques of photoflood and flash equipment. In addition, course will deal with color temperature, copy work, portraiture, product illustration, color slide and still life as well as view camera techniques in the studio. Class meets for three hours of lecture/demonstration and three hours of lab each week. Three credits.

COLOR TRANSPARENCIES HPH 5481

Prerequisite: HPH 5555. Theory and practice of the materials, camera techniques, processing and various applications of 35mm color slides. Emphasis on use of color slides in audio-visual presentations, documentation, commercial illustration, travel photography and other communication. Students must supply their own 35mm camera with adjustable shutter, aperture and focus, as well as film, slide mounts and carousel slide trays. Class meets for two hours lecture/demonstration and two hours of lab each week. Two credits.

PHYSICAL DEVELOPMENT

INTRODUCTION TO PHYSICAL EDUCATION

. PD 6340
Principles of health and physical education, history, philosophy, theory and practice. Class meets three hours a week. Three credits.

CONCEPTS IN PHYSICAL DEVELOPMENT

. PD 4055
A study and application of physical fitness principles. A personal analysis of physical condition and a program of physical exercise and sport enables student to develop a personal fitness schedule. Class meets three hours a week. Three credits.

ELEMENTARY PHYSICAL EDUCATION

. PD 1028
This course is designed to prepare elementary teachers to plan and evaluate a physical education program for their class. The first part will help develop an understanding of basic skill development and locomotion patterns. The second part will deal with the nature of play and elementary physical education curriculum planning. Class meets three hours a week. Three credits.

INDIVIDUAL LIFETIME SPORTS PD 4291

Group instruction and practical experience in badminton, racquetball and tennis. Emphasis on planning and organization of these lifetime sports in a recreation setting. Class meets three hours a week. Two credits.

PERSONAL HEALTH AND COMMUNITY

HYGIENE PD 4368

Problems of maintaining good health. Topics include exercise and fitness, drug abuse, emotional health, proper nutrition, alcohol, tobacco, chronic and communicable diseases, human sexuality and consumer health. Special emphasis on the individual's relationship concerning community health. Class meets three hours a week. Three credits.

FIRST AID PD 2711

American Red Cross Certification in standard first aid and personal safety. Cause, prevention and first aid care of common emergencies. Red Cross Certification also given in cardiopulmonary resuscitation. Class meets three hours a week. Three credits.

PREVENTION OF SPORTS INJURY PD 5712

Fundamentals of athletic training techniques with emphasis on prevention of sports injuries, rehabilitation and taping techniques and proper nutrition. Information is for both the competitive and recreational athlete. Upon successful completion of the course the student will receive Cramer Certification as a student trainer. Class meets three hours a week. Three credits.

FUNDAMENTALS OF ATHLETICS PD 4146

Analysis of techniques involved in sport performance based on the application of biomechanics. The first part investigates the basic locomotor and skill development patterns. The second part studies the refinement of those patterns for specific sport skills with emphasis on areas where there are disagreements among teachers and coaches. Class meets three hours a week. Two credits.

FUNDAMENTALS OF BASKETBALL PD 1153

Fundamentals of offensive and defensive basketball, individual and team play, and strategy and rules. Class meets three hours a week. Two credits.

FUNDAMENTALS OF BASEBALL (BEGINNING)

. PD 1727
Introduction to the fundamental skills of baseball for the prospective player, coach or spectator. Class meets five hours a week. Three credits.

FUNDAMENTALS OF BASEBALL

(INTERMEDIATE) PD 4735

Intermediate fundamental skills of baseball for the prospective player, coach or spectator. Class meets five hours a week in gymnasium or baseball field. Three credits.

FUNDAMENTALS OF POWER VOLLEYBALL

(BEGINNING) PD 1723

Designed to teach fundamental skills and strategy of power volleyball. Emphasis will be on the basic skills of the forearm pass, overhead set, serve and spike. Elementary offense and defense will be taught. Class meets two hours a week. One credit.

FUNDAMENTALS OF POWER VOLLEYBALL

(INTERMEDIATE) PD 6736

Designed to teach intermediate and advanced skills and strategy of power volleyball. Emphasis will be on individual refinement of volleyball skills. Multiple offenses and advanced defenses will be taught. Class meets two hours a week. One credit.

FALL SPORTS OFFICIATING PD 7168

Knowledge and interpretation of the rules governing football, volleyball, soccer and basketball. Helpful to spectators as well as officials. Class meets three hours a week. Two credits.

SPRING SPORTS OFFICIATING PD 6061

Knowledge and interpretation of the rules governing basketball and baseball. Helpful to spectators as well as officials. Class meets three hours a week. Two credits.

PHYSICAL DEVELOPMENT PD 1472

A brief review of fundamentals and rules with emphasis on playing. Activities consist of softball, tennis, racquetball, volleyball and basketball. Class meets two hours a week. One credit.

RUNNING AWARENESS AND EXERCISE. PD 1829

Designed to fulfill students' need to exercise and improve their cardiovascular fitness. The course will cover proper mechanics for running (sprint and long distance, breathing techniques, physiology during running), training and exercise benefits, warm-up and warm-down. Class meets two hours a week. One credit.

PHYSICAL FITNESS THROUGH DANCE (BEGINNING) PD 1058

A planned, progressive fitness program designed to improve muscle tone, body contour and flexibility through the utilization of modern dance techniques. The student will learn qualities of movement and be responsible for a creative, interpretive dance. Class meets two hours a week. One credit.

PHYSICAL FITNESS THROUGH DANCE (INTERMEDIATE) PD 4296

An intermediate modern dance course for the student who wants to continue learning from Beginning Physical Fitness Through Dance. Students will compose numerous and varied dances throughout the semester. Class meets two hours a week. One credit.

KARATE (BEGINNING) PD 7279

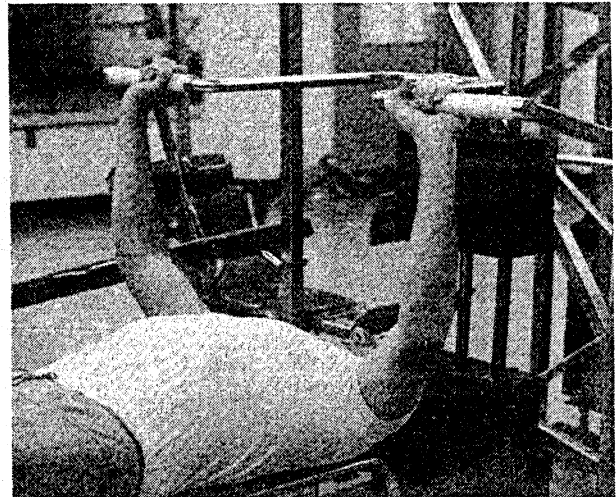
Introduction to the fundamentals of karate, including history, basic punches, blocks, kicks and self-defense techniques. Class meets two hours a week. One credit.

KARATE (INTERMEDIATE) PD 2728

After learning the formalities and basics in the beginner's class, the student puts the basic techniques into routines. The class also covers combination techniques and defense techniques. Class meets two hours a week. One credit.

FENCING PD 6499

Individualized instruction of rules, fundamentals and history of the sport. Class meets two hours a week. One credit.



WEIGHT TRAINING AND PHYSICAL FITNESS (BEGINNING) PD 1020

Involves development of the cardiovascular system as well as overall fitness. Includes identification and function of the muscles and how to plan an overall conditioning program suited for the individual. Class meets two hours a week. One credit.

WEIGHT TRAINING AND PHYSICAL FITNESS (INTERMEDIATE) PD 1025

Involves increased development of the cardiovascular system as well as overall fitness. Includes a plan for a continued overall conditioning program suited for the individual. Class meets two hours a week. One credit.

RACQUETBALL (BEGINNING) PD 1010

A brief history of rules and terminology of racquetball followed by instruction and practice in fundamentals. Class meets two hours a week. One credit.

RACQUETBALL (INTERMEDIATE) PD 1016

Introduction to advanced skills and the strategy of the game of racquetball and various patterns of plays. Class meets two hours a week. One credit.

GOLF PD 3235

Individualized instruction of rules, fundamentals and history of the sport. Includes proper use of clubs and courtesies of the game. Class meets two hours a week. One credit.

BOWLING (BEGINNING) PD 1008

Introduction and practice in fundamentals of bowling. Brief history of the sport plus selection, care and proper use of bowling equipment. Class meets two hours a week. One credit.

BOWLING (INTERMEDIATE) PD 1009

Introduction to advanced skills of league bowling and a review of the terminology, etiquette and scoring of bowling. Class meets two hours a week. One credit.

ARCHERY PD 7129

Individualized instruction of rules, fundamentals and history of the sport. Includes survey of the origin of archery and how to select and take care of equipment. Class meets two hours a week. One credit.

HORSEMANSHIP PD 7438

General care of horse and equipment. Mounted session includes riding on the flat and over fences. Class meets two hours a week. One credit.

GYMNASTICS PD 4536

Individualized instruction in tumbling, side horse, even and uneven parallel bars, balance beam and trampoline for the student with little or no experience. Class meets two hours a week. One credit.

WRESTLING PD 4257

Individualized instruction of rules, fundamentals and history of the sport. Practice area scheduled by arrangement. One credit.

SOCCER PD 1012

Introduction to the basics and some of the advanced skills of the game. General picture of tactics commonly used. Class meets two hours a week. One credit.

TENNIS (BEGINNING) PD 1017

Individualized instruction of rules, fundamentals and history of the sport. Class meets two hours a week. One credit.

TENNIS (INTERMEDIATE) PD 1018

Designed to improve the fundamental skills of tennis and introduce the student to various patterns of play. Class meets two hours a week. One credit.

CHEERLEADING AND YELL LEADING (BEGINNING) PD 1026

Basic instruction in the fundamentals of cheerleading and yell leading. Includes work with a partner. Cheerleaders and yell leaders represent the College in community activities. Class meets two hours a week from October to March. One credit.

CHEERLEADING AND YELL LEADING (INTERMEDIATE) PD 1027

For students who have taken Beginning Cheerleading. Additional responsibilities include making up original cheers and presenting them to the group. They will also work closely with the instructor in planning and coordinating activities. Class meets two hours a week from October to March. One credit.

BEGINNING BALLET PD 2655

Introduction to the fundamentals of ballet. Attention given to terminology, skills and participation. Class meets two hours a week. One credit.

PHYSICAL SCIENCE

PHYSICAL SCIENCE NPS 1031

Fundamental concepts and principles of physics, chemistry and astronomy to meet laboratory science requirements for the non-science major. Topics include the metric system, electricity and magnetism, modern physics and chemical bonding. Two hours of lecture and four to six hours of modularly-scheduled lab activity a week. Four credits.



ASTRONOMY NPS 6070

Study of the universe—from the moon, planets and stars as seen in the night sky to the most distant galaxies. Topics include quasars, black holes, origin of the universe and the possibilities of life on other places. Class meets four hours a week plus five nighttime telescope sessions scheduled as weather permits. Four credits.

GENERAL GEOLOGY NPS 4858

A survey of the planet Earth with an emphasis on the processes that have shaped and continue to shape our world. Topics include the interrelations of humans and the environment, the location and economics of minerals, petroleum and other natural resources, and the geology of the moon and Mars. Class meets seven hours a week. Five credits.

PRINCIPLES OF CHEMISTRY NPS 6634

Introduction to the fundamental concepts of chemistry. Emphasis on general concepts of inorganic chemistry, with sufficient study of organic chemistry to introduce the student to biochemistry. Class meets six hours a week. Five credits.

PRINCIPLES OF ORGANIC CHEMISTRY NPS 2650

Prerequisite: One semester of college-level chemistry. Introduction to aliphatic and aromatic compounds with emphasis on application to biochemistry and related fields. Nomenclature, principles and basic theories of organic chemistry. Class meets seven hours a week. Five credits.

GENERAL CHEMISTRY I LECTURE NPS 4515

Prerequisites: MTH 6079 or equivalent and concurrent enrollment in General Chemistry I Laboratory or division director's approval. Enables student to 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. In light of bonding concepts, these abilities will be demonstrated on tests. Class meets four hours a week. Four credits.

GENERAL CHEMISTRY I LAB NPS 4516

Prerequisites: MTH 6079 or equivalent and concurrent enrollment in General Chemistry I Lecture or division director's approval. The student's understanding of bonding concepts, solutions, gas laws and stoichiometry will be demonstrated in the laboratory. Class meets three hours a week. One credit.

GENERAL CHEMISTRY II LECTURE NPS 4455

Prerequisite: NPS 4515 (General Chemistry I). Presentation of oxidation-reduction, basic organic, chemical thermodynamics, electrochemistry and equilibrium. Class meets four hours a week. Four credits.

GENERAL CHEMISTRY II LAB NPS 4456

Prerequisite: NPS 4455 (General Chemistry II Lecture) or concurrent enrollment or division director's approval. The laboratory consists of experiments supportive to General Chemistry II Lecture with emphasis on quantitative techniques. Class meets three hours a week. One credit.

ORGANIC CHEMISTRY I NPS 2637

Prerequisite: NPS 4455 and 4456. The nomenclature, principles and theories of organic chemistry with emphasis on electronic theories and reaction mechanisms. Laboratory is supportive and emphasizes developing lab techniques and preparation of representative compounds. Class meets nine hours a week. Fall, five credits.

ORGANIC CHEMISTRY II NPS 3657

Prerequisite: NPS 2637. Continuation of Organic Chemistry I. Includes an introduction to organic qualitative analysis. Class meets nine hours a week. Spring, five credits.

GENERAL PHYSICS I NPS 3308

Prerequisite: MTH 6079 or equivalent. Introductory survey of selected topics in physics including motion, energy, matter, heat, electricity, magnetism and waves. Fall, four credits.

GENERAL PHYSICS II NPS 4356

Prerequisite: NPS 3308. Continuation of General Physics I. Subjects include electricity and magnetism, light, relativity, atomic structure and quantum mechanics. Class meets for three hours of lecture and three hours of lab each week. Spring, four credits.

ENGINEERING PHYSICS I NPS 5212

Corequisite: MTH 4313. Introduction to physics for science and engineering students. Emphasis is on mathematical approaches to the study of mechanics, wave motion and thermodynamics. Class meets for four hours of lecture and three hours of lab each week. Fall, five credits.

ENGINEERING PHYSICS II NPS 5238

Prerequisite: NPS 5212. Continuation of Engineering Physics I (NPS 5212), with emphasis on electricity and magnetism, light, and topics in modern physics. Class meets for four hours of lecture and three hours of lab each week. Spring, five credits.

INTRODUCTION TO QUANTITATIVE ANALYSIS

. NPS 5337

Prerequisite: NPS 3278. An introduction to concepts of acid-base, chromatography, coulometry, equilibrium, oxidation-reduction and spectrophotometry as they apply to quantitative chemical analysis. Lab consists of supportive experiments designed to introduce the student to modern quantitative experimental techniques. Class meets nine hours a week. Five credits.

PHYSICAL THERAPY

FUNDAMENTALS OF PHYSICAL THERAPY

. NPT 9771

Prerequisite: NPT 9770. The student will understand basic medical terminology, description of modalities and therapeutic measures used in the physical treatment of various injuries and diseases. Emphasis on departmental organization and orientation to position duties and job opportunities. Through field trips, the student will be exposed to actual hospital and clinical facilities. Clinical lab will allow the student to be introduced to the practical application of all modalities used in the physical therapy clinic. Two hours of lecture and two hours of lab a week. Three credits.

REHABILITATION NPT 9774

Prerequisite: NPT 9771. Introduction to the philosophy underlying rehabilitation, and the theory and principles involved in normal and abnormal ambulation and mobility. Emphasis will be on external supports used in teaching activities of daily living with attention to description, demonstration and practice with various appliances and devices necessary to assist the disabled. Two hours of lecture and four hours of lab a week. Four credits.

KINESIOLOGY NPT 9772

Prerequisite: NLS 6540. The student will analyze muscles and their function, biomechanics of human motion and activities of joints, and functions of the musculoskeletal system. Four hours of lecture a week. Four credits.

INTRODUCTION TO PHYSICAL THERAPY

.....NPT 9770
Prerequisite: Pre-enrollment interview with program coordinator, Introduction to sociological principles, practices and concepts with emphasis on groups, culture, personality, society, communication, cities, social institutions, family, religion, government, social change, social control and social progress. It will include field trips to various local physical therapy departments for a practical observation of the specific health field. Two hours of lecture a week. Two credits.

THERAPEUTIC EXERCISE NPT 9775

Corequisites: NPT 9776, 9777, 9778. The student will be introduced to the theory and principles underlying the use of mechanical appliances and equipment, shoulder wheels, pulleys, traction and exercise devices applicable to various disabilities. Emphasis will be placed on techniques of muscle re-education and sensory stimulation, safety precautions, indications and contraindications for exercise as a treatment technique. Three hours of lecture and four hours of lab a week. Five credits.

CLINICAL PATHOLOGY NPT 9776

Corequisites: NPT 9774, 9775, 9777, 9778. The study of general pathology with detailed emphasis on diseases and disease processes. Three hours of lecture a week. Three credits.

THERAPEUTIC MODALITIES NPT 9773

Prerequisite: NPT 9771. Introduction to the theory and practical application of electrotherapy, hydrotherapy and therapeutic massage with emphasis on technique of application and indications and contraindications for use. The student will be assigned to various local hospital physical therapy departments to observe the practical application of therapeutic modalities and will actively participate in the application of specific therapeutic modalities. Three hours of lab and six hours of lecture a week. Five credits.

CLINICAL EXPERIENCE I NPT 9777

Prerequisites: NPT 9773 and concurrent enrollment in NPT 9775, 9776. The student will receive supervised clinical experience in the observation and practical application of the techniques and procedures covered in all previous courses with emphasis on assisting physical therapist in the treatment procedures in a variety of clinical settings. Nine hours of clinic a week. Three credits.

CLINICAL SEMINAR I NPT 9778

Corequisites: NPT 9775, 9776. The student will participate in discussions conducted by the program coordinator to evaluate the experience and progress of the participants in NPT 9777 (Clinical Experience I) One hour of lecture a week. One credit.

CLINICAL EXPERIENCE II NPT 9779

Prerequisites: NPT 9774, 9775, 9777, 9778. The student will review practical application of principles learned in the prior didactic semesters. The student also will experience rotating internship in selected hospitals throughout the greater Kansas City area under the guidance of a Registered Physical Therapist. Three hours of clinic a week. Eleven credits.

CLINICAL SEMINAR II NPT 9780

Corequisite: NPT 9779. The student will participate in formal discussions related to the experience and progress of the participants in the total clinical area with emphasis on review of techniques, procedures and modalities. Two hours of lecture a week. Two credits.

RADIOLOGY

MEDICAL AND RADIOLOGY TERMS . . . NRD 9801

Prerequisite: Admission to the program. Study of medical terminology with emphasis on the practical application of terms relating to radiology procedures. Specific emphasis on technical terminology. Class meets three hours a week. Three credits.

RADIOLOGIC TECHNOLOGY I NRD 9802

Prerequisite: Admission to the program. Study of radiation biology, radiation protection and monitoring, professional attitudes and applied medical ethics. Major emphasis will be on nursing procedures related to patient care in the Radiology Department. Class meets three hours a week. Three credits.

RADIOGRAPHIC EXPOSURES I NRD 9803

Prerequisite: Admission to the program. Covers the principles of radiographic image formation and the factors that affect or control image formation. The student will conduct experiments for reinforcement of the principles covered in this course. Class meets four hours a week. Three credits.

RADIOGRAPHIC POSITIONING I NRD 9804

Prerequisite: Admission to the program. Study of anatomy and positioning for the abdomen, chest, upper and lower extremities. Class meets four hours a week. Three credits.

CLINICAL TRAINING I NRD 9805

Prerequisite: Admission to the program. The student will receive training in performing radiographic examinations. Class meets twenty-six hours a week. Two credits.

RADIOGRAPHIC EXPOSURES II NRD 9806

Prerequisite: NRD 9803. Covers 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 systems. Special techniques used in producing

radiographic images also are covered. Class meets four hours a week. Three credits.

CLINICAL TRAINING IINRD 9807

Prerequisites: NRD 9801, 9802, 9803, 9804, 9805. Consists of training in performing examinations of various parts of the body. Class meets twenty-six hours a week. Two credits.

RADIOGRAPHIC POSITIONING IINRD 9808

Prerequisite: NRD 9804. Covers anatomy and positioning related to the upper and lower GI tracts, genitourinary and biliary systems, the spine and skull. Class meets four hours a week. Three credits.

RADIOGRAPHIC POSITIONING IIINRD 9809

Prerequisite: NRD 9808. Topics include anatomy and positioning for the skull, sinuses, facial bones and teeth. Class meets four hours a week. Three credits.

RADIOLOGIC TECHNOLOGY IINRD 9810

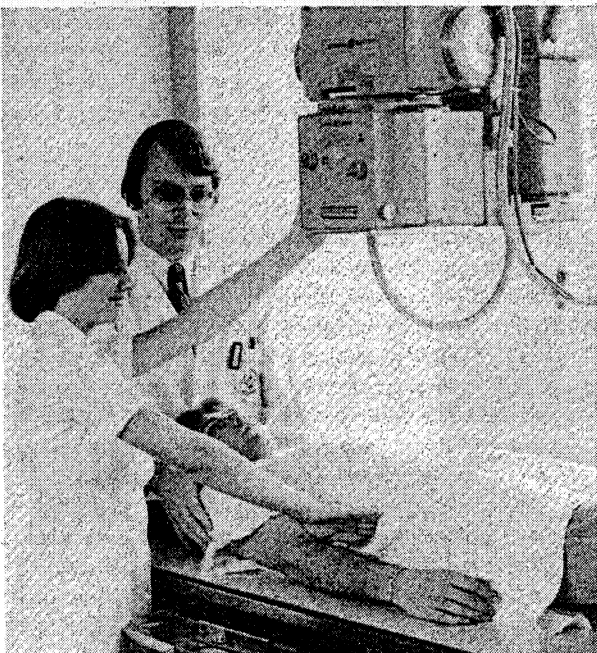
Prerequisites: NLS 6186, NRD 9801. The student will study the disease processes of the body and relate them to examination of the patient in the Radiology Department. Class meets three hours a week. Three credits.

PHYSICS OF X-RAY EQUIPMENTNRD 9811

Prerequisites: NPS 3308, NRD 9803, NRD 9806. Application of physics principles to the study of x-ray equipment and other diagnostic imaging devices used in the modern x-ray department. Class meets five hours a week. Four credits.

RADIOGRAPHIC ANATOMYNRD 9812

Prerequisites: NLS 6186, NRD 9804, NRD 9808, NRD



9809. Application of skills in anatomy and positioning to the study of radiographic anatomy. Class meets five hours a week. Three credits.

DEPARTMENT SEMINARNRD 9813

Prerequisites: NRD 9810, 9811, 9812, 9817. The student will prepare for the National Registry examination by taking tests and reviewing materials designed to simulate the A.R.R.T. examination. Class meets three hours a week. Three credits.

SPECIAL PROCEDURESNRD 9814

Prerequisites: NLS 6186, NRD 9804, NRD 9808, NRD 9809, NRD 9812. Study of the anatomy, positioning, equipment and special tasks related to performance of studies of the circulatory, nervous and lymphatic systems. The role of the technologist will be stressed. Class meets three hours a week. Two credits.

CLINICAL TRAINING IIINRD 9815

Prerequisites: NRD 9806, 9807, 9808. Training in performing examinations of the ribs, cervical, thoracic and lumbar spine, gall bladder, biliary system and retrograde pyelograms and infusion pyelograms using tomography. Class meets thirteen hours a week. One credit.

CLINICAL TRAINING IVNRD 9816

Prerequisite: NRD 9815. The student will perform examinations of the skeletal system. Training opportunities in portable radiography, emergency room techniques and supervised fluoroscopy will be provided. Class meets twenty-six hours a week. Two credits.

CLINICAL TRAINING VNRD 9817

Prerequisites: NRD 9809, 9816. The student will examine the bones of the cranium and be assigned to review sessions in areas of study where further skills are required. Class meets twenty-six hours a week. Two credits.

CLINICAL TRAINING VINRD 9818

Prerequisites: NRD 9810, 9811, 9812, 9817. Students will be assigned extra training in areas of need and be evaluated on their expertise in special procedures. Class meets thirteen hours a week. One credit.

CLINICAL TRAINING VIINRD 9819

Prerequisites: NRD 9813, 9814, 9818. Clinical training in the fields of nuclear medicine, radiation therapy and ultrasound. Class meets thirty-nine hours a week. Three credits.

SPECIALTY TRAINING (ELECTIVE)NRD 9820

Prerequisite: Consent of the instructor. Specialized training in one of the following fields: nuclear medicine, ultrasound, radiation therapy, thermography or computer-assisted tomography. Class meets nineteen hours a week. Nine credits.

RECREATIONAL LEADERSHIP

INTRODUCTION TO RECREATIONAL SERVICESPRL 5298

Historical and philosophical foundations of leisure and recreational activities. Emphasis on socio-economic movements, economic importance of recreation and social institutions which provide recreational services. Class meets three hours a week. Three credits.

SOCIAL RECREATIONPRL 2459

Planning, programming and conducting social recreation activities for clubs, churches, schools, playgrounds and recreation centers. Ample opportunity for developing individual strengths and understanding. Class meets three hours a week. Two credits.

OUTDOOR RECREATIONPRL 7164

History, development and trends of outdoor recreation, conservation and organized camping. Laboratory work, field trips and development of outdoor skills. Class meets three hours a week. Three credits.

RECREATIONAL FIELD STUDYPRL 1379

Application and study of the basic skills a recreation leader needs, including observation and actual experience. Emphasis on coordinating classroom knowledge with recreation and therapeutic situations in the community. Class meets for a one-hour weekly seminar. A minimum of 15 hours supervised laboratory experience by arrangement in an area agency, hospital or institution. Three credits.

INTRO. TO THERAPEUTIC RECREATIONPRL 2571

A basic course in recreation for the ill and handicapped to acquaint the student with the recreational needs of special population groups. Emphasis will be on various types of settings in which therapeutic recreation is available. Appropriate types of activities will be given for different disabilities with both instructor demonstration and class participation. Class meets three hours a week. Three credits.

RESPIRATORY THERAPY

BEGINNING PRINCIPLES OF RESPIRATORY THERAPYNRT 3370

Prerequisite: Admission to the Respiratory Therapy Program. Introduces the student to the field of respiratory therapy and to the hospital world. Involves basic anatomy, physiology, pathophysiology and respira-

tory therapy techniques necessary to begin giving patient care to pulmonary disease patients. Patient contact will be encountered after the first two or three weeks of introductory material. Lab time also is involved for mastery of patient care skills. Class meets for six hours of lecture and sixteen hours of lab each week. Summer, four credits.

RESPIRATORY THERAPY EQUIPMENTNRT 3371

Prerequisite: Admission to the Respiratory Therapy Program. Introduces the student to much of the equipment used in providing basic patient care. Includes equipment for oxygen therapy, aerosol therapy, IPPB. A substantial amount of time is spent in the lab to acquire hands on experience with equipment prior to actual use in the patient care setting. Class meets for six hours of lecture and eight hours of lab each week. Summer, four credits.

CARDIOPULMONARY MEDICINE INRT 3372

Prerequisite: Admission to the Respiratory Therapy Program. First of three courses lectured by the medical director of the program. An introduction to diagnostic procedures used by the pulmonary physician in evaluating patients with respiratory disease. Also provides information on the pathology of disease states that the student will encounter. Class meets for two hours of lecture each week. Summer, one credit.

CLINICAL CARDIOPULMONARY PHYSIOLOGYNRT 3373

Prerequisite: Successful completion of summer sequence of respiratory therapy courses. A comprehensive study of the physiology and pathophysiology of the pulmonary system, the cardiovascular system and the renal system as they relate to the practice of respiratory therapy. Fundamental to the understanding of disease processes and provides a rationale for much of the therapy the respiratory therapist provides. Class meets four hours a week. Fall, four credits.

CLINICAL PRACTICE INRT 3374

Prerequisite: Successful completion of summer sequence of respiratory therapy courses. The clinic activities are divided into two quarters. The first eight-week period will concentrate on giving basic care to both adults and pediatric patients as well as learning how to perform arterial punctures and pulmonary function studies. The second eight weeks emphasis will shift toward critical care medicine with treatments being given in the intensive care unit, and introductory work being done with mechanical ventilators. Also during the semester, students will learn to intubate under the guidance of anesthesia personnel and will go on rounds with the medical director of the program. Class meets 24 clinic hours each week. Fall, four credits.

CLINIC TOPICS AND PROCEDURES I . . . NRT 3375

Prerequisite: Successful completion of summer sequence of respiratory therapy courses. A lecture and lab course related to the clinic activities the student is pursuing in giving care to patients. Topics on basic care, emergency care, mechanical ventilators and critical care will be stressed. A pediatric lecture series will run throughout the semester. Class meets for two hours of lecture and three hours of lab each week. Fall, three credits.

CARDIOPULMONARY MEDICINE II . . . NRT 3376

Prerequisite: Successful completion of summer sequence of respiratory therapy courses. A continuation of the series provided by the medical director of the program with emphasis on disease states of the cardiopulmonary system. The pathology, diagnosis and treatment of the various diseases is presented. The role of the respiratory therapist in the medical management of these patients is discussed. Class meets for two hours of lecture a week. Fall, two credits.

RESPIRATORY PHARMACOLOGY NRT 3377

Prerequisite: Successful completion of the fall sequence of respiratory therapy courses. Presents all the pharmacology respiratory therapists provide, plus general study of most of the drugs used in the care of patients with cardiopulmonary problems. Drugs administered during a code blue also are stressed. Class meets two lecture hours a week. Spring, two credits.

CLINICAL PRACTICE II NRT 3378

Prerequisite: Successful completion of the fall sequence of respiratory therapy courses. The clinic course is split into two eight-week quarters, with emphasis on critical care of both adults and neonates. Students will spend time in rotations concerned with rehabilitation, department management, intubations and medical rounds. Class meets 24 clinic hours a week. Spring, four credits.

CLINIC TOPICS AND PROCEDURES II . . NRT 3379

Prerequisite: Successful completion of the fall sequence of respiratory therapy courses. A continuation of lecture and lab activities with emphasis on critical care medicine and more sophisticated aspects of respiratory therapy. Includes sections on medical ethics and department management. Through the semester, a lecture series on neonatology will be presented. Class meets for three hours of lecture and three hours of lab each week. Spring, four credits.

CARDIOPULMONARY MEDICINE III . . NRT 3380

Prerequisite: Successful completion of the fall sequence of respiratory therapy courses. A continuation of the medical director's discussion of pulmonary disease states, their pathology and their treatment. Class meets two hours a week. Spring, two credits.

SECRETARIAL CAREERS

BEGINNING TYPING BSC 1263

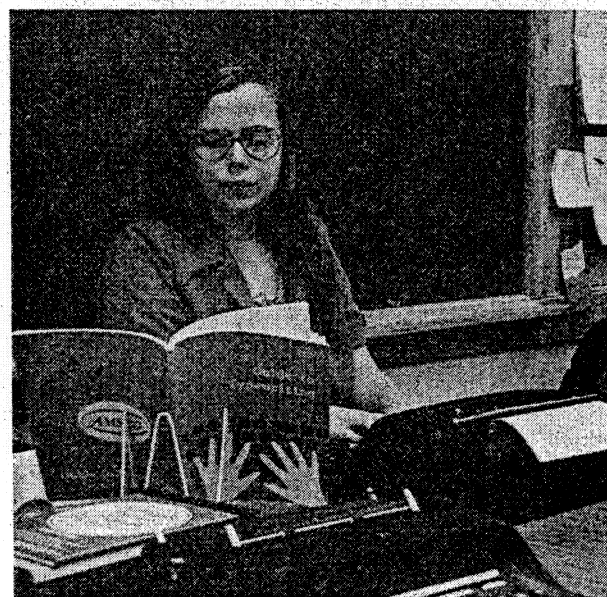
Mastery of the keyboard and machine techniques. Instruction in personal and business letters, outlines, manuscripts, tabulation and centering. Individualized instruction and scheduled use of secretarial laboratory. Class meets three hours a week. Students should schedule two hours of lab a week. Three credits.

INTERMEDIATE TYPING BSC 2376

Prerequisite: BSC 1263 or by permission. Emphasis on speed and accuracy in typing business letters, memoranda, tabulated reports and financial reports. Periodic production and performance tests. Individualized instruction and scheduled use of secretarial laboratory. Class meets three hours a week. Students should schedule two hours of lab a week. Three credits.

PRODUCTION TYPING BSC 7633

Prerequisite: BSC 2376 or by permission. Development of high degree of proficiency in production typing. Emphasis on typing in specialized offices such as medical, legal, governmental. Individualized instruction and scheduled use of secretarial laboratory. Class meets three hours a week. Lab meets two hours a week. Three credits.



SHORTHAND I BSC 1519

Prerequisite: BSC 1263 or concurrent enrollment. Beginning course of intensive study of shorthand theory and how to write simple unpreviewed material in shorthand at a speed of 50 to 60 words a minute. Class is instructor-directed but includes individualized use of tapes and programmed materials. Class meets three hours a week with a required lab two hours a week. Three credits.

SHORTHAND II BSC 4590

Prerequisites: BSC 1263 and BSC 1519 or by permission. Designed for students with prior limited experience with shorthand. Review of shorthand theory, transcription techniques, spelling, punctuation and grammar through use of tapes and programmed materials. Class meets three hours a week with a required lab two hours a week. Three credits.

DICTIONATION AND TRANSCRIPTION . . . BSC 3630

Prerequisite: BSC 3630, 4590, 2376 or by permission. Emphasis on increased speed and accuracy in writing shorthand from dictated material and transcribing notes. Class is instructor-directed but includes individualized programmed materials. Student works at own ability level. Class meets three hours a week with a required lab two hours a week. Three credits.

RECORDS MANAGEMENT BSC 1342

Alphabetic, numeric, subject and geographic filing systems. Provides a foundation of general office routines and efficient methods and systems of storing and retrieving information. Includes survey of various types of office filing equipment. Class meets three hours a week. Three credits.

MEDICAL TRANSCRIPTION BSC 4715

Prerequisite: BSC 2376. A course designed to develop transcription techniques to create accurate medical records. Contains six study units, individualized instruction with periodic exams and transcription tests. Class meets three hours a week with a required lab two hours a week. Three credits.

LEGAL SECRETARY BSC 2267

Topics recommended by the National Association of Legal Secretaries. General overview of the field of law as it applies to a legal secretary. Students wishing to prepare for the PLS examination should consult with the instructor prior to enrollment. Class meets two hours a week. Two credits.

SECRETARIAL PROCEDURES BSC 1272

Prerequisites: BSC 2376 and BSC 1519 or concurrent enrollment. Designed to develop a secretarial personality and occupational intelligence through an introduction to all phases of an office situation. Topics include the secretarial profession; word processing; responsibilities for written communications; transmittal services; records management; travel and conferences; collecting, processing and presenting business data; financial and legal work; and the professional future. Class meets three hours a week. Three credits.

SECRETARIAL PROCEDURES II BSC 2317

Prerequisite: BSC 1272. Application of theory presented in Secretarial Procedures I using simulated office experience and projects. Content areas:



meetings and conferences, travel arrangements, letter writing, supervision of others, reproduction equipment and services, seeking and terminating employment. The student may choose to follow a medical, legal or general presentation of secretarial procedures. Course includes scheduled use of the secretarial laboratory. Class meets three hours a week. Three credits.

SECRETARIAL FIELD STUDY I BSC 4492

Supervised student work experience in an approved office situation. Class meets two hours a week. A minimum of 15 hours on-the-job training a week by arrangement. Three credits.

SECRETARIAL FIELD STUDY II BSC 3214

Supervised work experience in an approved office situation. Class meets two hours a week. A minimum of 15 hours on-the-job training a week by arrangement. Three credits.

SECRETARIAL FIELD STUDY III BSC 5538

Supervised work experience in an approved office situation. Class meets two hours a week. A minimum of 15 hours on-the-job training a week by arrangement. Three credits.

SECRETARIAL FIELD STUDY IV BSC 2190

Supervised work experience in an approved office situation. Class meets two hours a week. A minimum of 15 hours on-the-job training a week by arrangement. Three credits.

SECRETARIAL FIELD STUDY V BSC 1075

Supervised work experience in an approved office situation. Class meets two hours a week. A minimum of 15 hours on-the-job training a week by arrangement. Three credits.

TYPING I: SHORT COURSE BSC 1960

Designed to acquaint the student with the keyboard and offer a variety of experiences in the basic skills of typing. Class/lab meets four hours a week. Two credits.

SHORTHAND REFRESHER: SHORT COURSE

.....BSC 3018
Review of theory and vocabulary. Emphasis on increasing speed in the writing of shorthand. Class meets one hour a week. One credit.

ELECTRONIC CALCULATORS BSC 5190

The student will apply the fundamental operations of arithmetic and ten key applications to business problems on electronic printing calculators. This functional knowledge includes using proper techniques in the basic operations, interpreting the answers and recording the answers thus enabling the student to develop a high degree of proficiency in touch operation, speed and accuracy; performing the basic functions; and solving application problems. Class meets one hour a week, and one hour of lab should be scheduled. One credit.

MACHINE TRANSCRIPTION BSC 5189

Prerequisite: BSC 2376 or by permission. Extensive use of dictation equipment learning transcription skills needed for efficient transcribing of all business letters, memos and technical reports. Language skills will be developed through correct word division, punctuation and number transcription exercises. Special topics such as news releases, agenda and minutes, medical and legal terminology as well as other specialized fields will be studied. Class meets three hours a week. Students will schedule two hours a week lab time. Three credits.

AUTOMATIC TYPEWRITERS BSC 5188

Prerequisite: BSC 2376 or by permission. Automatic Typewriters offers extensive use of the IBM Memory and Mag Card II typewriters. The students will develop a high degree of proficiency in the operation of these two machines. Class meets two hours a week. Students will schedule two hours a week lab time. Two credits.

SMALL ANIMAL HEALTH

INTRODUCTION TO ANIMAL TECHNOLOGY . . .

.....NAT 4894
Orientation to career opportunities available in animal health technology. Professional ethics, public relations, psychological adjustment of the student to physical treatment and emotional involvement in the treatment and care of animals. Emphasis on understanding the justifications and purposes for euthanasia, venapuncture, injections, animal sterilization and the development of appropriate attitudes toward research animals. Class meets two hours a week. Two credits.

PRINCIPLES OF ANIMAL SCIENCE I . . . NAT 6897

Principles of handling and management of animals, nutrition, housing and sanitation. Emphasis on animal physiology and body responses. Introduction to anesthesia and management of hospital cases. Methods of treatment, restraint, determination of body temperature, pulse and respiration, bathing and grooming. Class meets four hours a week. Three credits.

PRINCIPLES OF ANIMAL SCIENCE II . . . NAT 3899

Techniques of obtaining animal samples for laboratory analysis. Surgery preparations and anesthetic management of animals. Emphasis on effects of anesthetics and physiology of body systems not covered in Animal Science I. Class meets four hours a week. Three credits.

ANIMAL TECHNOLOGY ANATOMY . . . NAT 4904

Basic principles of systemic anatomy with integration of physiology, pharmacology, pathology and parasitology within the framework of animal body systems. Class meets seven hours a week. Five credits.

SANITATION AND ANIMAL CARE NAT 1895

Cleaning and sanitation, personal hygiene, vermin recognition, control and cleaning of cages and equipment, general care and supervision of hospital patients or colonies, preparation of diet, proper feeding of animals, preparation of work routines and standard daily operating procedures. Class meets three hours a week. Two credits.

ANIMAL HOSPITAL TECHNOLOGY I . . . NAT 5903

Preparation and administration of hypodermic injections, administration of vaccines, colonic irrigations, application and changing of wound dressings, preparation and administration of parental fluids, substances by the oral route, intrauterine infusions, intramammary gland infusions, and other mastitis therapy. Administration of anesthetics and assisting surgeon during operations. Techniques of radiographic film processes utilizing mockups and training aids. Sterilization of food, animals, artificial insemination of animals, dehorning procedures, and recommended immunization procedures and costs. Class meets five hours a week. Three credits.

LABORATORY ANIMAL TECHNOLOGY

.....NAT 3905
Prerequisites: NAT 6897, 3899, 2901. To equip the student with the capabilities of handling a supervisory position in a laboratory animal colony. Class meets three hours a week. Two credits.

ANIMAL HOSPITAL TECHNOLOGY II

.....NAT 6906
Emphasis on surgery techniques. Cooperative hospital experience. Class meets five hours a week. Three credits.

CLINICAL PATHOLOGICAL TECHNIQUES I

.....NAT 2901
Hematology and procedures involved with performing blood analysis. Class meets seven hours a week. Four credits.

CLINICAL PATHOLOGICAL TECHNIQUES II

.....NAT 7907
Emphasis on urinalysis, blood analysis, simple immunological tests, fecal analysis and the preparation of smears and simple staining techniques on microbiological specimens and tissue impressions. Class meets eight hours a week. Five credits.



LARGE ANIMAL TECHNOLOGYNAT 9908

Prerequisites: NAT 6897 and NAT 3899. To familiarize students with their functions in a large animal or mixed-type practice. Course will broaden their capacities by enabling them to work in a research facility that uses large animals for experimentation. Class meets six hours a week. Four credits.

RADIOLOGY AND ELECTRONIC PROCEDURES

.....NAT 8909
Intensive study and practice in radiological techniques and study of cardiology and ultrasonic sound procedures. Class meets three hours a week. Two credits.

ANIMAL HEALTH INTERNSHIPNAT 1902

Prerequisite: Two semesters of first-year animal health courses. Supervised intensive clinical study under the direction of a cooperating veterinarian to provide actual work experience. 420 work hours. Six credits.

CLINICAL MATHNAT 7896

Metric systems and conversion units. Apothecaries, equivalents and vocabulary. Preparation of solutions, vocabulary, strengths, procedures and computations. Drug administering, calculating and measuring dosages. One credit.

SOCIAL SCIENCES

INTRODUCTION TO PSYCHOLOGYSS 1068

Introduction to the basic concepts and methods of general psychology. Covers the brain and consciousness, sensation and perception, motivation, learning and memory, maturation and development, personality, and social psychology. This course is a prerequisite for all other courses in psychology. Class meets three hours a week. Three credits.



CHILD DEVELOPMENTSS 3546

Prerequisite: SS 1068. A comprehensive chronological account of human psychological and physical development from conception through adolescence. The course integrates genetic, biological, physiological and anthropological influences with the psychological process. Explores determinants of development from both hereditary and environmental perspectives. Twenty hours of practicum in a structured setting where children are present is required. Class meets three hours a week. Three credits.

EDUCATIONAL PSYCHOLOGYSS 3148

Prerequisite: SS 1068. Application of principles of psychology to problems in learning-teaching situations. Study of behavior, attitudes, skills, retention and transfer. Ability and achievement measurement techniques. Practicum in an educational or other structured setting is required. Class meets three hours a week. Three credits.

SOCIAL PSYCHOLOGYSS 5663

Prerequisite: SS 1068. An introduction to the psychology of social behavior. A systematic attempt to understand how the thoughts, feelings and behavior of individuals are influenced by the actual, imagined or implied presence of others. Topics include methodology, attitude and attitude change, aggression, leadership, affiliation, obedience and conformity. Class meets three hours a week. Three credits.

PERSONALITY AND ADJUSTMENT SS 4639

Prerequisite: SS 1068. A study of three theoretical systems in psychology: Freudian, behavioral and humanistic. Emphasis on the material each system offers for adjustment to everyday problems. Topics include basic: human nature, personality development, assertiveness, aggression, stress reduction, relaxation, sexism, racism and career development. Class meets three hours a week. Three credits.

GROUP PROCESSES SS 2725

Prerequisite: SS 1068. A psychology course that focuses on group interaction. Includes the study of theoretical approaches to group interaction, with students active in the process of group communication. Explores productive and counterproductive communication in verbal and nonverbal form. Class meets three hours a week. Three credits.

HUMAN POTENTIAL SEMINAR SS 2002

A structured, positive group experience designed to increase self-affirmation, self-motivation, self-determination and empathetic regard for others. Includes recall of peak and mini-peak experiences, acknowledgment and analysis of achieving satisfaction and success, clarification of personal values, acknowledgment of personal strengths and long-range goal setting. Regular attendance is imperative. Class meets three hours a week. Three credits.

CAREER / LIFE PLANNING SS 7227

A systematic approach to career/life planning. Focuses on a process enabling individuals to make occupational decisions at any point in their lives. Class meets three hours a week. Three credits.

SOCIOLOGY SS 3404

An overview of social life in America and the global community today. Covers group structure and processes, social interaction, and an examination of major institutions. Theories and methods of study are introduced, as well as the uses of social research. Class meets three hours a week. Three credits.

SOCIAL WELFARE SS 4122

Introduction to social welfare and its relationship with other social systems in America. Considers the social, economic and political factors that foster inequality and explores the various aims, approaches and forms of social welfare as a response to social deprivation. Class meets three times a week. Three credits.

SOCIAL PROBLEMS SS 3428

Current U.S. social problems are analyzed from a variety of sociological perspectives. Emphasizes the history and development of the problems and considers solutions. Class meets three hours a week. Three credits.



MARRIAGE AND THE FAMILY SS 5716

An examination of the institutions of marriage and family in the United States. Emphasis on human sexuality, changing roles, family formation, socialization, domestic conflict, interaction among family members and marriage partners, and the relationships between these institutions and society. Class meets three hours a week. Three credits.

PHYSICAL ANTHROPOLOGY SS 3721

Study of basic concepts and research areas in physical anthropology. Examines archeology, human variation, physical evolution, primate societies and the emergence of human society. Application to cross-disciplinary topics of general and career interest. Class meets three hours a week. Three credits.

TRANSPERSONAL PSYCHOLOGY SS 9022

Prerequisite: SS 1068. An introduction to an emerging force in psychology that deals with ultimate human potentialities and capacities beyond our usual state of consciousness. These experiences are not adequately considered in psychoanalytic, behavioristic or humanistic psychology. Covers assumptions, consciousness, mystical experiences, spirit, maximum interpersonal encounter, ultimate values, ultimate meanings, the sacralization of everyday life. Class meets three hours a week. Three credits.

CULTURAL ANTHROPOLOGY SS 1029

Study of peoples and cultures around the world. The political, economic, religious, family and social arrangements of major geographic regions will be surveyed. Examines hunters, tribesmen, peasants and industrial populations in historical context and in their contemporary settings. Class meets three hours a week. Three credits.

POLITICAL SCIENCE SS 1456

An introduction to the concepts, ideologies, political processes and organizational structures fundamental to the study of government. Class meets three hours a week. Three credits.

U.S. HISTORY TO 1877 SS 1055

A survey course in American history. Investigates American society from the early colonial era to the period of the Civil War. Topics include the Puritans, the American Revolution, the Federalists, the Jacksonians and sectional conflicts. Emphasis on analysis and discussion of the different interpretations of issues in American history. Class meets three hours a week. Three credits.

U.S. HISTORY SINCE 1877 SS 2000

A survey course in American history. Investigates American society from the Reconstruction period to the present. Topics include industrialization, immigration, reform movements and the two World Wars. Emphasis on analysis and discussion of the different interpretations of issues in American history. Class meets three hours a week. Three credits.

INTRODUCTION TO COMPARATIVE

GOVERNMENT SS 5852

Prerequisite: SS 1456 or permission. Introduction to the comparative study of government. Ideology, socio-economic characteristics, patterns of governmental organization and administration, party structure and electoral mechanisms will be examined in competitive and non-competitive political systems, industrially-developed and industrializing nations, and Western and non-Western nations. Class meets three hours a week. Three credits.

STATE AND LOCAL GOVERNMENT SS 2678

Survey of theories and practices of state and local governments throughout the United States. The Kansas models in particular will be studied. Major topics are structure of these governments, intergovernmental relations, types of services, the taxing and budgeting process, the role of the citizen, and possible reforms. An emphasis on speakers, field trips and applied projects makes this course a "how-to" format for the average citizen. Class meets three hours a week. Three credits.

AMERICAN NATIONAL GOVERNMENT . SS 3138

Examination of the theoretical, political and administrative aspects of American government. Topics of study are American political theory, political parties, decision making, the Presidency, the Congress, the courts and the nature of contemporary national government. Class meets three hours a week. Three credits.

INTERNATIONAL RELATIONS SS 2808

Study of the interaction of nation-states and factors which affect international relationships. The role of power, law and ideology, and the effectiveness of international organizations, private diplomacy, collective security and war are examined. Current topics in international politics are used as case studies. Class meets three hours a week. Three credits.

EUROPEAN HISTORY FROM 1750 SS 9922

Survey of the major social, economic and political events in Europe from the Industrial Revolution. Topics include pre-industrial versus industrial values, urbanization, industrialization, political revolutions and the two World Wars. The course emphasizes how the structure of society, the nature of politics and intellectual life have changed during the past 200 years. Class meets three hours a week. Three credits.

WESTERN CIVILIZATION: READINGS AND

DISCUSSION I SS 5500

Major ideas in Western Civilization dealing with our relationship to the environment and our speculations on the nature of God. Students will read selections from Western thought. A research paper will be required. The course will meet for five three-hour discussion sessions and for two two-hour testing sessions. Audio-visual material and a student manual will be available. Three credits.

WESTERN CIVILIZATION: READINGS AND

DISCUSSION II SS 2006

Covers major ideas in Western Civilization about people's social, economic, political and ethical relationships to others and their search for personal identity. Students will read selections from Western thought and discuss these ideas in small discussion groups. A research paper will be required. Class meets by arrangement. Three credits.

SOCIAL WORK AND SOCIAL SERVICES . . SS 4123

Introduction to the social work profession for students considering the field as a career and wanting to learn about social work and its activities. Course covers the origins, values, skills, fields of service and current issues in the social work profession. Class meets three times a week. Three credits.

SPEECH AND DEBATE

INTERPERSONAL COMMUNICATION . . CSP 4950

Basic speech course dealing with the oral communications process through the study of interpersonal relationships. Practical principles of effective speech communication in one-to-one and small group relationships are studied and applied in a variety of learning games and situations. Individualized talks are given but everyday communication is stressed. Class meets three hours a week. Three credits.

PUBLIC SPEAKINGCSP 4130

Emphasis on speech organization, development of ideas and delivery. Progress is self-paced, with individualized instructor guidance and opportunity for interaction with others. Speeches students will design and deliver include impromptu, extemporaneous and manuscript. Class meets three hours a week. Three credits.

GROUP DISCUSSIONCSP 1150

Study of interpersonal communication, emphasizing the theory and experience necessary for understanding group dynamics and effective group communication skills. Class meets three hours a week. Three credits.

ELEMENTARY DEBATECSP 5545

Introduction to theories of argumentation and debate leading to participation in intercollegiate debate. Students will attend two to eight weekend debate tournaments a semester. Class meets three hours a week. Two credits.

INTERMEDIATE DEBATE ICSP 2162

Prerequisite: CSP 5545. Continuation of argumentation and debate theories. Participation in intercollegiate debate required. Students will attend two to eight weekend debate tournaments a semester. Class meets three hours a week. Two credits.

INTERMEDIATE DEBATE IICSP 1001

Prerequisite: CSP 2162. Comprehensive review of theories of argumentation and debate. Increased emphasis on intercollegiate debate. Students will attend two to eight weekend debate tournaments a semester. Class meets three hours a week. Two credits.

ADVANCED DEBATECSP 6651

Prerequisite: CSP 1001. Emphasis on participation in senior level intercollegiate debate. Students will attend two to eight weekend debate tournaments a semester. Class meets three hours a week. Two credits.

THEATER

CHILDREN'S THEATERCDR 5554

Allows students with no experience to explore children's theater. Areas studied include the difference between theater for and by children, and the adaptation of various forms of children's literature. Presentation of programs to area grade school children will be an integral part of the program. Class meets three hours a week, plus modular scheduling of rehearsals and performances. Three credits.

INTRODUCTION TO THEATERCDR 1809

An exposure to the theatrical experience for insight and appreciation. Great plays will be read. Television,

film and live theater presentations will be viewed in performance. Class discussions of theater practices, dramatic structure and history of the theater will aim toward understanding and enjoyment of the art. Class meets three hours a week. Three credits.

ACTING ICDR 3311

Fundamentals of acting. Character analysis; relation of the role to the play; techniques and practice in posture, movement, voice and projection. Projects in actual stage performance and on videotape for broadcast. Class meets three hours a week, plus modular scheduling of rehearsals and public performance for classes. Three credits.



ACTING IICDR 5316

Prerequisite: CDR 3311. Continuation of Acting I. Emphasis on character analysis and development, with corresponding responsibility of actors for their own creativity. Projects in actual stage performance and on videotape for broadcast. Class meets three hours a week, plus modular scheduling of rehearsals and public performances for classes. Three credits.

IMPROVISATION IN CHILDREN'S THEATERCDR 2692

Prerequisite: CDR 5554. For students with experience in performing for children. This course provides an opportunity for continued involvement in children's theater. Students will explore traditional areas such as adapting plays and such techniques as mime, puppetry, improvisation and choral readings. Students will prepare material for their own selection and adapt it to the needs of the class and of the children for whom it is to be performed. Performances will be given for area grade school children. Class meets three hours a week, plus modular scheduling of rehearsals and performances. Spring, three credits.

STAGECRAFT I.....CDR 6215

This course, along with its sequel, Stagecraft II, will acquaint students with technical theater production. Students will assist in producing programs with the acting class. Areas covered in this course are use and recognition of tools, set building and painting techniques. Class meets three hours a week, plus modular scheduling of rehearsals and performances. Three credits.

STAGECRAFT II.....CDR 6241

The use of techniques of lighting and lighting instruments, make-up, costumes and hand props in relation to theatrical productions. Students serve as technical support for productions presented by acting classes. Class meets three hours a week, plus modular scheduling of rehearsals and performances. Three credits.



PUPPETRY WORKSHOP.....CDR 3612

Designed to acquaint students with puppetry as a performing art, stressing construction and manipulation of puppets. Highlights include design for the puppet theater, methods of construction and range of materials. Students will experiment with puppet types and staging toward a contemporary total theater. One or two credits.

ORAL INTERPRETATION.....CDR 2582

A basic course in the study of literature through oral communication. Emphasis on analyzing and performing prose, poetry and dramatic literature. Students will give public performances or compete in tournaments. Class meets three hours a week. Three credits.

URBAN AGRIBUSINESS

**THEORY AND PRACTICE OF HORTICULTURE I
.....NUA 8887**

Principles of plant classification, structure, photosynthesis, growth and development. The nature and properties of soils related to plant growth. Four hours of lecture and three hours of lab a week. Five credits.

**THEORY AND PRACTICE OF HORTICULTURE II
.....NUA 3889**

Principles and practices of pruning and training plants. Plant protection using an integrated pest management approach. Identification of diseases, insects, mites, weeds, physiological diseases and methods of control. Four hours of lecture and three hours of lab a week. Five credits.

**INTRODUCTION TO URBAN AGRIBUSINESS ...
.....NUA 6888**

Job opportunities and careers in horticulture. Class meets one hour a week. One credit.

**COOPERATIVE WORK EXPERIENCE I.....
.....NUA 5890**

Prerequisite: Approval of the urban agribusiness instructor. On-the-job training in a field directly related to the Urban Agribusiness Program. Class meets fifteen hours a week. Three credits.

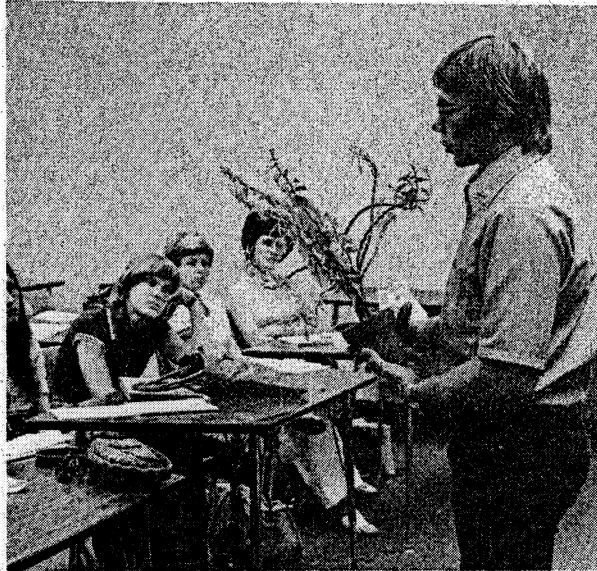


**COOPERATIVE WORK EXPERIENCE II.....
.....NUA 7892**

Prerequisite: NUA 5890. On-the-job training in a field directly related to the Urban Agribusiness Program. Class meets fifteen hours a week. Three credits.

LANDSCAPE HORTICULTURE.....NUA 2930

Prerequisite: NUA 8887 and NUA 3889 or practical experience in horticulture. Principles of planning, producing, setting out and maintaining ornamental plantings of trees, vines, ground covers, perennials, turf and annuals. Class meets four hours a week. Three credits.



SPECIAL TOPICS IN HORTICULTURE I

..... NUA 8937

Prerequisites: NUA 8887 and NUA 3889 or practical experience in horticulture. Special topics in the areas of arboriculture, floricultural crop production, fruit and nut crop production, greenhouse construction, nursery management, plant propagation, supervision of golf course management, and vegetable crop ecology. Class meets one to three hours a week. One to three credits.

SPECIAL TOPICS IN HORTICULTURE II

..... NUA 2938

Prerequisites: NUA 8887 and NUA 3889 or practical experience in horticulture. Special topics in the areas of arboriculture, floricultural crop production, fruit and nut crop production, greenhouse construction, nursery management, plant propagation, supervision of golf course management, and vegetable crop ecology. Class meets one to three hours a week. One to three credits.

SPECIAL TOPICS IN HORTICULTURE III

..... NUA 6009

Prerequisites: NUA 8887 and NUA 3889 or practical experience in horticulture. Special topics in the areas of arboriculture, floricultural crop production, fruit and nut crop production, greenhouse construction, nursery management, plant propagation, supervision of golf course management, and vegetable crop ecology. Class meets one to three hours a week. One to three credits.

PLANT MATERIALS I NUA 2891

Prerequisites: NUA 8887 and NUA 3889 or practical experience in horticulture. Perennials, annuals and conifers for landscape planting. Class meets four hours a week. Three credits.

PLANT MATERIALS II NUA 8893

Prerequisites: NUA 8887 and NUA 3889 or practical experience in horticulture. Identification, uses and abuses of deciduous trees and shrubs as well as evergreens and woody vines in landscaping. Class meets four hours a week. Three credits.

PRINCIPLES OF SUPERVISION NUA 9886

Responsibilities of supervisors. Organization, duties, human relations, grievances, training, rating, promotion, quality control and management-employee relations. Class meets three hours a week. Three credits.

GROUNDS ESTABLISHMENT AND MAINTENANCE NUA 4007

Prerequisites: NUA 8887 and NUA 3889 or practical experience in horticulture. Arboriculture and turf grass management. Maintenance of trees. Establishment and maintenance of turf. Class meets four hours a week. Three credits.



Student and Instructional Services

Counseling
Testing/Assessment
Career Planning and Placement Center
GED Program
General Studies
Writing Center
Project CLEAR
Hearing Impaired Program
Gallaudet College Midcentral
Regional Extension Center
Child Play Center
Dental Hygiene Clinic
Student Activities
Campus Ledger
Intercollegiate Athletics
Library
Parking
Student Code of Conduct
Student Grievance Policy & Procedures
Access to Student Information

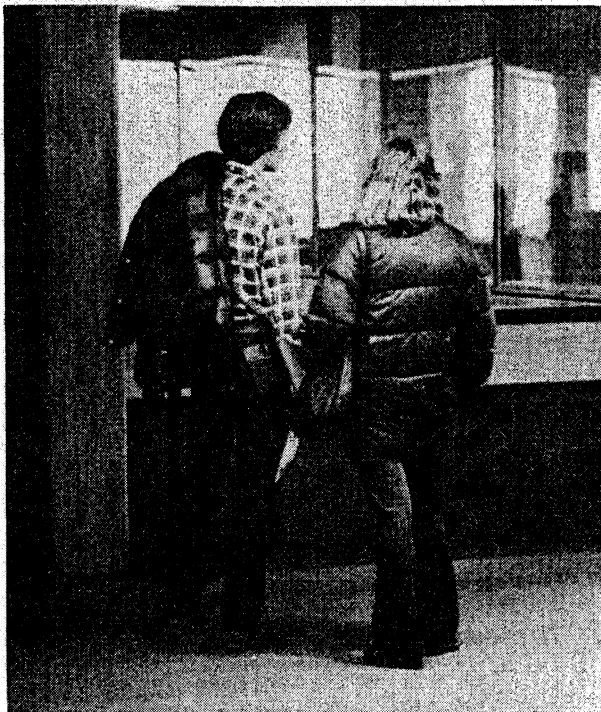
STUDENT AND INSTRUCTIONAL SERVICES

Counseling Center

JCCC's counseling staff is on hand to help you with academic, career or personal problems. Usually, you may see a counselor on a walk-in basis. During registration and early registration you should call to make an appointment.

Here is what the Counseling Center has to offer:

- **Career planning and exploration assistance:** Are you undecided about a career? Or do you need help in pursuing the career you have chosen? The Counseling Center's interest tests and educational information can give you insight into yourself and into career possibilities and strategies.



- **Information about JCCC academic and career programs:** A counselor can answer your questions about JCCC's academic and career programs and will help you develop a program plan.

- **Current transfer information:** If you are planning to transfer to a four-year institution, come to the Center before you enroll in courses at JCCC. A counselor can explain which courses will transfer and which courses are recommended by the institution you plan to attend.

- **Help in solving social or personal problems:** Learn to solve your social or personal problems through a self-examination process. A counselor will guide you in evaluating your attitudes, goals and values. Community referrals also are available.

- **Orientation to the College:** If you are new to JCCC, getting around the College may be difficult at first. A Counseling Center orientation session may

help you get better acquainted. Individual and group sessions are available.

Testing/Assessment Center

The Center offers a wide variety of testing services including aptitude and interest inventories, administration and interpretation of standardized exams, course placement exams and instructor-developed exams. This also is the place to come if you are interested in receiving advanced college credit through examination or experience. The Center will mail you information about specific tests and dates at your request.

Career Planning and Placement Center

Do you need help in mapping out your career? Finding a job? Writing a resume or letter of application? Preparing for a job interview? The Career Planning and Placement Center offers classes and individualized help in career planning and job hunting. The Center usually has available several hundred full-time and part-time job opportunities and maintains a network of contacts which includes employers, other college and university placement offices, and public and private employment agencies.

GED Program

If you plan to obtain a high school equivalency certificate by taking the General Educational Development Test, contact the Testing/Assessment Center for details. If you now are ready to take the GED Test, the Testing/Assessment Center will arrange for you to complete the necessary application forms. The Center also will schedule a testing appointment for you after you have received your GED testing permit.

Help in preparing to take the GED Test is available at no cost through a variety of classes including twelve-week and eight-week classes and through individual instruction.

Are you unsure whether you need help in preparing? Take a diagnostic GED practice test through the Testing/Assessment Center to determine if you are ready to take the actual GED Test.

General Studies Program

The General Studies Program will help you develop basic skills in reading, vocabulary and other areas through individualized instruction, small classes and the Tutor Exchange:

- **Individualized instruction** consists of a self-paced program focusing on improving your skills in reading comprehension, reading rate, spelling, vocabulary, grammar, mathematics and study methods. You also may study medical terminology and prepare for college-level studies in algebra and chemistry.

- **Tutor Exchange** is a list of tutors available to help you develop specific skills. See the receptionist at the General Studies Lab for details.

- **Small classes**, usually lasting a few weeks, are offered in several areas including study skills and vocabulary development.

Writing Center

Need help in writing an essay, research paper, journal, business letter, resume, book report or other assignment? Come to the Writing Center, GEB 149. Instructors and student tutors are on hand to help you solve specific grammar, spelling and word usage problems. If you have a quick question, call the GRAMMAR HOTLINE, 888-8500, ext. 439. For more personalized help, contact the Writing Center to make an appointment.

Project CLEAR

Mentally retarded adults are offered a variety of non-credit, continuing education opportunities through College Learning Experiences for Adults with Retardation, better known as Project CLEAR. The program focuses on independent living skills and life-enhancing experiences through classes offered on Saturdays and weekday evenings during the fall, spring and summer.

Project CLEAR also offers programs for parents of mentally retarded individuals and for other interested community members. Contact the Special Services Division for complete information.

Hearing Impaired Program

The Hearing Impaired Program at JCCC offers credit and non-credit opportunities which prepare hearing impaired students to enter the mainstream of regular career and academic programs at JCCC.

Services available through this program include personalized help in admission and orientation and supportive services such as notetaking, interpreting and counseling. A variety of courses are available each semester including speech therapy, manual communications and the fundamentals of math and English.

In addition, the program makes an effort to teach the community and others throughout Kansas how to better deal with the hearing-impaired population.



Gallaudet College Extension Center

JCCC established the Gallaudet College Extension Center in cooperation with Gallaudet College in Washington, D.C.—the world's only four-year liberal arts college for the deaf.

The Center serves a five-state area through workshops, seminars, conferences and consultation. It is the work of the Center to provide educational opportunities to deaf adults; develop an awareness about deafness in the hearing community; offer technical assistance to area agencies and services; and train parents, professionals, deaf adults and other interested persons.

Child Play Center

Your child may stay in the Child Play Center while you are in class or on campus for other school activities. This service is designed especially for children



of JCCC students. A staff qualified in accordance with Kansas State regulations is on hand to care for children between the ages of 2½ (toilet-trained) and 12. The Child Play Center challenges the imagination and creativity of each child. It also strives to guide and accept children at their own levels. For just \$1 an hour, your child will get quality care and have fun participating in planned activities. You can reserve a place for your child on a regular basis or use the Center on a drop-in basis.

Dental Hygiene Clinic

You and your family may have your teeth checked, cleaned, X-rayed and treated with fluoride for a small fee at the Dental Hygiene Clinic. Dental hygiene students, supervised by licensed dentists and dental hygienists, will provide the services and show you how to care for your teeth in the future. Call the Clinic to make an appointment.

Student Activities Program

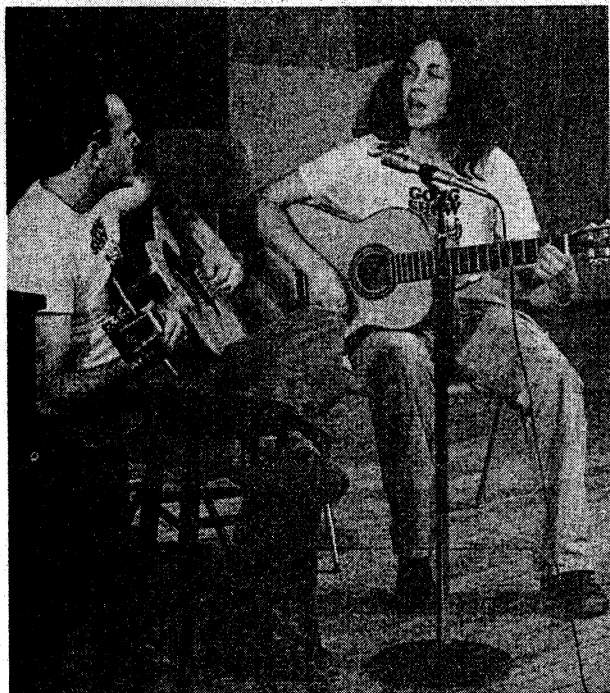
The JCCC Student Activities Program brings you year 'round cultural, social and recreational activities, sponsored by the Student Activities Office in cooperation with the Student Assembly and the Campus Activities Board, two volunteer student government organizations. Activities you can expect each year include the Friday Cinema Series, Spring Fever Week, Captioned Films for the Deaf Series and the annual Holiday Dance.

You also can look forward to live entertainment in the College Commons, guest lecturers, film festivals and Fool-Con, the regional science fiction/fantasy convention. Also watch for special ski trips, canoe trips and evenings at local dinner theaters.

In addition to these special events, you may wish to join a club—or form your own. Some clubs are vocationally-oriented such as the Hospitality Management Club and the Junior American Dental Hygienists Association of JCCC. Other clubs are organized around special interests including the interdenominational fellowship club, science fiction/fantasy club and political party organizations.

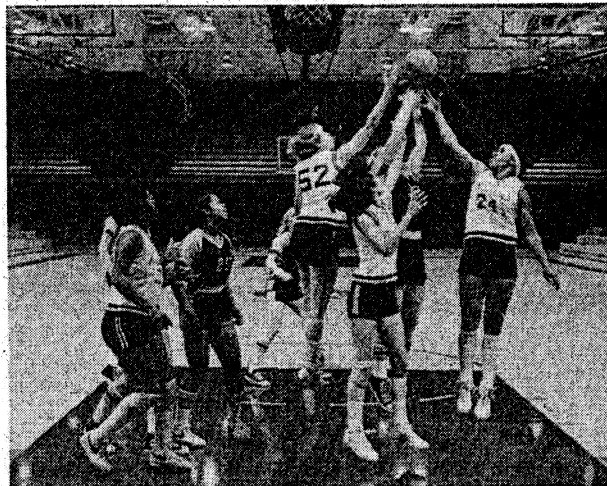
Student activities will give you the chance to develop your leadership skills and may stimulate your interest in a particular class or program. They also will give you the opportunity to interact with staff and students in a friendly, relaxed atmosphere.

For complete information on student activities, contact the coordinator of Student Activities or call the WHAT'S HAPPENING HOTLINE, 677-8588. To join or form a club, contact the coordinator of Student Activities.



Campus Ledger

The Campus Ledger is a student-run newspaper which emphasizes news and programs. Ultimate editorial responsibility rests with the editor who in turn is responsible to the JCCC Publications Board.



Athletics

Men compete in baseball, tennis, basketball, golf, soccer, track and wrestling at JCCC. Women may take part in tennis, volleyball, basketball, softball and track. The College will participate in other intercollegiate athletics as approved by the Board of Trustees. JCCC is a member of the National Junior College Athletic Association (NJCAA) and the Kansas Jayhawk Community College Conference. You must meet NJCAA eligibility rules to compete in intercollegiate activities.

JCCC also offers a full range of intramural activities which enable you to develop your skills and make friends during your leisure time.

Library

The JCCC library maintains a collection of books, periodicals, films, slides, tapes, microfilm and other resources available to students and Johnson County residents. A highly trained staff of librarians, library specialists and library aides are on hand to assist you in finding and using the resources.

Currently, the library houses more than 38,000 books, 480 current periodicals, 130,000 documents on microfiche and hundreds of slides, videotapes and audio recordings. A computer maintains a catalog of these materials.

Books are arranged on shelves according to the Library of Congress (LC) classification. A printed outline of the LC classification is available at the circulation desk.

You must use reference books, most audio-visual materials and all magazines and newspapers in the library. You may use the coin-operated photocopier if you need to make copies.

Usually books are due two weeks from the Monday following the day you check them out. This means you may keep books from two to three weeks. You will be charged 10 cents a day for each item you keep out past the due date. The maximum fee you may be charged is the cost of the book or \$5, whichever is greater. If you lose a book, you will be charged the cost of the book plus a \$2 service charge.

Sometimes your instructor may place materials on reserve and specify a loan period. You will be charged 25 cents an hour on each item you keep out past the time it is due, or \$1, whichever is less.

Your transcripts or grades will not be released until you pay all library fees.

Parking

Parking is free for all JCCC students. You do not have to register your vehicle. Parking lots are marked with signs directing you to the designated parking areas. You may not park in the handicapped students' Lots B and H unless you have a permit.

Handicapped Parking

If you are permanently handicapped, you may obtain a registration sticker from the Security Office which allows you to park in lots designated for the handicapped. Attach this sticker to the rear bumper, driver's side of your vehicle. If you wish to park for a limited time in the handicapped parking lots, obtain a permit from the Security Office and attach it to the rear window, driver's side of your vehicle.

Motorcycles and motorscooters

If you are riding a motorcycle or motorscooter, you are expected to comply with all parking and traffic regulations.

Bicycle racks

Racks are available throughout the campus. You do not need to register your bicycle.

Emergency parking or loading

Special permits are available in the Security Office.

Handicapped Lot Violation

Your vehicle will be immobilized after you receive two citations for parking in a handicapped lot without a permit, Monday through Friday, 7 a.m. to 9 p.m. You will be charged \$10 for removal of the immobilizer.

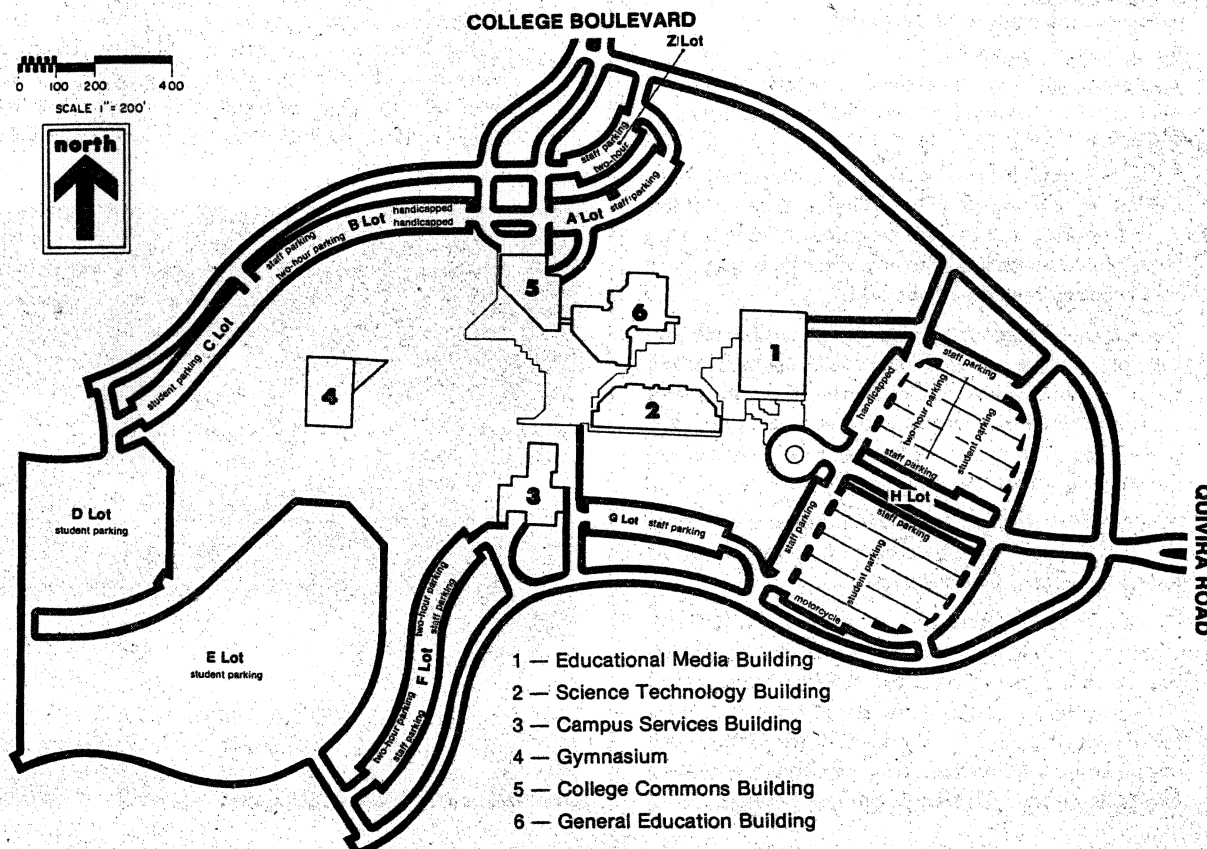
Immobilization or towing

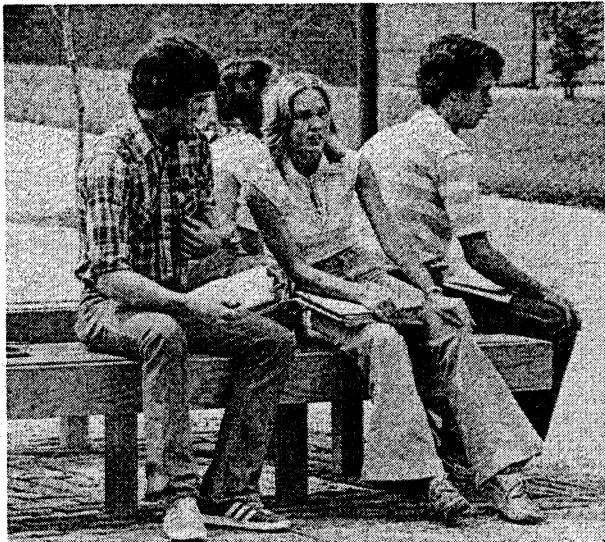
Your vehicle will be immobilized or towed away if:

1. it is parked in handicapped parking lots or a loading area without a permit;
2. you refuse to move your vehicle after a security officer requests you do so;
3. it is blocking a dock or sidewalk or is parked on the grass;
4. you park your car or truck in the motorcycle area.

Accidents

If you are involved in an accident on campus, notify the Security Office immediately and file an accident report.





Student Code of Conduct

JCCC reserves the right to suspend you for any conduct which is detrimental to the best interests of the College. These following violations of the College's standards for student conduct may result in suspension or other disciplinary action:

- threatening the life or physical safety of others;
- substantially disrupting, impeding or interfering with the operation of the College
- substantially infringing on or invading the rights of others
- damaging College equipment or facilities
- violating conditions of probation
- academic dishonesty
- willfully violating any published regulation for student conduct adopted or approved by the Board of Trustees
- conduct which results in your conviction of a federal or state offense. (The College does not prohibit the participation in College programs of students who have previous criminal records, for which they have met the requirements of the law.)

The Dean of Student Services is responsible for any temporary or permanent student suspension. You will have the opportunity to discuss the suspension with the Dean before any formal action is taken, unless the suspension is a result of action involving an immediate danger to life, limb or property.

The College considers suspension a serious action. It will make every effort to keep you in school and to help you fulfill your objectives.

There is a written policy about suspension that protects your rights as an individual. All procedures are handled in writing with enough time for you to appeal the suspension through a student discipline committee of the College to the President of the College and to the Board of Trustees. You may obtain a copy of this policy from the Dean of Student Services.

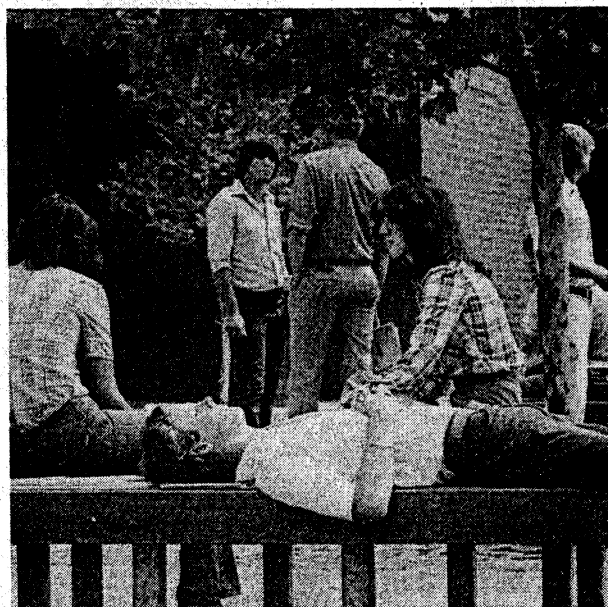
How to file a grievance

A grievance may concern an alleged violation of school policies, alleged infringement of your rights as a student and other such problems concerning students, College staff and authorized College activities. You must follow these procedures to process your complaint or grievance:

(a) You must attempt to rectify the grievance with the supervisor of the area in which the alleged violation occurred within 10 College working days. Every effort will be made to resolve the grievance at the lowest possible level.

(b) Consult with the appropriate supervisor (e.g. instructor, coordinator or division director) and attempt to resolve the grievance through informal discussions. The supervisor must inform you in writing of any decision made and the reason for that decision within five College working days. If you feel the grievance is not resolved, you may submit a grievance in writing to the next level of authority within 10 College working days from the time you filed the complaint at the previous level. Each level appealed to will have five College working days to respond.

(c) Consult with the Dean of Student Services. (1) Submit the grievance in writing to the Dean of Student Services and request a conference. (2) The Dean will notify the Affirmative Action/Title IX Officer of the College in writing of any grievance concerned with alleged discrimination. (3) The Dean must, within five College working days, inform you in writing of any decision made and the reasons for making that decision. (4) You may appeal in writing to the President of the College if the grievance is not resolved with the Dean of Student Services within five College working days after the Dean has received the written grievance.



(d) **Consult with the President of the College.** (1) The President must receive the written appeal within 10 College working days from the time you filed the grievance with the Dean of Student Services. (2) The President must, within five College working days, inform you in writing of any decisions made and reasons for that decision. (3) The decision of the President is final.

If you do not take the next step in the grievance procedure within the stated time period, the grievance shall be considered settled.

Your rights as a grievant

No reprisals of any kind will be taken against you by any member or representative of the administration for filing a grievance.

Access to Student Information

Your rights concerning access to your educational records are spelled out in Public Law 98-380 as amended by Public Law 93-568 and in regulations published by HEW in the June 17, 1976 Federal Register.

The law and regulations published by the Department of Health, Education and Welfare require educational institutions to:

- provide you the opportunity to inspect your educational records. Contact the JCCC Admissions/Records Office.
- provide you the opportunity to challenge through a hearing the content of your educational records if you believe they contain information that is inaccurate, misleading or in violation of the right to privacy. **(Grades are not subject to challenge.)**
- limit disclosure of information from your record to those who have your consent or to officials specifically permitted within the law, such as college officials and – under certain conditions – local, state and federal officials.

If you are a dependent student, your parents will have access to your educational record. The College will assume you are a dependent if your parents provide a written statement that you are listed as a dependent on their federal income tax forms.

JCCC does not publish a student directory. JCCC will upon request provide this information:

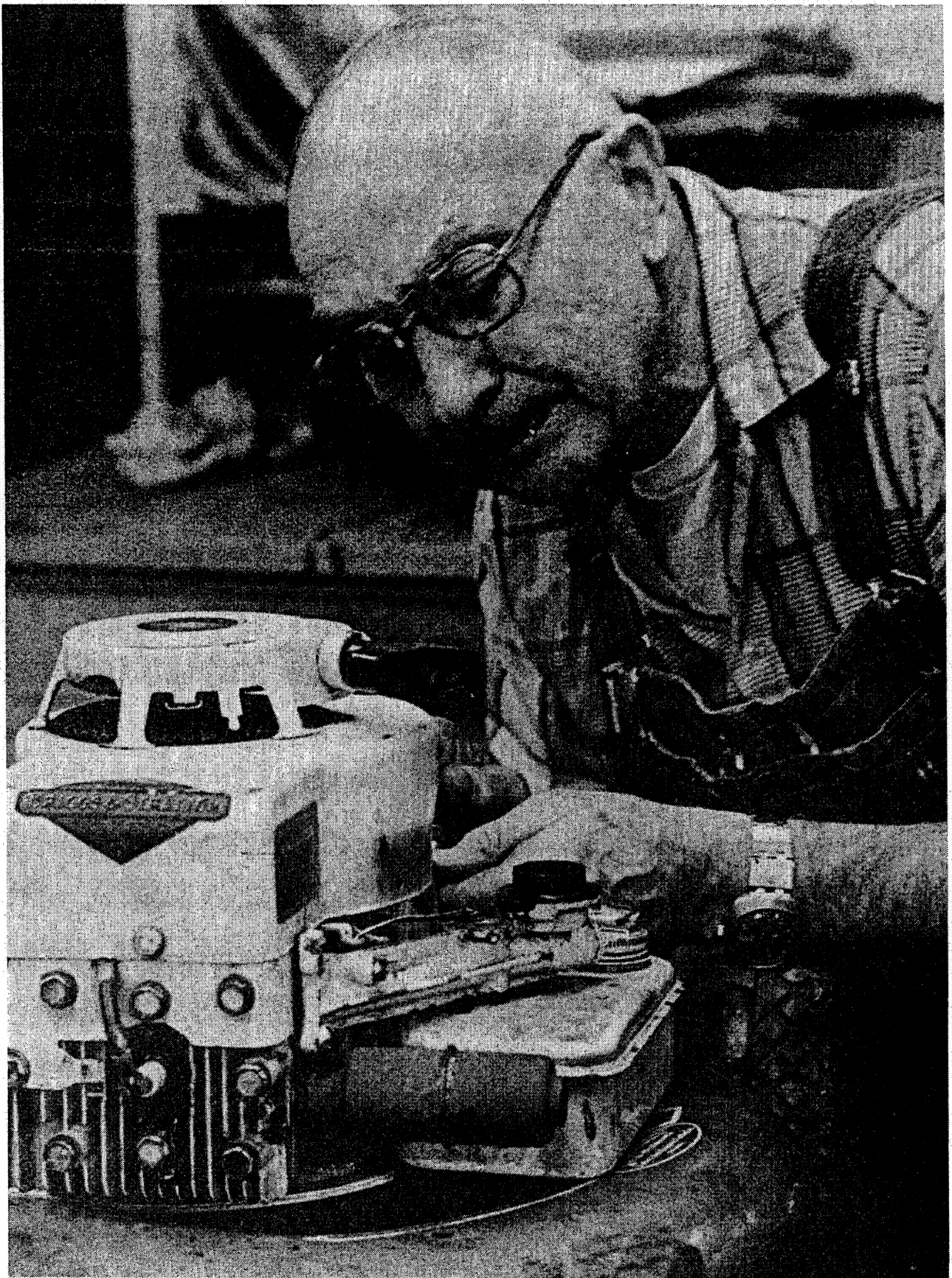
- student's name
- address
- telephone number
- date and place of birth
- major field of study
- participation in officially recognized activities
- sports – weight and height of athletic team members
- dates of attendance
- degrees
- awards received
- most recent previous educational institution attended

If you object to the disclosure of any of the above information, notify the Admissions/Records Office in writing which items you do not want released without your consent.

You may obtain a copy of the College's policies on access to student information and implementation of these procedures from the Admissions/Records Office.

You may file a complaint with HEW if you believe your rights under this law have been violated and if efforts to resolve the situation through JCCC appeal channels have proved unsatisfactory. Send your complaint to:

F.E.R.P.A., HEW
Room 514 E
200 Independence Avenue SW
Washington, DC 20201



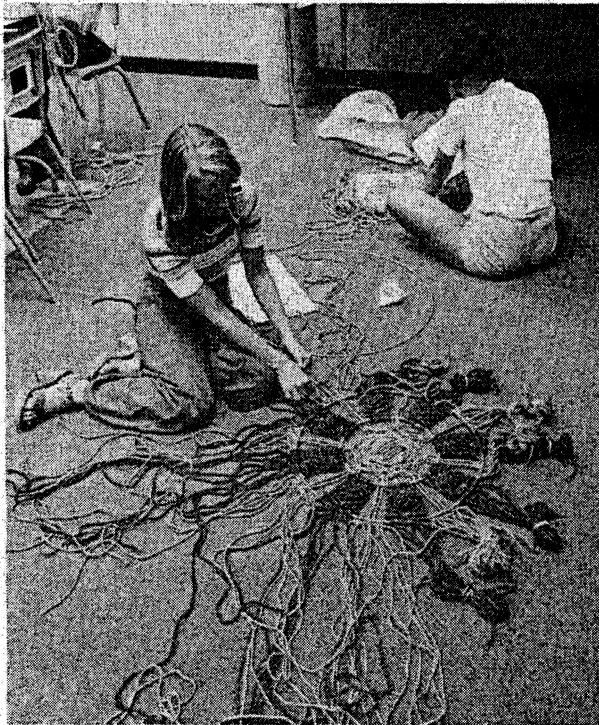
Community Education and Services

Continuing Education
Community Development
Community School Program
VIEWS for Women
Cultural Arts Program
A Program for Those Over 60
On-Site Education
Clinics for Youth
Speakers Bureau
Child Care Directory

COMMUNITY EDUCATION AT JCCC

Continuing Education

Would you like to improve your on-the-job performance, develop a new skill or pursue a leisure-time interest? Try the workshops, seminars and courses offered through JCCC's continuing education program. Most courses are non-credit and are held at convenient locations throughout Johnson County. Bulletins announcing available courses are mailed to all Johnson County residences three times a year. Activities offered include art, aviation, foreign languages, home and family, human relations, music and photography.



Community Development

If you are concerned about development, stabilization or change in your community, why not confront these issues with others who care? JCCC is often a meeting ground and catalyst for citizens interested in:

- developing leadership skills
- examining proposed amendments to the state constitution
- meeting and questioning candidates for political office
- exploring problems related to youth, women, single adults and the elderly
- discussing health services, county reorganization, land use, water and environment
- joining Great Decisions discussion groups focusing on foreign policy decisions including arms reduction
- considering today's trends in ethics and economics
- searching for values affecting individuals and society

Community School Program

If you live in one of the smaller urban or rural areas in Johnson County, you do not have to travel far to take JCCC courses. JCCC comes to you through its community school program established in Olathe, Stanley-Stilwell, DeSoto-Clearview, Gardner-Edgerton and Spring Hill. Classes are held in local schools selected jointly by the Community School Council and JCCC. The Community School Council consists of a cross section of local residents confirmed by the local board of education, making the community school a joint venture of the College and the community. Each community school has a resident coordinator who assists in scheduling and registration procedures. Community School courses are listed in JCCC's Community Education bulletin each semester.

VIEWS for Women

JCCC's special VIEWS for Women Program focuses on the needs and concerns of area women. The program helps make personal development and the resulting changes mutually enriching to all members of the family. Course topics include personal growth, health and physical development, communication skills, home and automobile maintenance, financial management, career development, human relations and leadership.



Cultural Arts Program

There is a rich array of cultural opportunities available in the greater Kansas City area and JCCC's Cultural Arts Program helps you enjoy them. The program includes classes, lectures, films, concerts and tours on a variety of subjects—architecture, antiques, anthropology, art, jewelry, theater, music, photography, astronomy, travel, nature and commerce. The College cooperates with local schools, colleges, institutions and organizations to offer you an exciting program of cultural activities both on and off campus.

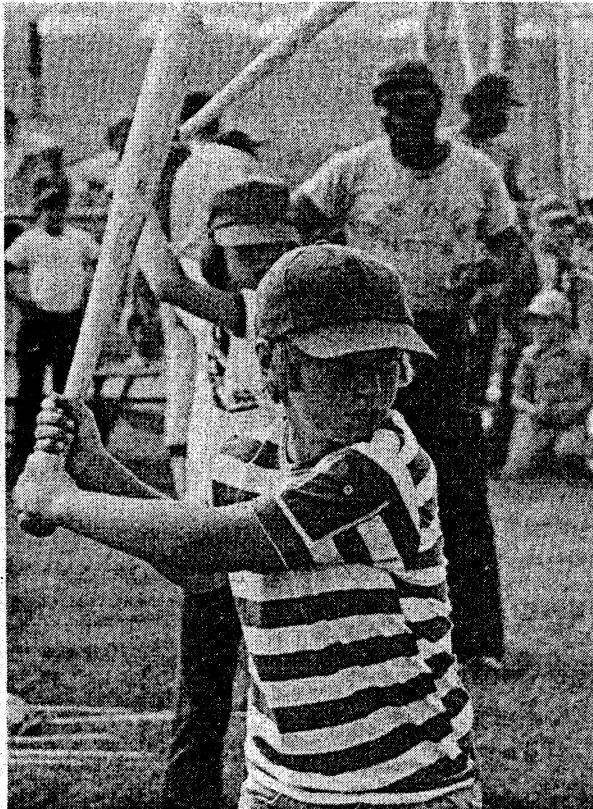
A Program for Those Over 60

Are you over 60 and a Johnson County resident? You are in luck—you can join JCCC's Brown and Gold Club! There is no charge to join. And, as a member, you don't have to pay to take College credit and non-credit courses or to get into College-sponsored musical, dramatic or athletic programs.

In addition to the Brown and Gold Club, JCCC presents programs for those over 60 at senior citizen centers, luncheon sites, churches and libraries. Another popular over-60 activity is Campus Day, a full day of programs and involvement with JCCC students and instructors held each semester.

On-Site Education

If your firm, industry, business or organization cannot come to JCCC, JCCC will come to it through the On-Site Education Program. Most courses listed in the College Catalog and the Community Education Bulletin may be taught on the premises of your organization. And, if you want a specific course not being offered, the College staff can work with you to design a class to meet that need. On-site courses in the past have included technical writing, effective supervision, stress management and pre-retirement planning.

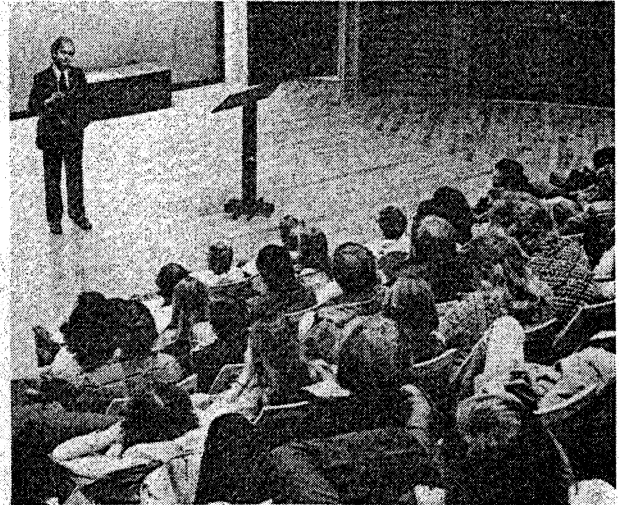


Clinics and Courses for Youth

Each year JCCC offers sports clinics and courses for boys and girls from 7-16. The clinics focus on tennis, baseball, basketball, gymnastics, volleyball, softball and soccer.

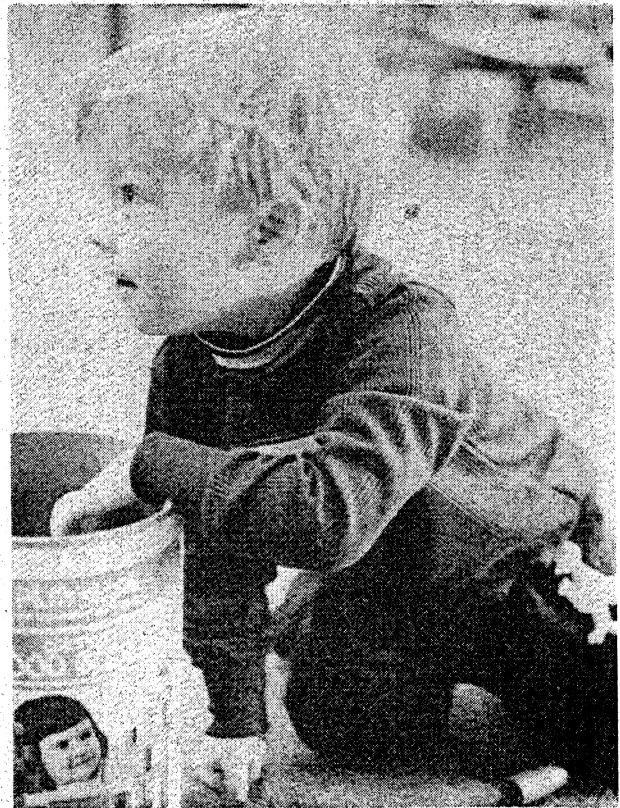
Speakers Bureau

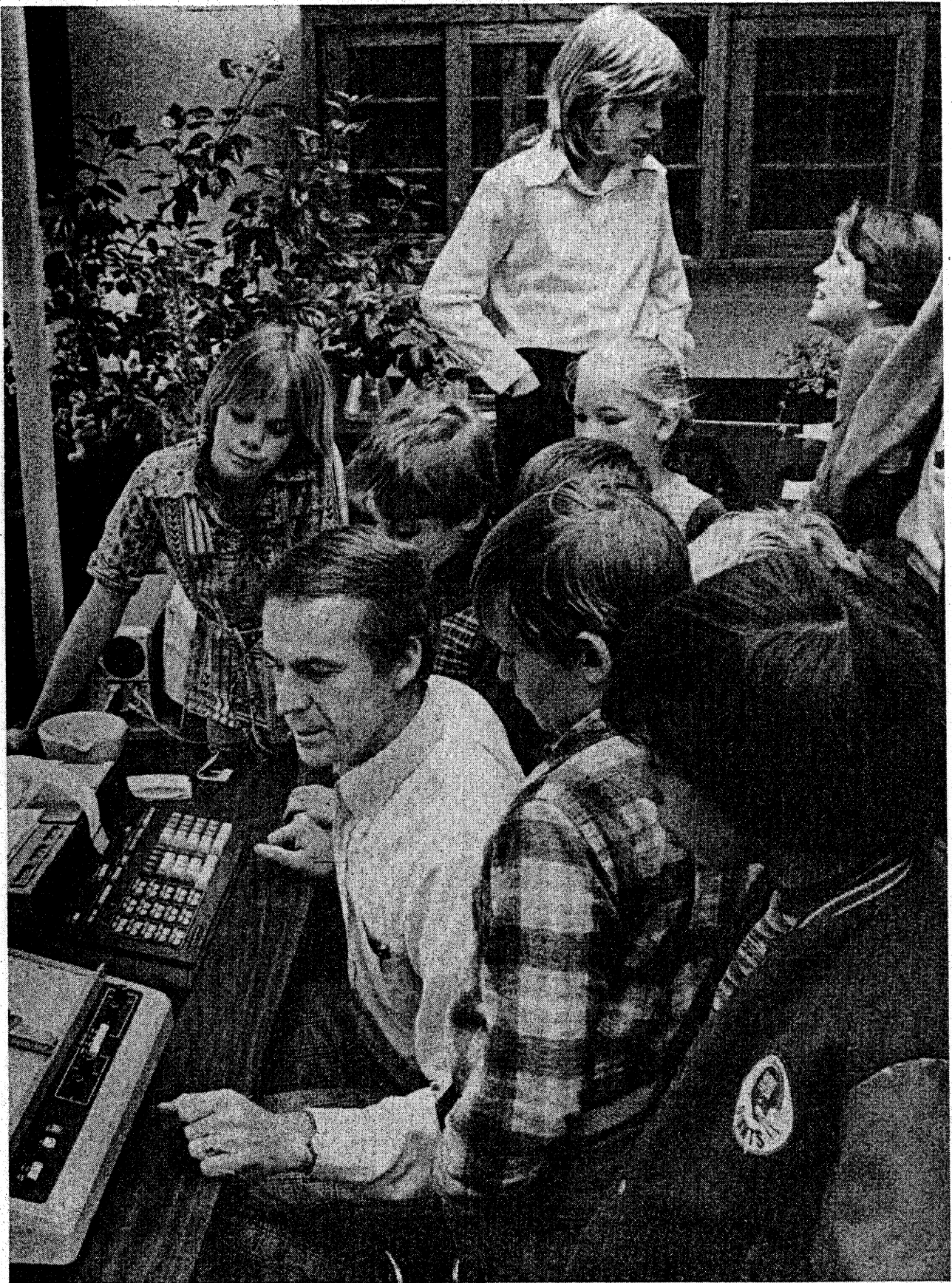
Does your organization need a guest speaker? You pick the topic—chances are JCCC's Speaker's Bureau can arrange for someone to speak to your organization about it. The Bureau also can arrange performances by music, drama and speech students.



Child Care Directory

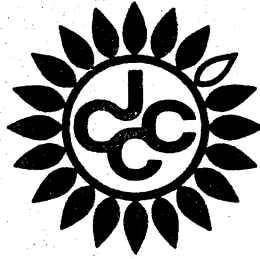
A complete directory of child care centers in Johnson County is published annually by JCCC. To get your copy, send a large self-addressed envelope to JCCC Community Services, College Blvd. at Quivira Road, Overland Park, Kansas 66210.





Board of Trustees and Staff

About the College
History
Board of Trustees
Staff



LEAGUE FOR INNOVATION

Johnson County Community College is a member of the League for Innovation in the Community College. League membership includes 18 of the most innovative community college districts in the nation. The stated aim of the League for Innovation is to encourage and evaluate innovation and experimentation designed to improve all aspects of College operation.

Membership in the League constitutes a significant recognition of a commitment to (1) a program of experimentation and improvement; (2) a willingness to share the fruits of experimentation; (3) a cooperative program with other districts on the solution of common problems; and (4) an evaluation of experimentation in the orderly operation of the district's programs.

KRCHE

JCCC is a member of the Kansas City Regional Council for Higher Education (KRCHE), a cooperative of 17 colleges and universities in the Kansas City area. These institutions work together to extend the resources available to their students and to provide quality educational services.

KRCHE's current program emphasis is on professional development, enrollment development and resource-sharing, but KRCHE maintains a variety of specific programs and assists member institutions with a wide range of programs through which they can share information and ideas.

KRCHE was founded in 1962, and has a current membership of 16 parent institutions and 23 campuses in a wide metropolitan area which extends to 125 miles. Included are colleges and universities which are tax-supported, independent and church-related, both Roman Catholic and Protestant. They are two-year, four-year and graduate, both single-purpose and multi-purpose, located in Kansas, Missouri and Iowa. Membership in KRCHE is the means for keeping regional institutions in touch with one another across the lines which separate them—state boundaries, public-private divisions and distinctive institutional missions. And the diversity in membership adds to the intellectual and organization resources available for inter-institutional sharing.

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; Medical Record Technology – American Medical Association and American Medical Records Association; Mental Health Technology and Nursing programs – State Board of Nursing; Paralegal Program – American Bar Association; Respiratory Therapy – American Medical Association and American Association of Respiratory Therapists; Basic Police Academy – University of Kansas.

WEEKEND COLLEGE

Why not spend your weekends earning college credit? You can through Weekend College, designed for students with little or no college experience who are unable to attend classes during the week. The courses, held on Friday evenings and Saturdays, are part of the existing fully-accredited two-year curriculum at JCCC. It is possible to earn an Associate of Arts degree in four years through this program. You may wish to consider Weekend College if . . .

- . . . you are unable to attend classes during the week because you work;
- . . . you are seeking to accelerate a program toward a degree;
- . . . you are looking for personal enrichment or professional growth.

Contact the Division of Student Services for more information.

SUMMER SESSION

Each year, Johnson County Community College conducts a summer session following the spring semester. The summer courses parallel those offered during the regular fall and spring semesters. The balanced programs that are available enable you to accelerate your academic programs or satisfy individual needs

The summer sessions also provide the opportunity for high school seniors to acquire advanced standing by successfully completing collegiate courses.

History Of The College

A little over 12 years ago the citizens of Johnson County made history when they created Johnson County Community College. What they envisioned was a school that would grow as the community grew and that would meet the changing needs of all its citizens.

Today JCCC is the largest of the 19 community and junior colleges in Kansas and has a reputation as a leader in community colleges across the nation.

The story of the creation of JCCC is the story of commitment of the citizens in Johnson County to the principle of life-long learning for a student body made up of all the citizens of the community.

In July of 1963, the Board of County Commissioners of Johnson County appointed a committee of 18 residents to explore the feasibility of a county community college. Their study and research was expressed in a unanimous recommendation in December 1966, that the college be established.

The next step was the formation of the Citizen's Action Committee to secure support from citizens and educational leaders for the formation of a community college district to be governed by six trustees elected at large.

JCCC became the first new college recommended for creation under the Community Junior College Act of 1965. The idea became a reality when JCCC was formally established after a county-wide referendum approved the idea by nearly a 3-1 margin.

Four months later the first Board of Trustees was elected and charged with deciding what kind of school was best for the community, finding a president and beginning to build a campus. Soon 1,380 students were attending classes in an assortment of rented warehouses, church basements and a 75-year-old elementary school.

Under the leadership of the Trustees and JCCC's first president, Dr. Robert Harris, the present campus was completed in 1972—six buildings housing 384,550 square feet of space on more than 200 acres of prairie grassland.

The real story of JCCC, however, is lodged in its programs and classes. JCCC offers 26 career programs and more than 400 separate courses in general studies in communications, mathematics, the humanities, the natural and social sciences and in community and continuing education.

JCCC's open-door admissions policy and quality programs attract 5,500 students each year and more than 19,000 participants in community service and continuing education programs and events.

When it's all added, the success of Johnson County Community College is an expression for the conviction that JCCC and the community which began and supports it are united in commitment to life-long learning for everyone.

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M.S., Emporia State University

ALLISON, Charles

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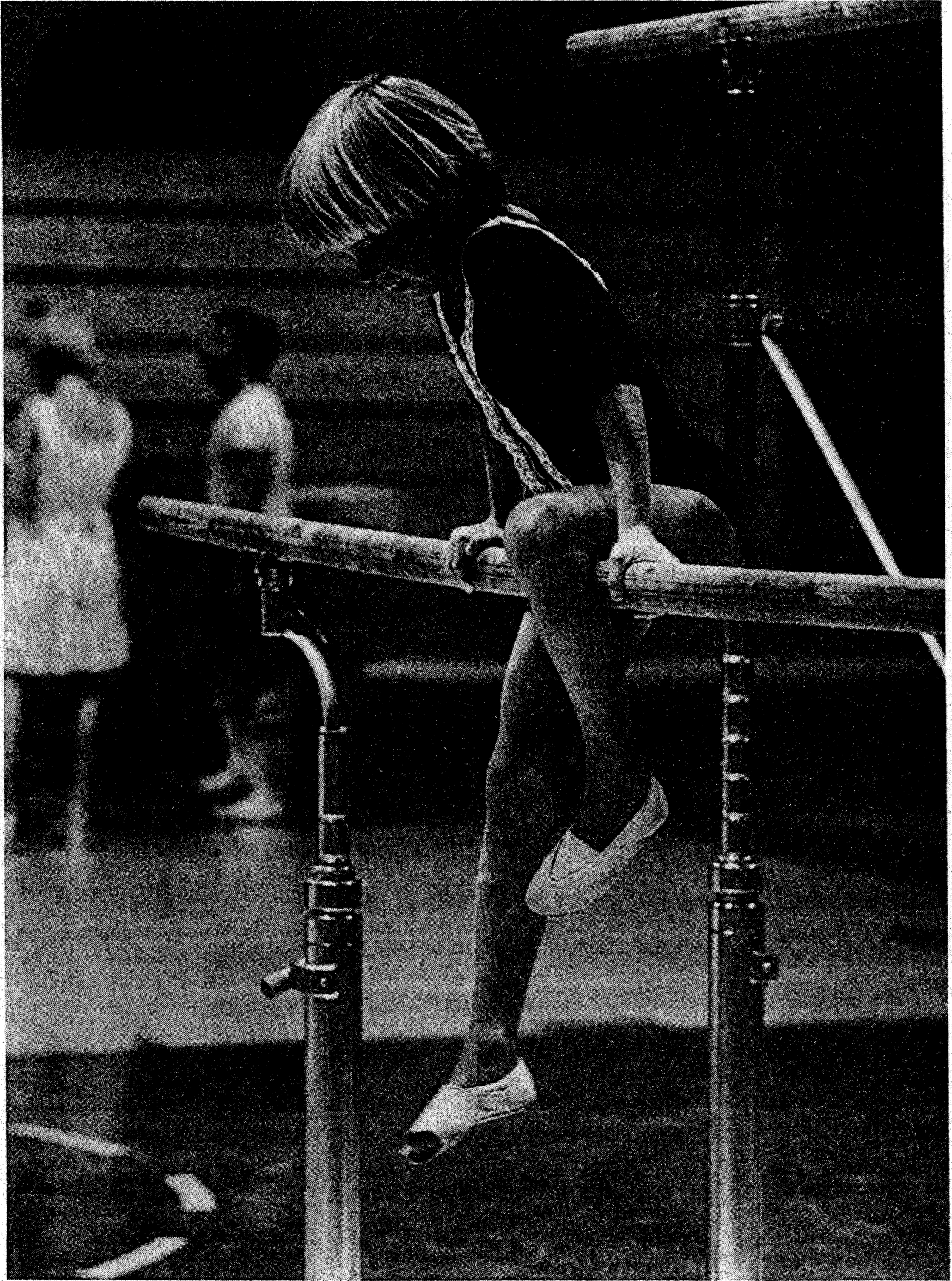
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Index

A

Academic Calendar	3
Academic Counseling	102
Academic Honors	16-17
Academic Progress	16
Access to Student Information	107
Accounting Courses	44
Accounting Program	24
Accreditation	114
Address Change	9
Administration of Justice Program	24-25
Administration of Justice Courses	45-46
Admissions Procedure	8
Advanced Standing Credit	14-15
Adults over 60	111
Affirmative Action	4
Agriculture Courses	46
Aid Available	10-11
American College Testing (ACT)	8
Application for Admission	8
Application for Financial Aid	10
Art Courses	46-48
Associate of Arts Degree	16
Athletic, Intercollegiate	104
Attendance - Class	14
Attendance - Veterans	14

B

Biomedical Equipment Tech. Program	25
Biomedical Equipment Courses	48
Board of Trustees	115
Bookstore	9
Brown and Gold Club	111
Business Courses	49-50
Business Management Program	25-26

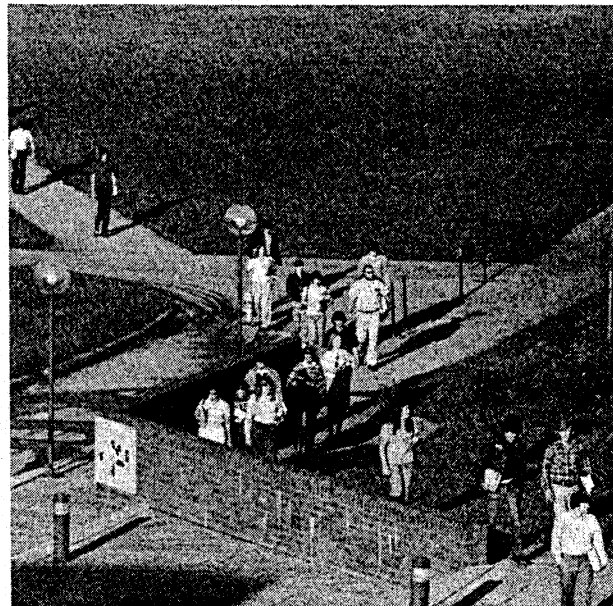
C

Calendar, Academic	3
Campus Ledger	104
Campus Map	2
Career Planning & Placement Center	102
Career Programs (list)	23
Certificate Programs	17
Child Play Center	103
Child Care Directory	111
Clinic & Courses for Youth	111
CEEB	14
CLEP	14
College Transcripts	8
Commencement	17
Commercial Art Courses	50-51
Commercial Art Program	26

Community Development	110
Community School Program	110
Communications Courses	51-52
Continuing Education	110
Counseling	102
Courses by Arrangement	14
Course Descriptions	43
Credit/No Credit	16
Credit by Examination	14
Credit Transferred from other Colleges	15
Cultural Arts	110

D

Data Processing Courses	52-54
Data Processing Program	27
Debate/Speech	96-97
Dental Assisting Courses	54
Dental Assisting Program	27
Dental Hygiene Clinic	103
Dental Hygiene Courses	54-56
Dental Hygiene Program	28
Drafting Technology Courses	56-57
Drafting Technology Program	28-29
Dropping Classes	8



E

Electronics Engineering Technology	29
Electronics Engineering Courses	58-59
Emergency Medical Technology Courses	59
Emergency Medical Technology Program	29
Engineering Courses	59-60
Equine Studies Courses	60-61
Equine Studies Program	30
Experienced Based Education	15

F

Fashion Merchandising Courses	62-63
Fashion Merchandising Program	30-31
Fees	8
Financial Aid	10
Application	10
Aid Available	10-11
Academic Progress	11
Office	10
Fire Protection & Public Safety Courses	63-64
Fire Protection & Public Safety Program	31
Foreign Languages	65
Foreign Students	9

G

Gallaudet College Extension Center	103
GED Program	102
General Studies Program	102
General Studies Courses	66
Grading System	15
Graduation Requirements	16

H

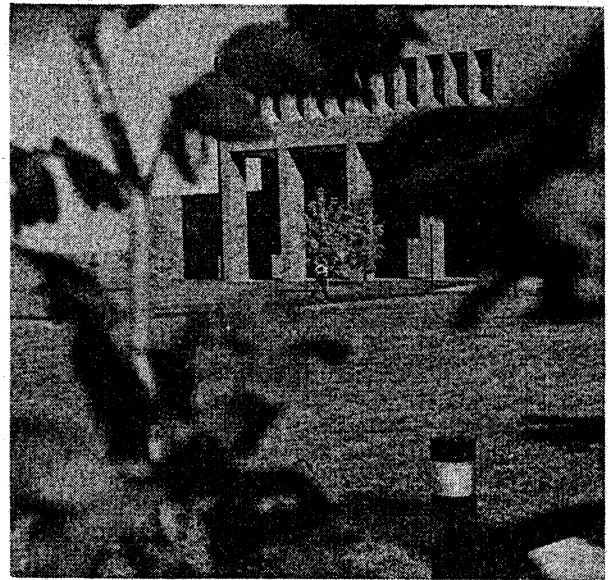
Handicapped Students	9
Parking	105
Hearing Impaired Courses	66-67
Hearing Impaired Programs	103
High School Students - Quick Step	9
High School Transcripts	8
History of College	115
Honors, Academic	16-17
Hospitality Management Courses	68-69
Hospitality Management - Culinary Program	32-33
Hospitality Management Program	31-32
Humanities Courses	67-68

I

Incomplete Grade	15
Independent Studies	14
Intent to Graduate	16
Intercollegiate Athletics	104
International Students	9
Interpreter Training Courses	70
Interpreter Training Program	33

J

Job Placement	102
Journalism Courses	70-71



K

KRCHE	15, 114
-------------	---------

L

League for Innovation	114
Library	104
Life & Home Management Program	33
Life & Home Management Courses	71
Life Science	71-72

M

Marketing & Management Courses	72-73
Marketing & Management Program	34-35
Mathematics Courses	73-75
Medical Laboratory Technology Courses	75-76
Medical Laboratory Technology Program	76-77
Medical Records Technology Courses	76-77
Medical Records Technology Program	35-36
Medical Terminology Courses	77
Mental Health Technology Courses	77
Mental Health Technology Program	36
Military Service	14
Music Courses	77-80

N

Name Change	9
Non-Discrimination	4
Non-Resident Tuition	8
Nursing Courses	81-82
Nursing Program	36-37

P

Paralegal Courses	82-83
Paralegal Program	37-38
Parking	105
Personal Concerns	102
Project CLEAR	103
Photography Courses	83-84
Physical Development Courses	84-86
Physical Science Courses	86-87
Physical Therapy Assistant Program	38
Physical Therapy Courses	87-88
Program Planning	102

Q

Quick Step	9
------------------	---

R

Radiology Courses	88-89
Radiologic Technology Program	38-39
Recreational Leadership Program	39
Recreational Leadership Courses	90
Refunds	8
Registration	8
Residency	8
Respiratory Therapy Courses	90-91
Respiratory Therapy Program	39-40

S

Scholarships/Financial Aid	10
Secretarial Career Program	40
Secretarial Career Courses	91-93
Senior Citizens	111
Small Animal Health Courses	93-94
Small Animal Health Program	41
Social Science Courses	94-96
Speakers Bureau	111
Speech and Debate	96-97
Staff Listing	116-123
Student Activities	104
Student Assembly	104
Student Code of Conduct	106
Student Grievance Policy	106
Summer Session	114

T

Table of Contents	5
Testing/Assessment Center	102
Textbooks	9



Theater	97-98
Transfer Program	20-22
Travel for Credit	14
Tuition and Fees	8
Tutoring	103

U

Urban Agribusiness Courses	98-99
Urban Agribusiness Program	41

V

Veteran Information	9
IEWS for Women	110

W

Weekend College	114
Women, IEWS	110
Writing Center	103



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