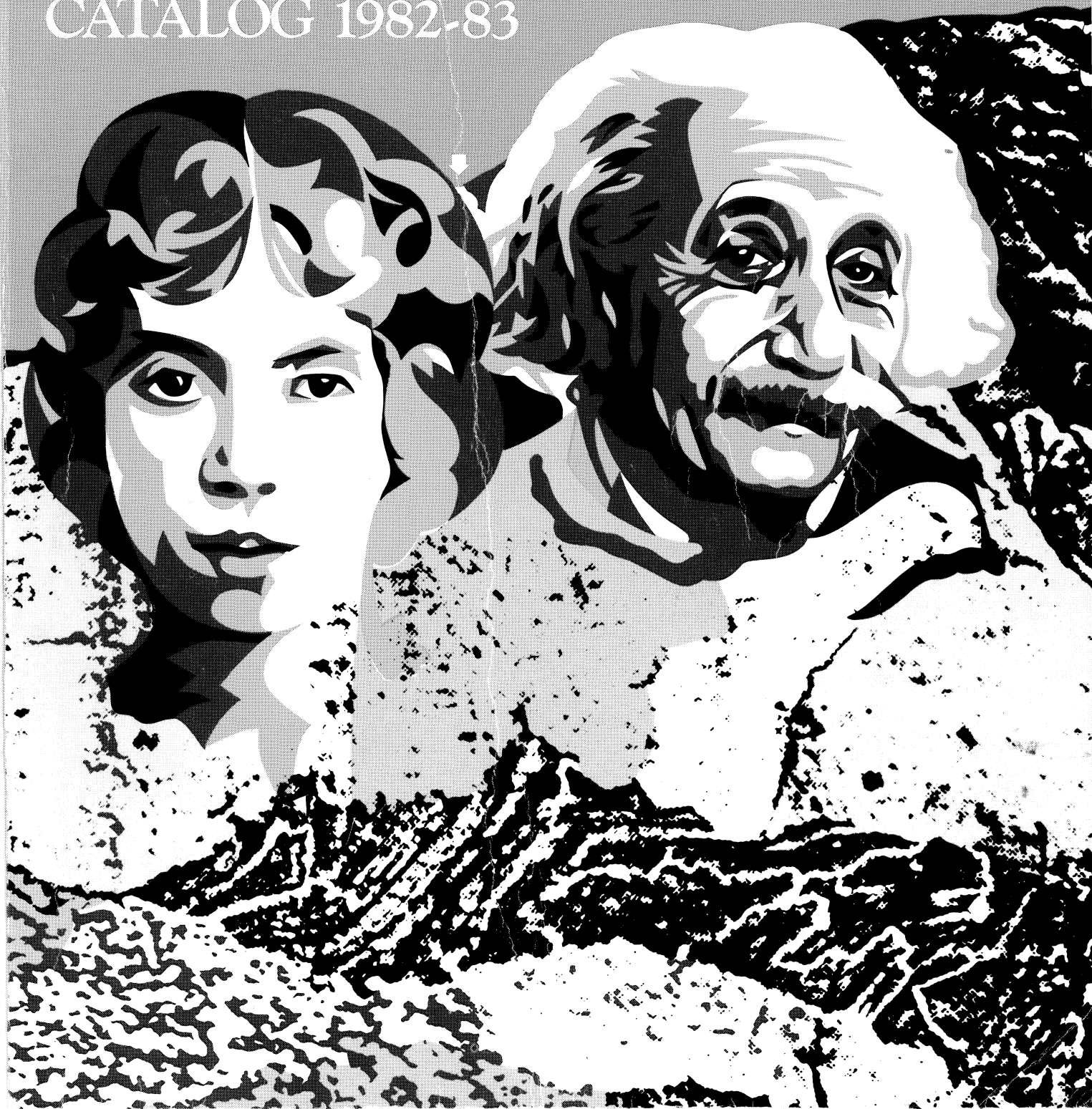
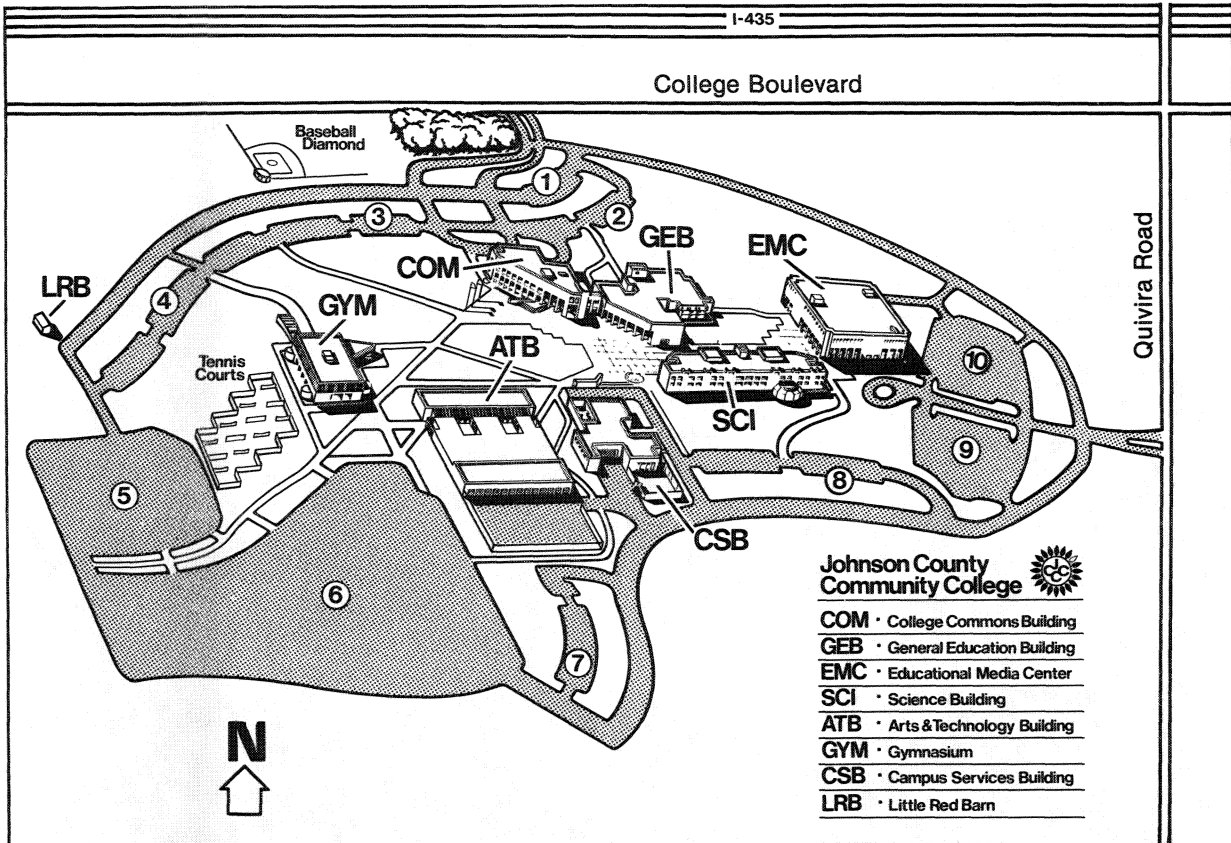


JOHNSON COUNTY COMMUNITY COLLEGE

CATALOG 1982-83







JCCC Campus Map

GEB General Education Building: Administrative offices; general classrooms; lecture hall/little theatre; faculty offices; seminar rooms; business management labs; admissions and records; counseling; business office; testing/assessment center; special services; career planning and placement center; financial aid.

EMC Educational Media Center: Library, production area for graphics, television, photography and printing; faculty offices; general classrooms; commercial art program, electronics lab; learning center; language labs; writing center; drafting; data processing.

SCI Science and Technology Building: General classrooms; labs for life science, chemistry, physics and nursing; dental hygiene clinic; faculty offices; music; police academy; lecture halls; personnel office.

CSB Campus Services Building: Security, maintenance office and shops; vehicle repair area; central warehouse; air conditioning and electrical equipment rooms; purchasing.

GYM Gymnasium: Three basketball cross-courts which can be converted to an arena or auditorium; physical education facilities including a weight room and wrestling room; general classrooms; faculty offices. Outdoor activities: playing fields, tennis and racquetball courts and jogging trail located adjacent to GYM.

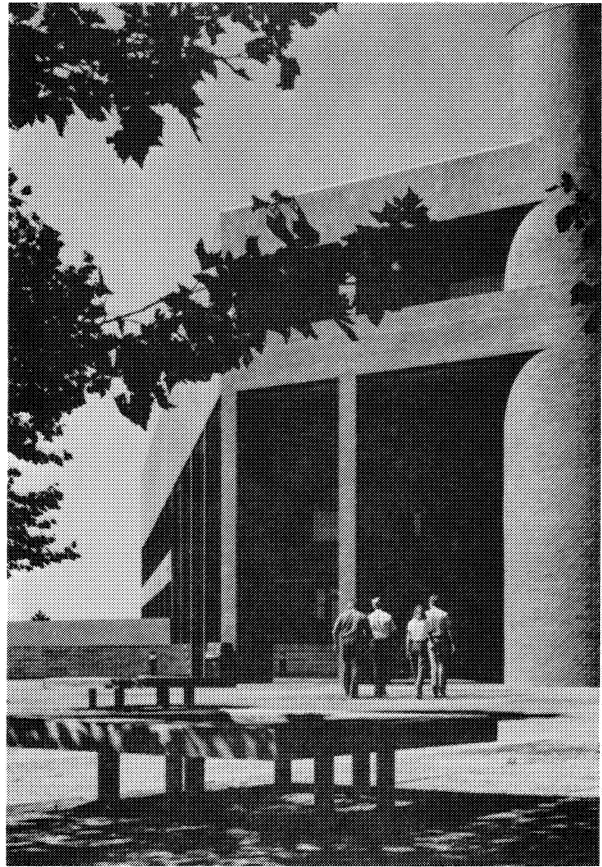
COM Commons: Bookstore, food service; recreational facilities; lounges and meetings rooms; faculty offices; hospitality management program, foundation office, institutional research, math resource labs, general classrooms; child play center.

ATB Arts and Technology: Arts programs, including drawing, painting, sculpture, ceramics, silversmithing and photography; gallery display area; technology programs, including energy, construction and maintenance, and automotive technologies; general classrooms; faculty offices; engineering and technology division office.

LRB Little Red Barn: Historical landmark and space for equine studies.

CATALOG 1982-83

Johnson County
Community College
12345 College at Quivira
Overland Park, KS 66210



NON-DISCRIMINATION NOTICE

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, Director, Institutional Planning and Development, Johnson County Community College, 12345 College at Quivira, Overland Park, Kansas 66210, (913) 888-8500, or Director, Office of Civil Rights, HEW, Washington, DC 20201.

This catalog becomes effective July 1, 1982.

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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Charles J. Carlsen, president

Welcome!

In just 14 years, Johnson County Community College has grown from a collection of temporary buildings to the largest community college in the state. This growth is a tribute to the mission of the College – providing life-long learning opportunities for every member of the community. This mission has been translated into a strong, two-year baccalaureate program that permits individuals to complete the first two years of most four-year college degree programs; into more than 35 career/vocational programs that prepare people for immediate employment or that help them update job skills or retrain for other jobs; and into more than 400 non-credit continuing and community education programs designed to help adults meet their personal educational needs.

As president of Johnson County Community College, let me assure you that while growth and accomplishment are important to us and to you, so is quality. We have taken great care to put together a highly qualified professional faculty and staff who are truly concerned with you and your goals.

Sincerely,

A handwritten signature in cursive script that reads "Charles J. Carlsen".

*Charles J. Carlsen
President*

Johnson County Community College

About the College

History

A little over 15 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.

The present campus was completed in 1972—six buildings housing 384,550 square feet of space on more than 200 acres of prairie grassland. A new building, the Arts and Technology Building, was added in 1981.

The real story of JCCC, however, is lodged in its programs and classes. JCCC offers more than 35 career programs and more than 400 separate courses in general studies, 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 7,000 students each year and more than 15,000 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.

Mission

Johnson County Community College primarily serves the residents of Johnson County, and:

Provides lifelong learning services;

Stays abreast of educational needs of the community;

Provides freshman and sophomore level courses;

Encourages the integration of liberal education and vocational skills;

Provides unique services for the handicapped, especially the hearing impaired;

Provides educational enrichment programs;

Arranges cultural and international events for the benefit of the community;

Counsels students making educational decisions;

Counsels individuals making vocational and life decisions;

Helps individuals find job placements;

Provides facilities for recreation, cultural and educational activities;

Maintains an open-door policy for college admission (may have specific requirements for individual programs);

Provides technical, para-professional and professional programs needed in the community;

Provides support services to local business, government, industry and community organizations through utilization of the college facilities and talents of staff and students;

Holds forums, conferences, institutes, short courses.

League for Innovation

Johnson County Community College is a member of the League for Innovation in the Community College. League membership includes 17 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.

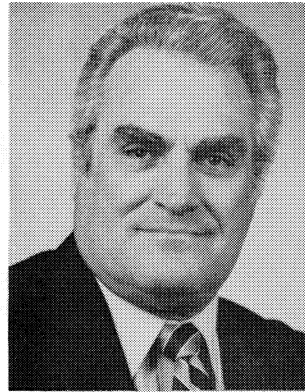
KCRCHE

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.

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; National League for Nursing; Paralegal Program – American Bar Association; Respiratory Therapy – American Medical Association and American Association of Respiratory Therapists; Basic Police Academy – University of Kansas.



Floyd Huggins



Jean Hunter



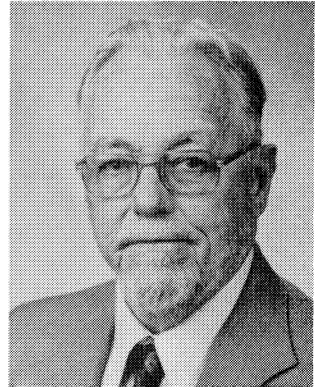
George Langworthy



Susan Lindsay



Carol Sader



Hugh Speer

Board of Trustees



Academic Calendar

SUMMER SESSION 1982

REGULAR AND MINI SESSIONS

- July 1 First four-week mini session ends.
- 5 Independence Day holiday. Classes not in session. College offices closed.
- 29 Eight-week summer session and second mini session end.

FALL SEMESTER 1982

- Aug. 19 Fall semester begins. First day of credit classes.
- Sept. 6 Labor Day. Classes not in session. College offices closed.
- Nov. 25-26 Thanksgiving holiday. Credit classes not in session. College offices closed.
- Dec. 20 Last day of fall semester classes.
- Dec. 23-Jan. 1 Christmas and New Year's holidays.

SPRING SEMESTER 1983

- Jan. 3 Spring mini session classes begin.
- 14 Last day of spring mini session classes.
- 17 Spring semester begins. First day of credit classes.
- Feb. 14 President's Day. Classes not in session. College offices closed.
- March 14-19 Spring recess. Credit classes not in session. College offices open.
- May 20 Commencement.
- 23 Last day of spring semester classes.
- 30 Memorial Day. Classes not in session. College offices closed.

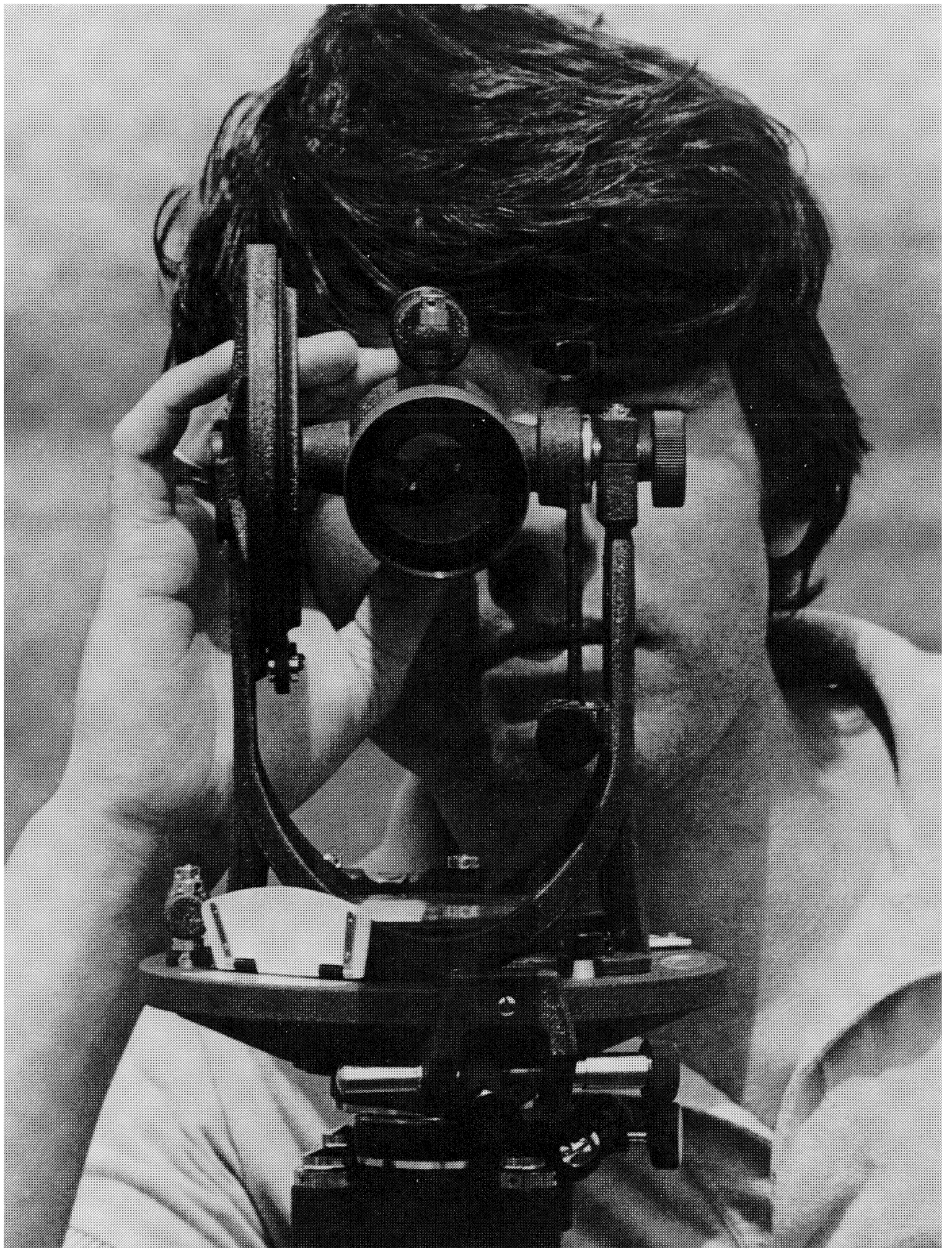
SUMMER SESSION 1983

REGULAR AND MINI SESSIONS

- June 4 Summer mini session ends.
- 6 Summer session and first four-week mini session classes begin.
- 30 First four-week mini session ends.
- July 4 Independence Day holiday. Classes not in session. College offices closed.
- 5 Second four-week mini session classes begin.
- 29 Eight-week summer session and second four-week mini session end.

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Admissions

Admission Procedures
Registration
Tuition and Fees
Refunds
Other Information
Special Students at JCCC
Financial Aid



ADMISSION PROCEDURES

Can anyone go to Johnson County Community College?

Admission is open to all persons 18 years of age or older or anyone who has completed a high school education or equivalent and who may benefit from college-level instruction. The only exception is high school students who must have written approval from their high school principals. Non-residents of Johnson County may be accepted on a space-available basis.

Admission to JCCC does not guarantee enrollment in any specific program. JCCC may deny admission or re-admission to anyone considered detrimental to the best interest of the college community.

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 five 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 transcript 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, 1983. If you plan to submit your scores, take the ACT test as early as possible and request that your scores be sent to JCCC. ACT scores also are required for all students enrolling in any English courses.

6. **If you are enrolling in any mathematics course,** you will be required to take a mathematics assessment test.

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

REGISTRATION

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 an educational 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 questions have been answered and your plan developed 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	\$15.00 per semester credit hour
Commons fee	\$1.50 per semester credit hour
<u>Student Activity fee . . .</u>	<u>\$1.00 per semester credit hour</u>
TOTAL PER CREDIT HOUR	\$17.50

Out-of-state and foreign students:

Tuition	\$50.00 per semester credit hour
Commons fee	\$1.50 per semester credit hour
<u>Student Activity fee . . .</u>	<u>\$1.00 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.

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.

REFUNDS

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. If you have completed registration and you withdraw from a class or classes in which you are enrolled, you will receive the following refund:

- 100% of tuition and fees paid if your withdrawal is processed by the Admissions/Records Office **before** –but not on—the first day of the semester, term or session

- 80% of tuition and fees paid if your withdrawal is processed by the Admissions/Records Office:

- within two weeks after the beginning of classes for fall and spring semesters
- four calendar days after the beginning of classes for an eight-week term
- two calendar days after the beginning of classes for a four-week session
- one calendar day after the beginning of classes for a two-week mini session, a short course or a seminar

- No refund will be authorized for withdrawals or changes in registration made after the calendar days as specified. The only exceptions are if the class is cancelled by the College or a revision of the class schedule is necessary in which case you will receive a 100% refund of tuition and fees. Your refund is calculated based upon the day you officially drop the class in the Admissions Office and not when you stop attending the class.

OTHER INFORMATION

How much will my textbooks cost?

Your textbooks probably will cost from \$100 to \$150 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.

Does JCCC offer summer sessions and mini sessions?

JCCC offers both summer sessions and mini sessions each year. For more information contact the Admissions Office.

JCCC also offers Weekend College designed for students who are unable to attend classes during the week. The courses, held on Friday evenings and Saturdays, are part of the fully accredited two-year curriculum at JCCC. It is possible to earn an associate of arts degree in four years through this program. Contact the dean of Student Services for more information.

SPECIAL STUDENTS AT JCCC

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.

Resident Aliens

JCCC is required by federal law to enroll non-immigrant alien students. You must establish your status as a resident alien when you apply by providing your Resident Alien card number. You also are required to meet with a counselor for academic evaluation and course placement.

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 should 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.

Disabled Students

Disabled students at JCCC have access to a variety of support services including interpreting, notetaking, tutoring and other services to allow the disabled student full participation in classes. The buildings are equipped with ramps, elevators and restrooms designed to accommodate wheelchairs. Parking areas convenient to the buildings are reserved for disabled students. If you would like more information about services, activities and facilities available to disabled students, contact the director of 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 Financial Aid Office.

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

Credit Hours Enrolled* You Will Be Eligible For:
12 or more semester hours full time benefits
9-11 semester hours 3/4 time benefits
6-8 semester hours 1/2 time benefits
1-5 semester hours tuition and fees

*Fewer hours needed for benefits during summer semester. Check with the Financial Aid Office.

Before you register, your courses and program must be approved by the JCCC Financial Aid Office. Remember, you must attend **all** your classes regularly and sign in **monthly** at the Financial Aid 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 to your educational costs at JCCC.

The Financial Aid Office will make every effort to meet the financial needs of each qualified student. JCCC's ability to meet each student's financial need is based on the availability of local, state and national funds.

JCCC assesses your financial need through a fair, objective form called the Family Financial Statement provided by the American College Testing Program. If you are applying for financial aid you should submit a completed Family Financial Statement and the required fee to the office designated on the form. Family Financial Statement 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?

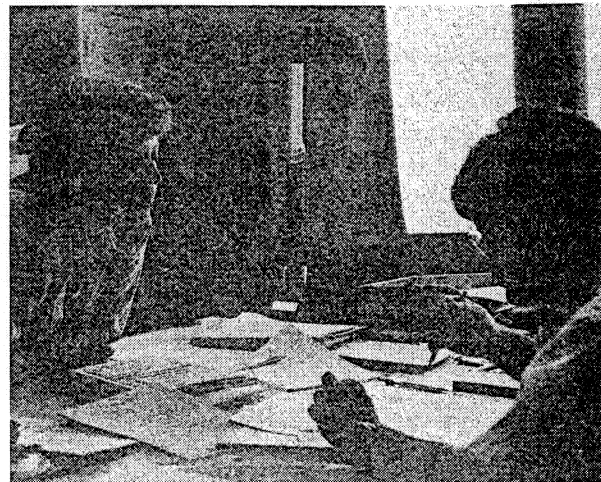
First, complete an application for admission to JCCC and fulfill all admission requirements. Then contact the Financial Aid Office for the appropriate application form. **You should submit financial aid applications by June 1 for the fall semester and by Dec. 1 for the spring semester. Your aid application is complete only when you have provided all the required forms and validation documents.**

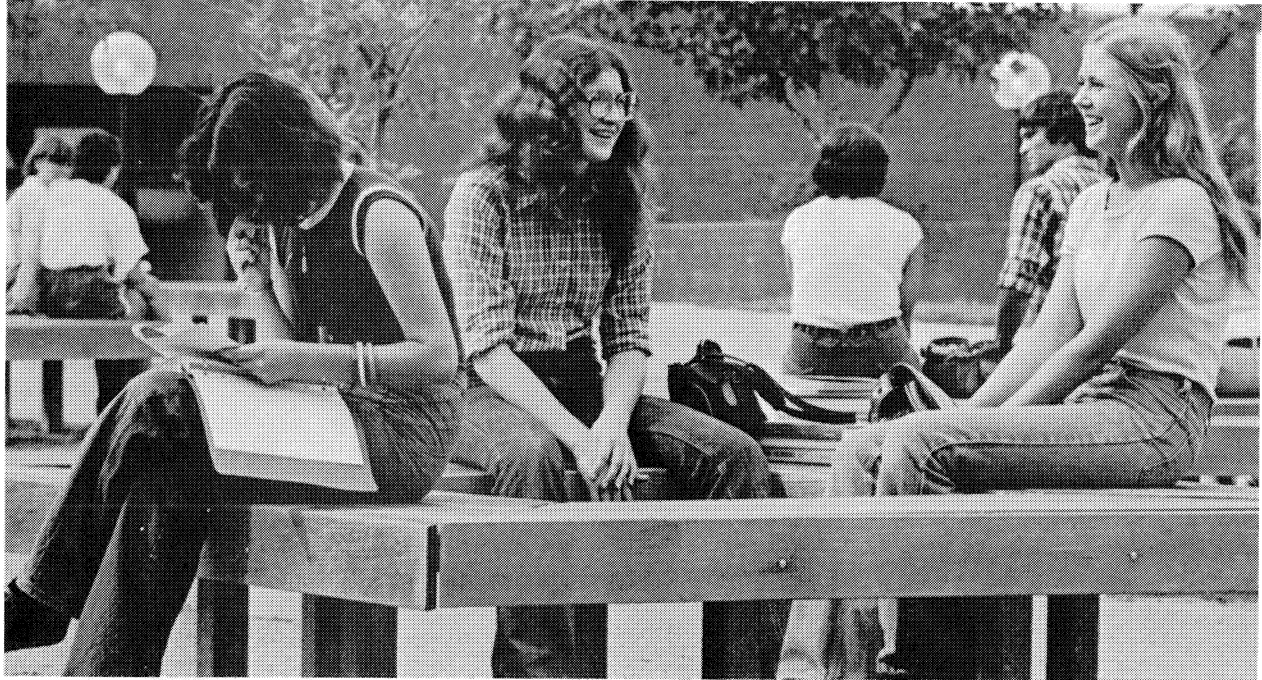
How will I know if I am awarded financial aid?

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

What types of aid are available?

- **Pell Grant (formerly Basic Grant or BEOG):** The Pell Grant is funded by the federal government. If you are eligible, you can receive up to \$900 for the academic year at JCCC. The grant can apply toward any educationally-related expenses.
- **Supplemental Educational Opportunity Grants (SEOG):** This government grant ranges from \$200-\$2000 and can apply toward any education-related expenses. You are eligible if you can show need.
- **National Direct Student Loan (NDSL):** This federal government loan is processed through JCCC. The loans range from \$200-\$1500 a year. You may borrow a maximum of \$3000 while enrolled at JCCC. The loan is interest-free while you are enrolled at least half-time. Six months after you leave JCCC, five percent interest begins to accrue and you must begin repaying the loan at \$30 a month.





• **Board of Trustees Grant (BOT):** The Board of Trustees grants are financial awards made to JCCC students who are or who will be enrolled in a minimum of six credit hours. Only Johnson County residents are eligible. The grants, which are designed to help defray school costs, are authorized by the JCCC Board of Trustees. Funds are limited and competition is keen.

• **Foundation Grants:** You must fulfill unique qualifications before you are awarded this grant which is administered by the JCCC Foundation. For a list of these grants and their special qualifications, contact the Financial Aid Office.

• **College Work Study Program:** In this federally-funded program, students work part-time on campus. The pay is \$3.50 per hour and paychecks are issued every other Friday.

• **Guaranteed Student Loan (GSL):** This loan is from a bank, savings and loan, or credit union. The loan is interest-free as long as you are enrolled at least half-time. Six months after you leave school you must begin repaying the loan. Interest is nine percent and the minimum monthly payment is \$50. The maximum loan is \$2500. A five percent origination fee will be deducted from the proceeds of the loan at the time of disbursement.

• **PLUS Loan:** This loan is administered by a bank, savings and loan or a credit union. Eligible independent students or parents of dependent students may borrow up to \$2500. Interest is 14 percent. You must begin repaying the loan at \$50 per month 60 days after you receive the check. If you are enrolled full-time, you can defer the principal. However, interest accrues and is payable.

When will I receive the funds?

No funds will be disbursed to students until the first day of classes.

There are no tuition waivers, book waivers or partial payment plans. However, if you cannot pay your fee when you register and you are an APPROVED FINANCIAL AID RECIPIENT, you can get a tuition deferment form from the Financial Aid Office. By presenting this form to the cashier in the Business Office, you can keep your registration valid until you receive your aid check.

If you have not signed and returned your offer of financial assistance or you registered during on-campus registration, you must pay for your tuition and fees according to the payment policy.

What effect will my grades have on my financial aid?

The Pell Grant, NDSL, SEOG, CWSP, PLUS Loan and GSL 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 Study
Travel for Credit
International Education
Advanced Standing Credit
KRCHE
Grading System
Honors
Academic Progress
Graduation Information
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 miss. 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.

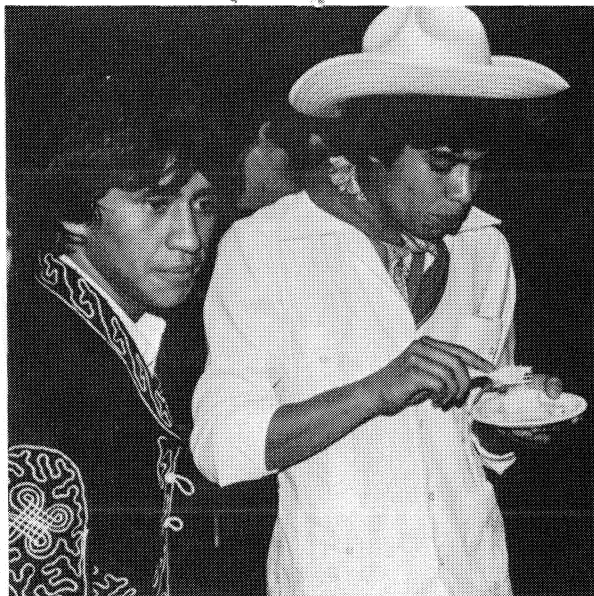


Independent Study

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.

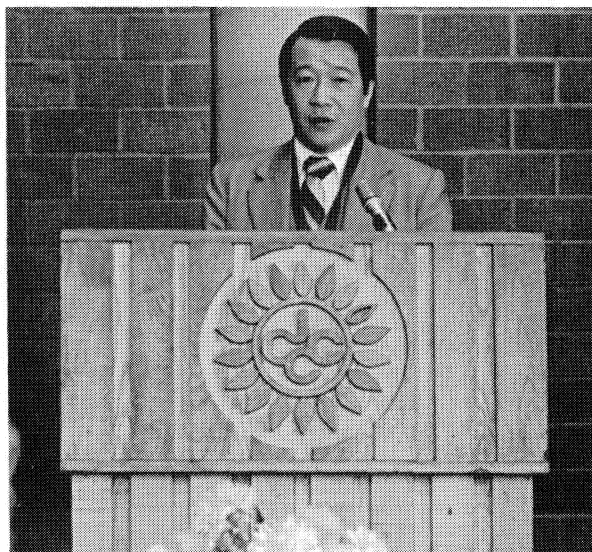


International Education

International education at JCCC spans the entire range of College activities – from credit and non-credit courses and independent study to travel-for-credit. It has even touched the athletic events at the College – JCCC has hosted Asian basketball and baseball teams.

The curriculum reflects the international education effort with classroom instruction offered in Spanish, French and German and through self-study courses in Chinese and Japanese. In addition, international approaches are evident in courses in such areas as sociology, social problems, anthropology, history, political science, international relations and in some business and economics courses.

As part of the international relations program, JCCC maintains a sister college relationship with two colleges in Taiwan: the Taichung Institute of Commerce and the Taiwan Academy of Arts.



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. You may receive up to 30 hours of credit for non-classroom experiences. There are several ways to do it. For complete details, including scores required, contact the Testing/Assessment Center.

You may gain credit through CLEP if you have knowledge of general information equivalent to that of a college freshman. The subject examination tests you in a specific area. Anyone may take the CLEP, regardless of age or education. If you're interested in taking the CLEP exam, apply at the Testing/Assessment Center.

• **College Entrance Examination Board (CEEB):** 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 receive college credit through successful performance on a comprehensive examination. The exam may be a locally-developed departmental exam or a nationally-standardized exam. Credit by examination is not available for all courses offered at JCCC. You will be charged a fee to take the examination. Contact the Testing/Assessment Center for more information.

• **Military Service:** You will be granted six semester hours of health and physical development credit at JCCC by presenting when you apply a copy of Form DD-214 if you are discharged or Form D-295 if you are active. You may be granted credit for military educational experiences based upon the recommendations of the Commission on Accreditation of Service Experiences which is approved by the American Council on Education. Your military service educational experience must be similar to course work offered at JCCC. Military educational experience applications are available in the Admissions/Records Office.

• **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. Credit will not be awarded for courses you repeat at JCCC. JCCC is unable to evaluate transfer credit from foreign colleges and universities attended by resident aliens. The director of admissions, records and financial aid will determine the final evaluation and acceptance of transfer credit.

Transfer credit is accepted from institutions accredited by or holding candidacy status in the North Central Association of Colleges and Schools, Middle States Association of Colleges and Schools, Northwest Association of Schools and Colleges, Southern Association of Colleges and Schools—Commission on Colleges, and the Western Association of Schools and Colleges.



KCRCHE

Through its affiliation with the Kansas City Regional Council for Higher Education, Johnson County Community College is able to offer its students access to the courses and programs of 16 colleges and universities in the Kansas City area. Johnson County Community College students can take one course per semester at any of these colleges at the JCCC tuition rate.

This program provides a rich resource especially if you are interested in developing a creative academic program. Lists of courses are available in the Admissions Office. For more information contact the director of admissions, records and financial aid. Additional information is available through the Office of the Regional Council, 912 E. 63rd Street, Kansas City, Missouri 64110, phone 361-4143.

Grading System

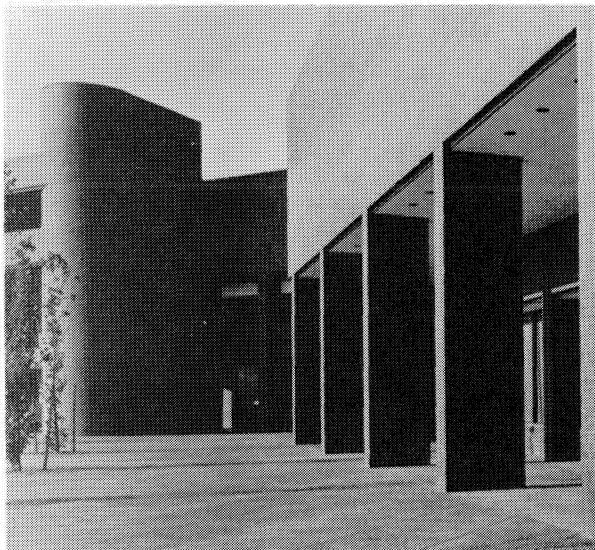
JCCC uses both the regular grading system and the credit/non-credit grading system.

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. You will be considered withdrawn from a class only after you have completed a drop form in the Admissions/Records Office – **not** when you stop attending class.)



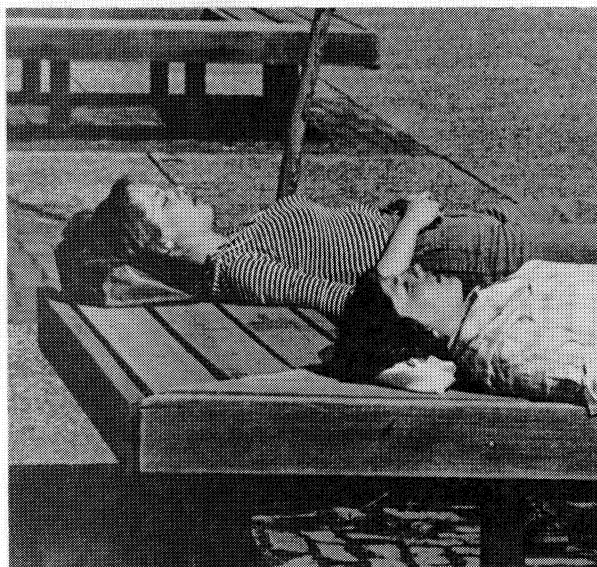
I – incomplete – You will receive this grade only if special circumstances prevent you from completing the course. Your instructor can explain how to complete the course. Usually you do not have to re-enroll in the class, but you will have to complete all course work by the end of the following semester. (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

You will receive Dean's honors 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 receive President's honors if you maintain an average of 3.5 or above. Honors notification will be indicated only 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 and be currently enrolled during the term in which you wish to graduate. Credits earned through non-classroom experiences 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

Your degree status will be included on your permanent record as soon as you meet the graduation requirements and you will receive a diploma.

Graduation with 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:

- Automotive Technology
- Construction and Maintenance
- Emergency Medical Technology
- Emergency Services Dispatcher Certification
- Energy Technology
- Fire Administration
- Fire Prevention
- Fire Protection
- Fire Administration
- Home Economics
- Hospitality Management
- Interior Merchandising
- Medical Transcription
- Paralegal
- Recreational Leadership
- Riding Instructor
- Secretarial





Programs of Study

Transfer
Career



UNIVERSITY TRANSFER PROGRAM

JCCC offers the first two years of most college baccalaureate degree programs. You can attend JCCC for your first two years, earn an associate of arts degree, and then transfer to a four-year institution without loss of time or credit. You can do this by following a transfer program.

If you plan to transfer after two years but you have not decided on a major, you should complete the general education courses required by most colleges.

If you have decided on a major, look closely at the four-year school's graduation requirements for that major. Some majors, such as architecture, fine arts and engineering, may require a special sequence of courses.

Carefully plan your first semester of courses with a JCCC counselor to make sure your courses transfer.

Samples of Majors

- Business**
- Accounting
- Business Administration
- Management
- Computer Science
- Information Systems

- Education**
- Early Childhood
- Elementary/Secondary
- Physical Education
- Recreation

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

- Home Economics**
- Interior Design
- Fashion Marketing
- Dietetics

- Liberal Arts**
- Art
- English
- Foreign Language
- Journalism
- Music
- Philosophy
- Speech
- Theater

- Medicine and Health**
- Pre-Veterinary
- Pre-Med
- Pre-Pharmacy
- Pre-Dental
- Nursing
- Physical Therapy
- Respiratory Therapy

- Social Science**
- Economics
- History
- Political Science
- Psychology
- Social Work
- Sociology

- Science and Math**
- Biology
- Chemistry
- Geology
- Mathematics
- Physics

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	Credits
Composition I	3
Social Science elective	3
Math/Natural Science elective	3-5
Humanities elective	3
General elective	3
Total Hours	15-17

Second Semester	Credits
Composition II	3
Speech elective	3
Math/Natural Science elective	3-5
Social Science/Humanities elective	3
General elective	3
Total Hours	15-17



GENERAL ELECTIVES

You may select an elective course from any area. However, check with a counselor first to make sure the course will transfer to a four year school. You may use electives to broaden your knowledge of your field of study or as an opportunity to explore a new area of interest.

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

Transfer Information

The following information on four-year colleges is available through the JCCC counseling center:

- transfer programs for different majors at area colleges – check these sheets periodically for updates
- university or college catalogs
- general information including tuition, financial aid, housing
- course equivalencies between the four-year colleges and JCCC

If you are planning to transfer, select courses from general and distribution requirement areas as illustrated above. These courses, also known as the general education requirements of baccalaureate (four-year) degrees, will come from five divisions listed below. The number of courses required in each division will depend on the college or university you are transferring to and the major field you are entering. Look closely at your major field requirements when choosing your classes.

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

COMMUNICATIONS (3-4 courses)

- CEN 7612 Composition I 3
- CEN 5732 Composition II 3

The next 3-6 hours could be Speech and/or Literature depending on your major.

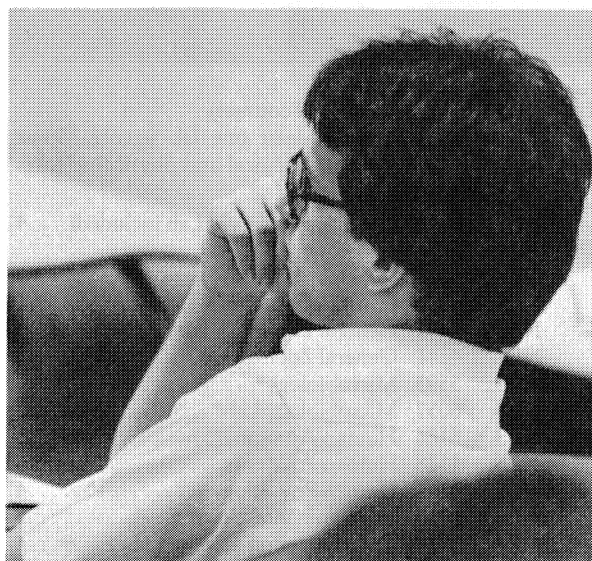
- CSP 4130 Public Speaking 3
- CSP 4950 Interpersonal Communication 3

Composition II is a prerequisite for the following literature and composition courses:

- CEN 5581 Poetry and Drama 3
- CEN 3898 Introduction to Fiction 3
- CEN 5582 American Writers 3
- CEN 5585 Literature of Science Fiction 3
- CEN 5583 World Masterpieces 3
- CEN 5584 Masterpieces of the Cinema 3
- CEN 5586 Children's Literature 3
- CEN 5587 Adolescent Literature 3
- CEN 5577 Advanced Composition 3
- CEN 5579 Creative Writing 3

Some degrees (B.A.) may require foreign language. JCCC offers four semesters/16 hours each of Spanish, French and German.

- CFL 3285 Elementary Spanish I 5
- CFL 4570 Elementary French I 5
- CFL 3196 Elementary German I 5



MATHEMATICS (1 course)

At least one math course usually is required. The required math assessment test available in the Testing Center will determine proper course selection.

- MTH 7246 Introduction to Algebra¹ 3
- MTH 3001 Intermediate Algebra¹ 3
- MTH 6079 Algebra* 3
- MTH 3427 College Algebra* 3
- MTH 2594 Trigonometry* 3
- MTH 6463 Calculus I* 3
- MTH 3268 Analytic Geometry & Calculus I* ... 5

¹May not transfer to some four-year colleges.

*Check catalog for prerequisite.

HUMANITIES (2-3 courses)

You may use literature courses as humanities credits.

- HUM 6120 Introduction to Humanities 3
- HUM 5431 Comparative Cultures 3
- CDR 1809 Introduction to Theater 3
- HAR 1713 Introduction to Art History 3
- HAR 3878 Modern Art History 3
- HMU 8927 Intro. to Music Listening 3
- HMU 2777 Intro. to Jazz 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



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
or
- NLS 5020 Principles of Biology and 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 6720 Environmental Science Lab 1
- NLS 4248 General Genetics (no lab) 3

Physical Science

- NPS 1031 Physical Science (AVT lab included) . 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 3308 General Physics I* 4
- NPS 5212 Engineering Physics I* 4

*Check catalog for prerequisite.

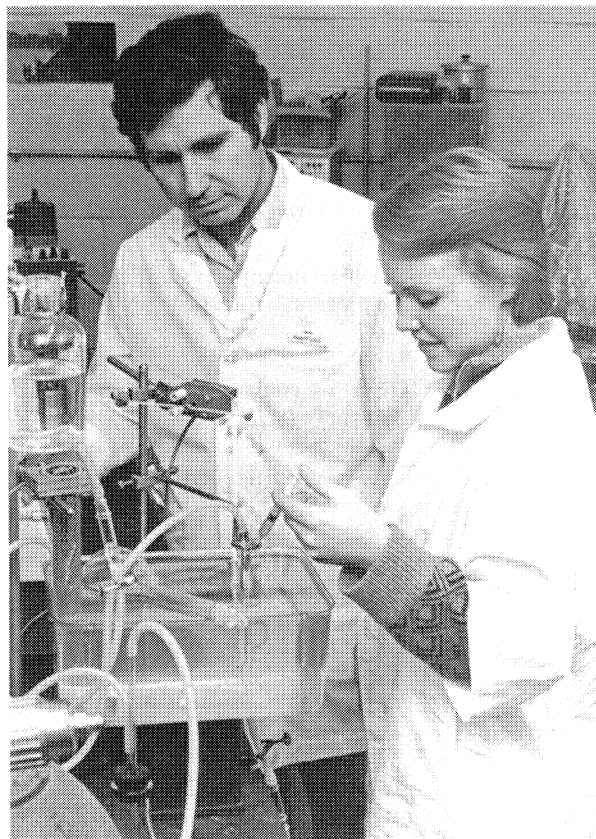


SOCIAL SCIENCES (2-3 courses)

History courses will transfer as humanities credits to some schools.

- SS 3721 Physical Anthropology 3
- SS 1029 Cultural Anthropology 3
- SS 3404 Sociology 3
- SS 3428 Social Problems 3
- SS 5716 Marriage and the Family 3
- SS 1068 Introduction to Psychology 3
- SS 3546 Child Development* 3
- SS 4639 Personality and Adjustment* 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 since 1877 3
- SS 9922 European History from 1750 3
- BUS 2004 Intro. to Economic Issues 3
- BUS 2253 Economics I 3
- BUS 3093 Economics II 3

*Check catalog for prerequisite.



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 37 career programs can be completed in two years or less. There are a few you can complete in one year or less.

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 requirements, 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.

- Accounting
- Administration of Justice/Law Enforcement
- Agribusiness
- Automotive Technology
- Biomedical Equipment Technology
- Business Management
- Chef Apprenticeship
- Commercial Art
- Construction and Maintenance Technology
- Data Processing
- Dental Assisting
- Dental Hygiene
- Drafting Technology
- Electronics Engineering Technology

- Energy Technology
- Emergency Medical Technology
- Equine Studies
- Fashion Merchandising
- Fire Protection & Public Safety
- Home Economics
- Hospitality Management
- Interior Merchandising
- Interpreter Training Program
- Marketing and Management
- Medical Laboratory Technology
- Medical Record Technology
- Medical Transcription
- Mental Health Technology
- Nursing (RN)
- Paralegal
- Physical Therapy Assistant
- Radiologic Technology
- Recreational Leadership
- Respiratory Therapy
- Secretarial Careers
- Small Animal Health
- Urban Agribusiness

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.

- NOTE:
- (F) Offered fall semester only.
 - (S) Offered spring semester only.
 - (R) Offered summer semester only.





ACCOUNTING CAREERS

The accounting curriculum focuses on the skills you will need 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 should visit with a counselor about the transferability of courses. Transfer students 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
CEN	7612 Composition I	3
BAC	5096 Accounting II	3
BDP	7135 Bus. Data Processing or	
BDP	6699 Program Fund	3-4
BAC	3870 FS Human Relations	2-3
BUS	3093 Economics II	3
BAC	3872 FS Business Math	2-3
BAC	3871 FS Accounting Seminar	2-3
BUS	1007 Business Communications	3
BAC	6299 Intermediate Accounting I	3
	or	
BAC	2436 Cost Accounting	3
	or	
BAC	4218 Account. for Non-profit Organ	3
Required General Courses		
	Social Science	3
	Math	3
	Humanities	3
Recommended Electives		18
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
BUS	6038 Savings and Investment	3
BUS	2259 Personal Finance	3
BUS	2341 Personnel Management	3
BUS	7007 Marketing	3
BAC	2360 Federal Income Tax I	3
TOTAL HOURS		60



ADMINISTRATION OF JUSTICE/ LAW ENFORCEMENT

The Administration of Justice Program can 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 a counselor.

Associate of Arts Degree

Credits

General Education Requirements	18
Required Program Core Courses	24
Required Program Electives	12
Electives	6
TOTAL HOURS	60

General Education Requirements

CEN	7612	Composition I	3
CEN	5732	Composition 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

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

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	3166	Juvenile Delinquency	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
SLE	4163	Retail 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.

SLE	7581	Principles of Corrections	3
SLE	7580	Corrections in the Community	3
SLE	7582	Correctional Psychology	3
SLE	7583	Theory of Child Care Work in Residential Treatment	3
SLE	7584	Methods of Interacting with Emotionally Sensitive Children	3
SLE	7585	Internship in Corrections I	3
SLE	7586	Internship in Corrections II	3
SLE	7587	Correctional Administration	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
CEN	7612	Composition I	3
CEN	5732	Composition II	3
SS	1068	Introduction to Psychology	3
SLE	5063	Field Study	3
TOTAL HOURS			30

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

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



AGRIBUSINESS

JCCC's two year program emphasizes a familiarity with agribusiness practices, sound business skills, basic knowledge about animal and plant science, and other skills you will need for most entry-level positions in the field. The program includes courses in agriculture, business, science and general education. The program also offers an internship program through which it's possible to gain hands-on experience working in the field.

Associate of Arts Degree

First Semester

NAB	2853	Intro to Agribusiness	2
MTH	3427	College Algebra	3
NLS	5402	General Botany	5
or			
NLS	4241	General Zoology	5
CEN	7612	Composition I	3
Humanities or			
Social Science elective			3
TOTAL HOURS			16

Second Semester

NAB	2852	Plant Science	4
or			
NAB	2848	Prin. of Animal Science	4
NPS	6634	Principles of Chemistry	5
BUS	7007	Marketing	3
CEN	5732	Composition II	3
TOTAL HOURS			15

Third Semester

NAB	2849	Agricultural Chemistry	5
BAC	2171	Small Business Accounting	3
BUS	7822	Principles of Management	3
CSP	4950	Interpersonal Communication	3
Elective			3
TOTAL HOURS			17

Fourth Semester

BUS	1121	Business Law I	3
NAB	2854	Agricultural Economics	5
Science elective			5
NAB	2856	Seminar in Agribusiness:	
Internship			5
TOTAL HOURS			16



AUTOMOTIVE TECHNOLOGY

In this program, you will have the opportunity to gain practical laboratory experience and the necessary theoretical background in diagnosis and tune-up, chassis, electrical and hydraulic systems, automatic transmissions, engines and emissions. The program focuses on the background you will need to advance to supervisory positions, deal directly with customers, estimate material and labor costs, and direct the work of others. It also is designed to prepare you to transfer to a four-year college in such areas as automotive engineering, industrial arts and vocational/technical education. A certificate program also is available.

Associate of Arts Degree

First Semester

TAU	5606	Auto Transmissions & Drivelines	4
EGR	7094	Technical Physics I	3
TMF	8031	Introduction to Welding	3
MTH	5722	Technical Math I	3
CEN	7612	Composition I	3
TOTAL HOURS			16



Second Semester

TAU	5604	Auto Basic Electricity	3
TAU	5607	Auto Engines I	3
TAU	5605	Auto Suspension, Steering and Brakes (S)	3
BUS	7822	Principles of Management	3
CEN	5578	Technical Writing	3
TOTAL HOURS			15

Third Semester

TAU	5608	Auto Electrical Systems	3
TAU	5609	Auto Fuels and Carburetion	3
TAU	5611	Auto Heating, A/C and Emissions	4
Electives			6
TOTAL HOURS			16

Fourth Semester

TAU	5612	Auto Diagnosis and Evaluation	4
TAU	5614	Auto Dealership Operation	3
EDT	7674	Graphic Communications	3
Elective			3
Technology Elective			3
TOTAL HOURS			16

Suggested Technology Electives

TSE	7240	Basic Small Engine Service	3
EET	5290	Introductory Electronics	3
		Auto Trim and Chassis Wiring*	3
		Auto Special Project*	3-4
		Summer Work-Study*	3

Automotive Technology Certificate Program

TAU	5604	Auto Basic Electricity	3
TAU	5605	Auto Suspension, Steering and Brakes (S)	3
CEN	7612	Composition I	3
TAU	5606	Auto Transmissions & Drivelines	4
TAU	5607	Auto Engines I (S)	3
TMF	8018	Introduction to Welding	3
TAU	5608	Auto Electrical Systems	3
TAU	5609	Auto Fuels and Carburetion	3
TAU	5611	Auto Heating, A/C and Emissions	4
TAU	5612	Auto Diagnosis and Evaluation	4
		TOTAL HOURS	33

*Courses being developed.



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	3409	Circuit Analysis I	3
EET	5290	Introductory Electronics	3
CEN	7612	Composition I	3
		TOTAL HOURS	14

Second Semester

MTH	9001	Math for Electronics II	5
EET	6029	Circuit Analysis II	3
EET	5886	Electronic Principles I	3
EET	9086	Digital Electronics I	4
		TOTAL HOURS	15

Third Semester

EET	9826	Electronic Principles II	3
EMT	7975	Biomedical Equipment Tech. II	4
EET	6036	Digital Electronics II	4
EGR	7094	Technical Physics I	3
NLS	6186	Human Anatomy & Physiology*	5
		TOTAL HOURS	19

Fourth Semester

EET	4464	Electronic Principles III	3
EMT	9824	Biomedical Equipment Tech. II	3
EET	4503	Microprocessors	3
EMT	4505	Biomedical Internship	3
EGR	9017	Technical Physics II	3
		TOTAL HOURS	15

*May be taken first semester, second semester or summer prior to third semester.



BUSINESS MANAGEMENT

The Business Management Program emphasizes the skills needed to enter mid-management areas of any business. The program's objectives are to increase your awareness of your role as an employee and of the responsibilities of management; your skill in decision-making; and your awareness and appreciation of the basic functions of management, including planning, organizing, directing and controlling. This program is flexible enough to meet the needs of students planning to assume positions of administration 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

CEN	7612	Composition I	3
BUS	4282	Introduction to Business	3
BDP	7135	Business Data Processing	3
BUS	2259	Personal Finance <i>or</i>	
BUS	6038	Savings and Investment <i>or</i>	
BUS	1390	General Insurance	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	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



CHEF APPRENTICESHIP

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 4592	Seminar in Accounting	2-3
BHM 4489	Supervisory Management	3
BHM 4941	Practicum II	2
TOTAL HOURS		7-8

First Summer

CEN 7612	Composition I	3
	Elective	3-5
TOTAL HOURS		6-8

Third Semester

BHM 4593	Seminar in Purchasing	2-3
BHM 2166	Food Specialties:Garde-Manger	3
BHM 5942	Practicum III	2
TOTAL HOURS		7-8



Fourth Semester

BHM 7803	Advanced Food Preparation	3
BHM 4594	Seminar in Beverage Control	2-3
BHM 7943	Practicum IV	2
TOTAL HOURS		7-8

Second Summer

CSP 4950	Interpersonal Communication	3
	Elective	3-4
TOTAL HOURS		6-8

Fifth Semester

BHM 4591	Seminar:Menu Planning and Sales Promotion	2-3
BHM 6944	Practicum V	2
	Elective	3-4
TOTAL HOURS		7-9

Sixth Semester

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



COMMERCIAL ART

The Commercial Art Program concentrates on the visual and technical skills, problem-solving ability and creative versatility you will need to be an effective commercial artist. High professional standards, established with 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 3880	Photography III*	3
HCA 4679	Visual Technology*(S)	4
HAR 4028	Silkscreen*(S)	3
HCA 1861	Layout*	3
TOTAL HOURS		16

Third Semester

HAR 6021	Design 3D	.....4
HCA 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	Comm. 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 6666	Photography II*	.....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.

Part-time Students

If you wish to enroll on a part-time basis (less than 12 hours), follow the sequence listed below or consult the program coordinator.

1. Design 2D (HAR 2880) and/or an art elective
2. Basic Representation I (HCA 6862) and/or Lettering (HCA 7205)
3. Design Color (HAR 7209) and/or Photography I (HPH 5555)
4. Basic Representation II (HCA 5863) and/or Layout (HCA 1861)
5. Visual Technology I (HCA 4679) and/or Silkscreen (HAR 4028)
6. Design 3D (HAR 6021) and/or Visual Technology II (HCA 6688)
7. Visual Communications I (HCA 1689) and/or Photography III (HPH 3880)
8. Visual Communications II (HCA 9689) and/or electives
9. Preparation of Portfolio (HCA 7690) and Commercial Art Field Study (HCA 5691)



CONSTRUCTION AND MAINTENANCE TECHNOLOGY

This program focuses on various segments of light commercial and residential construction including concrete, masonry, plumbing, heating, air conditioning, electrical, rough framing and finish carpentry.

After two semesters in the program you may elect to continue with advanced work in construction or to take the maintenance option. The construction option offers laboratory experience in totally framing and finishing a component building project with advanced work in related occupations. The maintenance option focuses on many skills including cabinet making, plumbing, electrical repair, painting and decorating. A certificate program in construction or maintenance also is available.

Associate of Arts Degree

First Semester

TMF 8025	Intro. to Metal Fabrication	.....3
TCM 9134	Concrete and Masonry	.....3
TCM 9135	Environmental Systems	.....3
EDT 4011	Interp. Architectural Drawing	.....2
CEN 7612	Composition I	.....3
	TOTAL HOURS	.....14

Second Semester

EGR 7118	Building Materials and Construction	.....3
TCM 9136	Materials and Properties	.....3
TCM 9123	Site Planning and Foundations	.....4
EDT 1229	Building Construction Estimating	.....3
MTH 5722	Technical Math I3
	TOTAL HOURS16

Summer Session

TCM 9125	Field Study and Conference4
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Construction Option

Third Semester

TCM 9120	Building Construction I3
TCM 9127	Millwork and Finish3
TCM 9126	Concrete Construction	.....3
	Elective	.....3
	Technology Elective	.....3
	TOTAL HOURS	.....15

Fourth Semester

TCM 9131	Building Construction II	.....3
TCM 9137	Construction Management	.....3
	Elective	.....3
	Technology Elective	.....6
	TOTAL HOURS	.....15

Maintenance Option

Third Semester

TCM 9120	Building Construction I	.....3
	Diagnosis of Mechanical and Electrical Problems*	.....4
	Maintenance Procedures and Processes*	.....3
	Elective	.....3
	Technology Elective	.....3
	TOTAL HOURS	.....16

Fourth Semester

	Mechanical Systems*	.....4
	Building Operation Management*	.....3
	Elective	.....3
	Technology Elective	.....6
	TOTAL HOURS	.....16

Suggested Technology Electives

		Construction and Maintenance Special Project*	3-4
TEN	6566	Residential HVAC Systems	3
		Plumbing Design and Installation*	3
		Advanced Masonry*	3
		Landscaping*	3
		Construction Inspection & Safety*	3
TMF	8031	Introduction to Welding	4
TCM	9122	Introduction to Electricity	3
		Diagnosis of Mechanical and Electrical Problems*	4
		Mechanical Systems*	4
		Maintenance Procedures and Processes*	3
		Systems & Building Relationships*	3
		Building Operations Management*	3
		Special Project	2-5

Construction Certificate Program

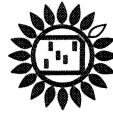
TMF	8025	Intro. to Metal Fabrication	3
TCM	9134	Concrete and Masonry	3
TCM	9135	Environmental Systems	3
EGR	7118	Building Materials and Construction	3
TCM	9127	Millwork and Finish	3
TCM	9136	Material Properties	3
TCM	9123	Site Planning & Foundations	4
TCM	9120	Building Construction I	3
EDT	1229	Building Construction Estimating	3
TCM	9126	Concrete Construction*	3
TCM	9131	Building Construction II*	3
TCM	9137	Construction Management*	3
		TOTAL HOURS	37



Maintenance Certificate Program

TMF	8025	Intro. to Metal Fabrication	3
TCM	9134	Concrete and Masonry	3
TCM	9135	Environmental Systems	3
EGR	7118	Building Materials and Construction	3
TCM	9127	Millwork and Finish	3
TCM	9136	Material and Properties	3
TCM	9123	Site Planning & Foundations	4
TCM	9120	Building Construction I*	3
		Diagnosis of Mech. and Elect. Problems*	4
		Maintenance Procedures and Processes*	3
		Mechanical Systems*	4
		TOTAL HOURS	36

*Courses are being developed.



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. 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. You need 60 hours to graduate.

Required Data Processing Courses

			Credits
MTH	3001	Intermediate Algebra	3
BAC	4092	Accounting I	3
BDP	6699	Programming Fundamentals	4
BDP	5105	EDITOR	1
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	3869	Application Programming: Data Processing Topics (S)	2-3
BDP	3868	Application Programming: Applications (F)	2-3
BDP	6451	Operating Systems (S)	3
		TOTAL HOURS	33-35

Data Processing Electives

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

BDP	6703	FORTRAN	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

Suggested Electives

CEN	7612	Composition I	3
CEN	5732	Composition II	3
CSP	4950	Interpersonal Communication	3
BAC	5096	Accounting II	3
HUM	6392	Logic	3
SS	1068	Intro. to Psychology	3
BUS	2253	Economics	3
MTH		Math/Additional	
BDP	4023	PASCAL	4
BDP	4049	Fundamentals of BASIC	3

(F) Offered in fall semester only.

(S) Offered in 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
CEN	7612 Composition I	3
SS	1068 Intro. to Psychology	3
NLS	6186 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
PD	2711 First Aid	3
NS	5381 Medical Terminology I	2
	American Government <i>or</i>	
	American History elective	3
TOTAL HOURS		40

Required Courses at PVCC		Credits
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 the 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 on Dental Accreditation. The program consists of two full academic years and one summer session. The dental hygiene clinic is located on campus. It is used to develop students' efficiency in clinical techniques, under the supervision of a licensed dentist and registered dental hygienists. In addition, learning experiences are arranged so students can assist in raising 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. Deadline for application for admission for fall is Feb. 15.

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	5593	Microbiology	3
NDH	7255	Periodontics	1
NDH	7256	Dental Health Education	1
SS	1068	Intro. to Psychology	3
TOTAL HOURS			18

Third Semester (Summer)

NLS	1144	Human Physiology	4
CEN	7612	Composition I	3
SS	3404	Sociology	3
TOTAL HOURS			10

Fourth Semester

NDH	7257	Clinical Dental Hygiene III	7
NDH	7258	Pathology and Periodontology	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 Communication	3
TOTAL HOURS			10



DRAFTING TECHNOLOGY

This is a comprehensive program based on standards for drafting technicians established by industries in the Kansas City area. A drafting technician's duties may include detailing production drawings and design in such disciplines as mechanical, electrical, structural, architectural, technical illustration, piping and mapping with applications in photodrafting, estimating and quality control. Projects and laboratory procedures in this program are 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 drafting, 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	5722	Technical Math I	3
CEN	7612	Composition I (or Elective)	3
Elective			2
TOTAL HOURS			15

Second Semester

EDT	2811	Technical Drafting II	5
EDT	7812	Pictorial Drafting	2
MTH	5387	Technical Math II	5
		Selected Drafting Class or Elective	3
		TOTAL HOURS	15

Third Semester

		Selected Drafting Classes	5-8
EGR	7094	Technical Physics I	3
		Electives	6
		TOTAL HOURS	14-17

Fourth Semester

		Selected Drafting Classes	6-8
EGR	9017	Technical Physics II	3
EGR	7118	Building Materials & Construction	3
		Elective	2-3
		TOTAL HOURS	14-17

Selected Drafting Courses

EDT	4011	Interpreting Arch. Drawings	2
EDT	2915	Architectural Drafting*	3
EDT	4014	Process Piping*	3
EDT	2297	Technical Illustration	3
EDT	4012	Interp. 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 (elective)	
NPS	1031	Physical Science (elective)	
CEN	5578	Technical Writing	3
BDP	4049	Fund. of Basic	3
EGR	7724	Prog. for Engr. and Science	4



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 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 may also elect to enter the JCCC Biomedical Equipment

Technician Program. The first-year requirements for this program and the Electronics Engineering Technology Program are 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	3409	Circuit Analysis I	3
MTH	9000	Math for Electronics I	5
CEN	7612	Composition I	3
		TOTAL HOURS	14

Second Semester

EET	6029	Circuit Analysis II	3
EET	5886	Electronic Principles I	3
EET	9086	Digital Electronics I	4
MTH	9001	Math for Electronics II	5
		TOTAL HOURS	15

Third Semester

EET	9826	Electronic Principles II	3
EET	6036	Digital Electronics II	4
EGR	7724	Programming for Eng. & Science	4
EGR	7094	Technical Physics I	3
CEN	5578	Technical Writing	3
		TOTAL HOURS	17

Fourth Semester

EET	4464	Electronic Principles III	3
EET	2468	Electronic Comm. Systems	3
EET	4503	Microprocessors	3
EGR	9017	Technical Physics II	3
		Non-technical Elective	3
		TOTAL HOURS	15



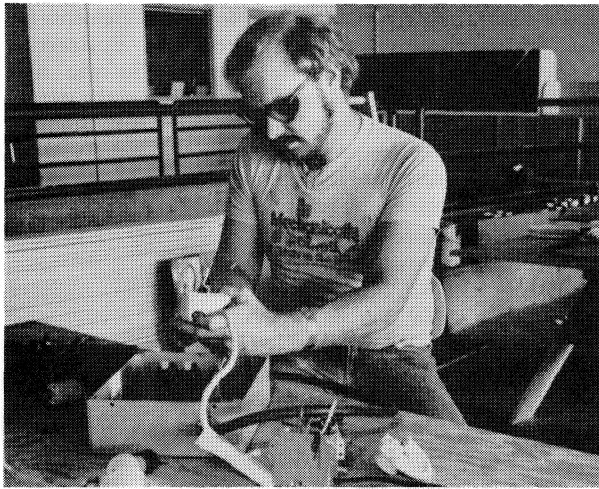
EMERGENCY MEDICAL TECHNOLOGY

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. Physical stamina and dexterity are required.

Any Semester

Credits

NET	6441	Emergency Medical Technology	5
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ENERGY TECHNOLOGY

This two-year program includes basic theory, application, estimating, installation, maintenance and service of air conditioning, heating and ventilating systems. As a student in this program, you will have the opportunity to gain classroom and laboratory experience designed to develop your awareness of basic mathematical and scientific principles dealing with the control of temperature and quality of air and the design, testing, installation and development of heating and cooling systems. At the end of the second semester, you may elect to specialize in either heating, ventilation, air conditioning or solar. A certificate program is also available.

Associate of Arts Degree

Suggested Sequence of Courses		Credits
First Semester		
TEN	6541	Basic Principles of HVAC 4
EGR	7094	Technical Physics I 3
TEN	6544	Electromechanical Systems 3
MTH	5722	Technical Math I 3
CEN	7612	Composition I 3
		TOTAL HOURS 16
Second Semester		
TEN	6543	Instrumentation & Control Devices 4
EDT	7674	Graphic Communications 3
TEN	6546	Residential HVAC Systems 3
TEN	6567	Residential HVAC Estimating 3
EGR	9017	Technical Physics II 3
		TOTAL HOURS 16

Heating, Ventilating and Air Conditioning Option

Third Semester		
TEN	6547	Energy Alternatives 3
TEN	6548	Diagnosis and Service Proc. 3
TEN	6550	Commercial System and Design 4
		Elective 3
		Technology Elective 3
		TOTAL HOURS 16

Fourth Semester

TEN	6549	System Design & Load Calculation 4
TEN	6551	Commercial Service Problems HVAC 3
TMF	8032	Sheet Metal Pattern and Development* 3
		Elective 3
		Technology Elective 3
		TOTAL HOURS 16

Solar Option

Third Semester

TEN	6557	Intro. to Solar Alternatives 3
TEN	6558	Solar Design & Installation 4
TEN	6559	Passive Solar Fundamentals 3
		Elective 3
		Technology Elective 3
		TOTAL HOURS 16

Fourth Semester

TEN	6563	Application of Solar 3
TEN	6560	Solar Project 4
TEN	6564	Solar Integration & Control 3
		Elective 3
		Technology Elective 3
		TOTAL HOURS 16

Suggested Technology Electives

TEN	6553	Advanced Control Systems and Design 3
TEN	6552	Equipment Selection & Design 3
TMF	8031	Introduction to Welding 3
TEN	6547	Energy Alternatives 3
TMF	8025	Intro. to Metal Fabrication 3
TEN	6557	Intro. to Solar Alternatives 3
TEN	6561	Advanced Energy Applications and Potentials 4
TEN	6565	Special Project 3-4

Energy Technology Certificate Program

TEN	6541	Basic Principles of HVAC 4
TEN	6543	Instrumentation & Control Devices 4
TEN	6544	Electromechanical Systems 3
TEN	6546	Residential HVAC Systems 3
TEN	6567	Residential HVAC Estimating 3
TEN	6547	Energy Alternatives 3
TEN	6548	Diagnosis and Service Procedures 3
TEN	6550	Commercial System & Design 4
TEN	6551	Commercial Service Problems HVAC 3
TMF	8032	Sheet Metal Pattern & Development 3
		TOTAL HOURS 33

Course being developed.



EQUINE STUDIES

The Equine Studies Program emphasizes the skills you will need 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

CEN	7612	Composition 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

CEN	5732	Composition II	3
SS	1068	Introduction to Psychology	3
SES	3820	Equine Health & Disorders	4
SES	1880	Beginning Hunt Seat Equitation	2
SES	3784	Advanced Horse Training*	2
		Elective	3
		TOTAL HOURS	17

Third Semester

CSP	4950	Interpersonal Communication	3
BAC	2171	Small Business Accounting	3
SES	3029	Equine Breeding & Management	4
SES	4139	Intermediate Western Equitation*	
		or	2
SES	4140	Intermediate Hunt Seat 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 Hunt Seat Equitation*	
SES	1308	Equine Judging	2
		Elective	3
		TOTAL HOURS	17

Riding Instructor Certificate 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	4139	Intermediate Western Equitation*	2
SES	4140	Intermediate 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 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	3863	Seminar: Human Relations (F)	2-3
BFM	7013	Fashion Fundamentals I (F)	3
BFM	3046	Fashion in Society	3
BMM	1026	Retailing	3
		Elective	3-4
		TOTAL HOURS	14-16

Second Semester

BFM	3865	Seminar: Supervisory Develop. (S)	.2-3
BFM	1195	Textiles	3
BMM	2407	Creative Retail Selling	3
BFM	4655	Fashion Promotion (S)	3
		Elective	3-4
		TOTAL HOURS	14-16

Third Semester

BFM	3864	Seminar: Career Options (F)	2-3
BFM	1019	Fashion Fundamentals II (F)	3
BUS	7007	Marketing	3
BFM	1054	Fashion Display (F)	3
		Elective	3-4
		TOTAL HOURS	14-16

Fourth Semester

BFM	3862	Seminar: Marketing Research (S)	2-3
BFM	3503	Merchandise Evaluation (S)	3
BUS	4512	Basic Economics	3
		Electives	6-7
		TOTAL HOURS	14-16

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
CEN	7612	Composition I	3
MTH	2122	Fundamentals of Math	3
CSP	4950	Interpersonal Communication	3
SS	3404	Sociology	3
SS	1068	Intro. to Psychology	3

(F) Offered fall semester only.
 (S) Offered 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

EFS	1745	Fundamentals of Fire Prevention	3
EFS	3744	Building Construction for Fire Protection	3



EFS	4089	Fire Photography	3
EFS	1529	Fire Investigation	3
EFS	1527	Arson Investigation	3
EFS	1528	Life Safety Code	3
EFS	1525	Extinguishing, Detection and Alarm Systems	3
		Electives	9
		TOTAL HOURS	30

ADMINISTRATION

BUS	7822	Principles of Management	3
BUS	5360	Principles of Supervision	3
BUS	2341	Personnel Management	3
	*	Municipal Fire Administration	3
EFS	1526	Fire Science Law	3
EFS	1524	Emergency Management Operations	3
		Electives	12
		TOTAL HOURS	30

PROTECTION

EFS	1743	Introduction to the Fire Science	3
EFS	1748	Fire Hydraulics	3
EFS	2577	Fire Hydraulics Lab	3
EFS	3757	Fire Apparatus and Equipment	3
EFS	5756	Fire Tactics and Strategy	3
EFS	6755	Rescue Practices	3
EFS	4481	Rescue Practice Lab	3
	*	Sprinklers and Standpipe Systems	3
	*	Hazardous Materials	3
		Electives	3
		TOTAL HOURS	30

TECHNICAL ELECTIVES

EFS	7981	Essentials of Fire Fighting	4
EFS	4256	Fire Vehicle Maintenance for Operators and Mechanics	1
EFS	4245	Fire Service Comm. Systems**	1
EFS	4250	Fire Service Records & Reports**	1
NET	6441	Emergency Medical Technician**	5
NPS	6634	Principles of Chemistry	5
MTH	4354	Technical Math I	5
SLE	7108	Criminal Justice System	3
	*	Major Disasters & Civil Disorders	3
	*	Readings in Fire & Safety Technology	1-3

NONTECHNICAL ELECTIVES

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

*Courses yet to be developed
 **Prerequisite course required



HOME ECONOMICS

**Life and Home Management
 Family Economics**

Today's society is constantly changing. And there are few places these changes are felt more strongly than in the home. JCCC's home economics programs focus on how women – and men – can use their personal resources to adapt to the environment in which they live. Both programs emphasize interpersonal relations, management of personal and family resources, consumerism, nutrition, clothing and housing – skills that are useful in a variety of careers.

Life and Home Management

Associate of Arts Degree

30 hours in Life and Home Management and 30 hours in one of the existing career programs (or in General Education courses)

Suggested Sequence of Courses Credits

First Semester

BLH	7004	Home Management	3
BFM	5149	Interior Design I	3
BLH	7003	Family Communications	3
		Electives	6
TOTAL HOURS			15

Second Semester

BUS	2259	Personal Finance	3
BFM	3046	Fashion and Society	3
BLH	2858	Housing and Equipment	3
		Electives	6
TOTAL HOURS			15



Third Semester

BFM	1195	Textiles	3
BLH	2859	Nutrition/Meal Planning	3
		Electives	9
TOTAL HOURS			15

Fourth Semester

BFM	3503	Merchandise Evaluation	3
BIM	2561	Interior Products	3
		Electives	9
TOTAL HOURS			15

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
BUS	2259	Personal Finance	3
BFM	3046	Fashion and Society	3
BFM	5149	Interior Design I	3
TOTAL HOURS			15

Second Semester

BFM	1195	Textiles	3
BLH	2858	Housing and Equipment	3
BLH	2859	Nutrition & Meal Planning	3
BFM	3503	Merchandise Evaluation	3
BIM	2561	Interior Products	3
TOTAL HOURS			15

Family Economics

Associate of Arts Degree

30 hours in Home Economics and 30 hours in one of the existing career programs (or in General Education courses)

Suggested Sequence of Courses

First Semester

BLH	7004	Home Management	3
BUS	2259	Personal Finance	3
BLH	7003	Family Communications	3
		Electives	6
TOTAL HOURS			15

Second Semester

BUS	3566	Personal Law	3
BFM	5149	Interior Design I	3
BUS	6038	Savings and Investment	3
		Electives	6
TOTAL HOURS			15

Third Semester

BLH	2858	Housing and Equipment	3
BSC	1342	Records Management	3
		Electives	9
TOTAL HOURS			15

Fourth Semester

BFM	3046	Fashion and Society	3
BFM	3503	Merchandise Evaluation	3
BFM	2859	Nutrition & Meal Planning	3
		Electives	9
TOTAL HOURS			15

Certificate Program

30 hours Family Economics
Suggested Sequence of Courses

First Semester

BLH	7004	Home Management	.....3
BUS	2259	Personal Finance	.....3
BLH	7003	Family Communications	.....3
BUS	3566	Personal Law	.....3
BHM	5149	Interior Design I	.....3
TOTAL HOURS			.....15

Second Semester

BUS	6038	Savings and Investment	.....3
BLH	2858	Housing and Equipment	.....3
BFM	3046	Fashion and Society	.....3
BFM	3503	Merchandise Evaluation	.....3
BFM	2859	Nutrition & Meal Planning	.....3
TOTAL HOURS			.....15



HOSPITALITY MANAGEMENT

You can 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 entry-level 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.

Associate of Arts Degree

Suggested Sequence of Courses Credits

First Semester

BHM	6037	Hospitality Management Fund.	.....3
BHM	7028	Basic Food Preparation	.....3
CEN	7612	Composition I	.....3
BHM	4593	Seminar: Purchasing	.....2-3
		Elective	.....3-4
TOTAL HOURS			.....14-16

Second Semester

BHM	3006	Food Management	.....3
BHM	4489	Supervisory Management	.....3
BHM	4592	Seminar: Accounting	.....2-3
		Elective3-6
TOTAL HOURS		11-16

Summer Session

BHM	2640	Seminar: Internship3
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Third Semester

BHM	4591	Seminar: Menu Planning and Sales Promotion2-3
BHM	4203	Hotel-Restaurant Operations3
BHM	3903	Design Techniques	.....3
CSP	4950	Interpersonal Communication	.....3
		Elective	.....3-4
TOTAL HOURS			.....14-16

Fourth Semester

BHM	7803	Advanced Food Prep. & Meats	.....4
BHM	1388	Advanced Hosp. Management	.....3
BHM	4594	Seminar: Beverage Control	.....2-3
BHM	2166	Food Specialties	.....3
TOTAL HOURS			.....12-13

Suggestive Electives

BDP	7135	Business Data Processing	.....3
CJO	2136	Fund. of Advertising	.....3
HUM	6392	Logic	.....3
PD	1020	Physical Fitness and Weight Training	.....1
SS	1068	Intro. to Psychology	.....3
BAC	2171	Small Business Accounting	.....3
BUS	2259	Personal Finance	.....3
BUS	2341	Personnel Management	.....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
BLH	2859	Nutrition and Meal Planning	.....3

Certificate Program

BHM	6037	Hosp. Mngmnt. Fund.	.....3
BHM	7028	Basic Food Preparation	.....3
CEN	7612	Composition I	.....3
BHM	4593	Seminar: Purchasing	.....2-3
BHM	3006	Food Management	.....3
BHM	4489	Supervisory Management	.....3
BHM	4592	Seminar: Accounting	.....2-3
BUS	2341	Personnel Management	.....3
BUS	2640	Seminar: Internship	.....3
		Electives	.....3-5
TOTAL HOURS			.....30-32



INTERIOR MERCHANDISING

The associate of arts degree program is designed to prepare you for a wide range of employment opportunities in the field of residential and commercial home furnishings in retail, wholesale or manufacturing areas. The program is a blend of formal course work and practical on-the-job training designed to enable you to see, select, coordinate and arrange quality and functional interior products and equipment for living or working environments.

The curriculum is a combination of professional, design and merchandising courses. It focuses on the technical, creative and merchandising skills you need in the interior products industry.

Suggested Sequence of Courses

Credits

First Semester

BFM	2017	Seminar: Human Relations	2-3
HAR	7576	Drawing I	3
BUS	7007	Marketing	3
BFM	5149	Interior Design I	3
MTH	2122	Fund. of Math (or equivalent)*	3
TOTAL HOURS			14-15

Second Semester

BFM	2204	Sem: Supervisory Development	2-3
HAR	7209	Design, Color	3
BMM	5026	Salesmanship	3
or			
BMM	2407	Creative Retail Selling	3
BLH	2858	Housing and Equipment	3
CLC	1300	Job Search Skills	1
Elective			3-4
TOTAL HOURS			14-16

Third Semester

BIM	6602	Seminar: Practices & Procedures	2-3
BFM	1195	Textiles	3
BIM	3032	History of Interior Design	3
BFM	2925	Interior Design II	3
BFM	1300	Career Preparations	1
Art Elective			3-4
TOTAL HOURS			14-17

Fourth Semester

BIM	5021	Seminar: Budget & Estimating	2-3
BIM	2561	Interior Products	3
BMM	1206	Retailing	3
BIM	4035	Space Planning	3
Elective			3-4
TOTAL HOURS			14-16

Suggested Electives

BAC	2171	Small Business Accounting	3
HAR	1608	Art Fundamentals	3
HAR	1713	Intro. to Art History	3
CEN	7612	Composition I	3
BMM	1303	Retail Advertising and Display	3
EDT	4011	Interpreting Architectural Drawings	2
HPH	5555	Photography I	3
BUS	1007	Business Communications	3
HAR	2880	Design 2-D	3

*See program coordinator or counselor for math placement requirement.

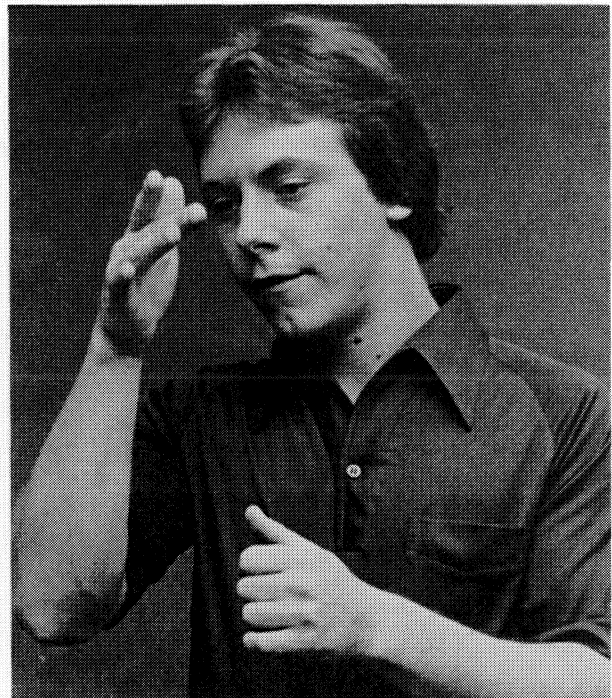


INTERPRETER TRAINING

This comprehensive program concentrates on skills in interpreting and basic knowledge and awareness of the hearing impaired necessary for most entry-level positions in interpreting. The trend for interpreting services for the future looks promising as more social agencies, school systems, medical services and industries are providing interpreter services for the hearing impaired.

Successful interpreters usually are flexible, outgoing and feel comfortable in front of a group. They also relate effectively to people and have a good command of the English language and American Sign Language.

During the last semester of the program you will participate in a practicum class that will give you interpreting experience with supervision in a variety of situations at JCCC and in the community.



Suggested Sequence of Courses

Credits

First Semester

AIT	4686	Non-Verbal Communication as a Sign Language Base	3
AIT	4687	Elementary ASL	8
AIT	5169	Understanding Deafness	3
AIT	4698	ASL Theory	3
TOTAL HOURS			17

Second Semester

AIT	4688	Intermediate ASL	7
AIT	4689	Advanced ASL I	5
AIT	4690	Fingerspelling I	3
AIT	4691	Orientation to Interpreting	3
TOTAL HOURS			18

Third Semester

AIT	4694	Advanced ASL II	3
AIT	4695	Fingerspelling II	1
AIT	4696	Sign Systems and Specialized Sign Vocabulary	3
AIT	5170	Interpreting I	3
CLC	4616	Vocabulary Development	1
TOTAL HOURS			13

Fourth Semester

AIT	4699	Advanced ASL III	1
AIT	5171	Interpreting II	3
AIT	4703	Interpreters and Physical "Burn Out"	1
AIT	5172	Practicum	3
Electives			6
TOTAL HOURS			14



MARKETING AND MANAGEMENT

This comprehensive, two-year program is designed to prepare you for a career in retail, wholesale or manufacturing sales; 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.

Associate of Arts Degree

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 I.	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

BMM	3877 Sem: Organization & Operation . . .	2-3
BMM	3873 Sem: Supervisory/Mgmt.	2-3
BMM	3874 Sem: Mgmt. Decision-Making	2-3
BMM	3876 Sem: Financial Analysis	2-3
BMM	3875 Sem: Marketing Research	2-3
TOTAL HOURS		10-15

Suggested Electives 18

BDP	7135 Business Data Processing	3
CEN	7612 Composition I	3
CSP	4950 Interpersonal Communication	3
BUS	4282 Introduction to Business	3
SS	3404 Sociology	3
SS	1068 Introduction to Psychology	3
BUS	4512 Basic Economics	3
BUS	2341 Personnel Management	3

Math-related courses

Fashion-related courses

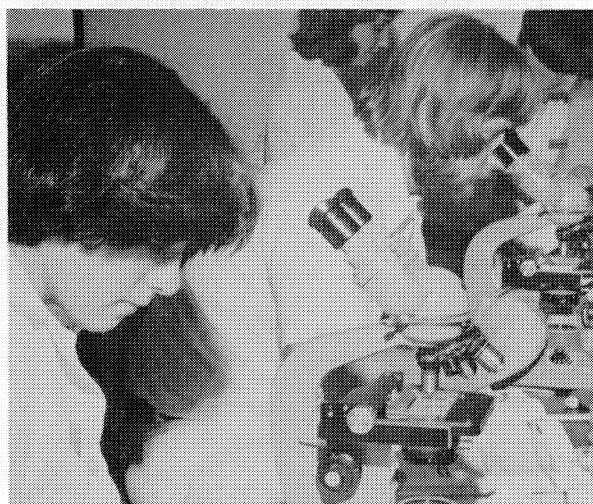
Advertising-related courses



MEDICAL LABORATORY TECHNOLOGY

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

Required Courses at JCCC		Credits
NLS	6186 Human Anatomy and Physiology . . .	5
NPS	6634 Principles of Chemistry	5
CEN	7612 Composition I	3
NLS	5593 Microbiology	3
NLS	6057 Microbiology Lab	2
NPS	2650 Principles of Organic Chemistry	5
MTH	3001 Intermediate Algebra	3
CSP	4950 Interpersonal Communication	3
TOTAL HOURS		29

Required Courses at PVCC

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
NLT	4173	Phlebotomy Colloquia	6
TOTAL HOURS			52

Note: If you plan to graduate from Penn Valley, check with the coordinator of the Medical Laboratory Technology program about the Missouri Constitution requirement.



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 teaches 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. To apply for admission into the program request "Admission Procedures" for the Medical Record Program from the Admissions/Records Office. 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
CEN		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
NS	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	Intro. to Psychology	3
CEN		Elective	3
		Elective	3
TOTAL HOURS			18

Electives

15 hours to be chosen from this list:

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



MEDICAL TRANSCRIPTION

A medical transcriptionist types or transcribes medical reports that have been dictated on a recorder. Because of the nature and substance of the reports, a transcriptionist needs special skills. Usually a physician dictates medical data pertaining to medical history, diagnostic examination and studies, surgical procedures and other therapies related to a patient.

The program focuses on the skills required to assume a position as a medical transcriptionist in a variety of health care settings such as hospitals, doctors' offices, and comprehensive health centers. JCCC faculty teaches some of the courses at Baptist Memorial Hospital. You are responsible for providing your own transportation there. To apply for admission into the program, request from the Admissions/Records Office **ADMISSION PROCEDURES** for the Medical Records program.

Suggested Sequence of Courses		Credits	
First Semester			
NMR	1135	Intro to Medical Record Profession*	2
NMR	2681	Health Records, Analysis and Controls*	3
NLS	6186	Anatomy and Physiology	5
CEN	7612	Composition I	5
TOTAL HOURS			15
Second Semester			
NS	2686	Medical Terminology IV*	3
BSC	4715	Medical Transcription	3
NLS	1037	Pathophysiology	3
BSC	5188	Automatic Typewriters	2
TOTAL HOURS			11
Third Semester			
NMT	3413	Medical Transcription Practicum*	4
TOTAL HOURS			4

*Courses offered at Baptist Memorial Hospital.



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 deadline for application for admission is Feb. 15. 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.

Sequence of Courses		Credits
Summer		
NPS	6634	Principles of Chemistry** 5

First Semester		
NLS	1128	Anatomy 4
SS	1068	Intro. to Psychology 3
NRN	8846	Concepts of Health (F) 8
		TOTAL HOURS 15

Second Semester		
NLS	1144	Physiology 4
SS	3546	Child Development 3
NRN	3131	Adaptation to Change (S) 8
		TOTAL HOURS 15

Third Semester		
NRN	2847	Short Term Health Problems (F) 9
		Social Science Elective* 3
		English* 3
		TOTAL HOURS 15

Fourth Semester		
NRN	5848	Long Term Health Problems (S) 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
 ENGLISH: Composition 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.

(F) Offered in fall semester only.
 (S) Offered in spring semester only.





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. 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

Required Courses		Credits
BPL	9739 Introduction to Paralegalism	3
BPL	7740 Legal Research and Writing	3
BPL	3866 Seminar: Workers' Compensation and Bankruptcy	2-3
BPL	3867 Seminar: Legal Interviewing and Investigation	2-3
CEN	7612 Composition I	3
CSP	4950 Interpersonal Communication	3
	Paralegal Electives (see list)	18
	General Electives	24-26
	TOTAL HOURS	60

Certificate Program

Required Courses		Credits
BPL	9739 Introduction to Paralegalism	3
BPL	7740 Legal Research & Writing	3
BPL	3866 Seminar: Workers' Compensation and Bankruptcy	2-3
BPL	3867 Seminar: Legal Interviewing and Investigation	(2-3)
CEN	7612 Composition I	3
CSP	4950 Interpersonal Communication	3
	Paralegal Electives (see list)	12
	General Electives	3-4
	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
CEN	7612 Composition I	3
CSP	4950 Interpersonal Communication	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

Note: If you plan to graduate from Penn Valley, check with the coordinator of the Physical Therapy program about the Missouri Constitution requirement.



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
CEN	7612	Composition I	3
SS	3404	Sociology	3
NPS	1031	Physical Science	4
CSP	4950	Interpersonal Communication	3
NLS	6186	Anatomy and Physiology	5
		American Government or American History elective	3
		TOTAL HOURS	24

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	1
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	9813	Department Seminar	3
NRD	8012	Special Procedures	3
NRD	9818	Clinical Training VI	1
NRD	9819	Clinical Training VII	3
NRD	9820	Special Training Elective	9
		TOTAL HOURS	56

Note: If you plan to graduate from Penn Valley, check with the coordinator of the Radiologic Technology program about the Missouri Constitution requirement.



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.



Associate of Arts Degree

Suggested Courses		Credits
HAR	1713 Introduction to Art History	3
HAR	6193 Ceramics I	3
HAR	2089 Sculpture I	3
HMU	7669 Intro. to Music Fundamentals	2
HAR	1192 Weaving I	3
BUS	2259 Personal Finance	3
CEN	7612 Composition I	3
CEN	5732 Composition II	3
HUM	6120 Introduction to Humanities	3
CJO	3901 News Reporting I	3
NLS	6540 Life Science	4
NLS	6186 Human Anatomy/Physiology	5
CSP	4950 Interpersonal Communication	3
PD	4368 Personal Health & Comm. Hygiene	3
PD	7129 Archery I	1
SS	1068 Introduction to Psychology	3
SS	3404 Sociology	3
PD	1010 Racquetball (Beginning)	1

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/CPR	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.



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
NLS	6057 Microbiology Lab	2
CEN	7612 Composition I	3
MTH	3001 Algebra	3-5
TOTAL HOURS		28-30

Required Courses at Baptist

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

(F) Offered in fall semester only.

(S) Offered in spring semester only.

(R) Offered in summer session only.



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 four Memory and two Mag Card II automatic typewriters. Machine transcription is taught on the latest equipment using 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.

Associate of Arts Degree Program

Suggested Sequence of Courses		Credits
First Semester		
BUS	4282 Introduction to Business	3
CEN	7612 Composition I	3
BSC	2376 Intermediate Typing	3

BSC	4590	Shorthand II	3
BSC	3857	Secretarial Field Study I	2-3
TOTAL HOURS			14-15

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	3858	Secretarial Field Study II	2-3
Electives			3
TOTAL HOURS			14-15

Summer Session

BSC	3861	Secretarial Field Study V*	2-3
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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	3859	Secretarial Field Study III	2-3
Electives			6-7
TOTAL HOURS			14-16

Fourth Semester

BSC	2317	Secretarial Procedures II	3
BUS	2253	Economics I	3
or			
BUS	2004	Introduction to Economic Issues	3
BSC	3860	Secretarial Field Study IV	2-3
Electives			3-4
TOTAL HOURS			11-13

*Business Law I may be substituted.

Recommended Electives

BSC	3630	Dictation and Transcription	3
BSC	4715	Medical Transcription	3
BSC	2267	Legal Secretary I	2
BUS	1007	Business Communications	3
BUS	2341	Personnel Management	3
BAC	5096	Accounting II	3
SS	1068	Intro. to Psychology	3
BUS	2259	Personal Finance	3
BSC	5189	Machine Transcription	3



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

Certificate Program

BSC	2326	Intermediate Typing	3
BAC	2171	Small Business Accounting	3
BSC	1272	Secretarial Procedures I	3
BSC	2317	Secretarial Procedures II	3
CEN	7612	Composition I	3
BSC	1342	Records Management	3
BSC	5190	Elec. Calculators	1
and			
BSC	5188	Automatic Typewriters	2
or			
BSC	5189	Machine Transcription	3
BUS	1007	Business Communication	3
BSC	3857	Sec. Field Study I	2-3
BSC	3858	Sec. Field Study II	2-3
TOTAL HOURS			30

There are two Secretarial Field Study courses required: Secretarial Field Study I—Management and Secretarial Field Study II—Human Relations.

Legal Secretarial Option

Recommended courses for students who wish to prepare for the Professional Legal Secretary examination while completing requirements for an associate of arts degree.

Required Courses

CEN	7612	Composition I	3
BSC	1342	Records Management	3
BSC	4590	Shorthand II	3
BSC	2376	Intermediate Typing	3
BSC	1272	Secretarial Procedures I	3
BSC	3858	Secretarial Field Study II	2-3
BSC	3860	Secretarial Field Study IV	2-3
BSC	2267	Legal Secretary I	2
BSC*		Legal Secretarial Procedures	3
BSC*		Legal Transcription	3
BAC	4092	Accounting I	3
or			
BAC	2171	Small Business Accounting	3
BPL	7740	Legal Research and Writing	3
BPL	9739	Intro. to Paralegalism	3
BUS	1121	Business Law I	3
BUS	1007	Business Communications	3
General Electives			16
TOTAL HOURS			58-60

Recommended Electives

BSC	5188	Automatic Typewriters	2
BSC	5190	Electronic Calculators	1
BDP	7135	Business Data Processing	3
BUS	4282	Intro. to Business	3
BUS	5134	Business Law II	3
BSC	3630	Dictation and Transcription	3

*Course to be developed.

There are two Secretarial Field Study courses required: Secretarial Field Study II—Human Relations and Secretarial Field Study IV—Business Math.



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 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	6004	Clinical Path. Tech. II	5
NAT	6006	Large Animal Technology	4
NAT	8909	Radiology & Elect. Procedures	2
TOTAL HOURS			45

Courses Offered at JCCC

NLS	4241	General Zoology	5
CEN	7612	Composition I	3
BAC	2171	Small Business Accounting	3
NPS	4515	General Chemistry I Lecture	4
and			
NPS	4516	General Chemistry I Lab	1
or			
NPS	6634	Principles of Chemistry	5
SS		American Government or American History elective	3
CSP	4950	Interpersonal Communications	3
NLS	5593	Microbiology	3
NLS	6057	Microbiology Lab	2
TOTAL HOURS			27

Note: If you plan to graduate from Maple Woods, check with the coordinator of the Small Animal Health program about the Missouri Constitution requirement.



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.

Required Courses at JCCC

NLS	5402	General Botany	5
CEN	7612	Composition I	3
BAC	4092	Accounting I	3
BUS	7007	Marketing	3
BUS	5360	Principles of Supervision	3
CSP	4950	Interpersonal Communication	3
BUS	1121	Business Law I	3
		Business Elective	3
		Elective	3
TOTAL HOURS			29



Required Courses at Longview

NUA	8887	Horticulture I (F)	5
NUA	6888	Intro. to Urban Agribusiness (F)	1
NUA	3889	Horticulture II (S)	5
NUA	5890	Work Experience I (S)	3
NUA	2891	Plant Materials I (F)	3
NUA	7892	Work Experience II (S)	3
NUA	8893	Plant Materials II (S)	3
		Urban Agribusiness electives	9
TOTAL HOURS			32

Elective Courses at Longview

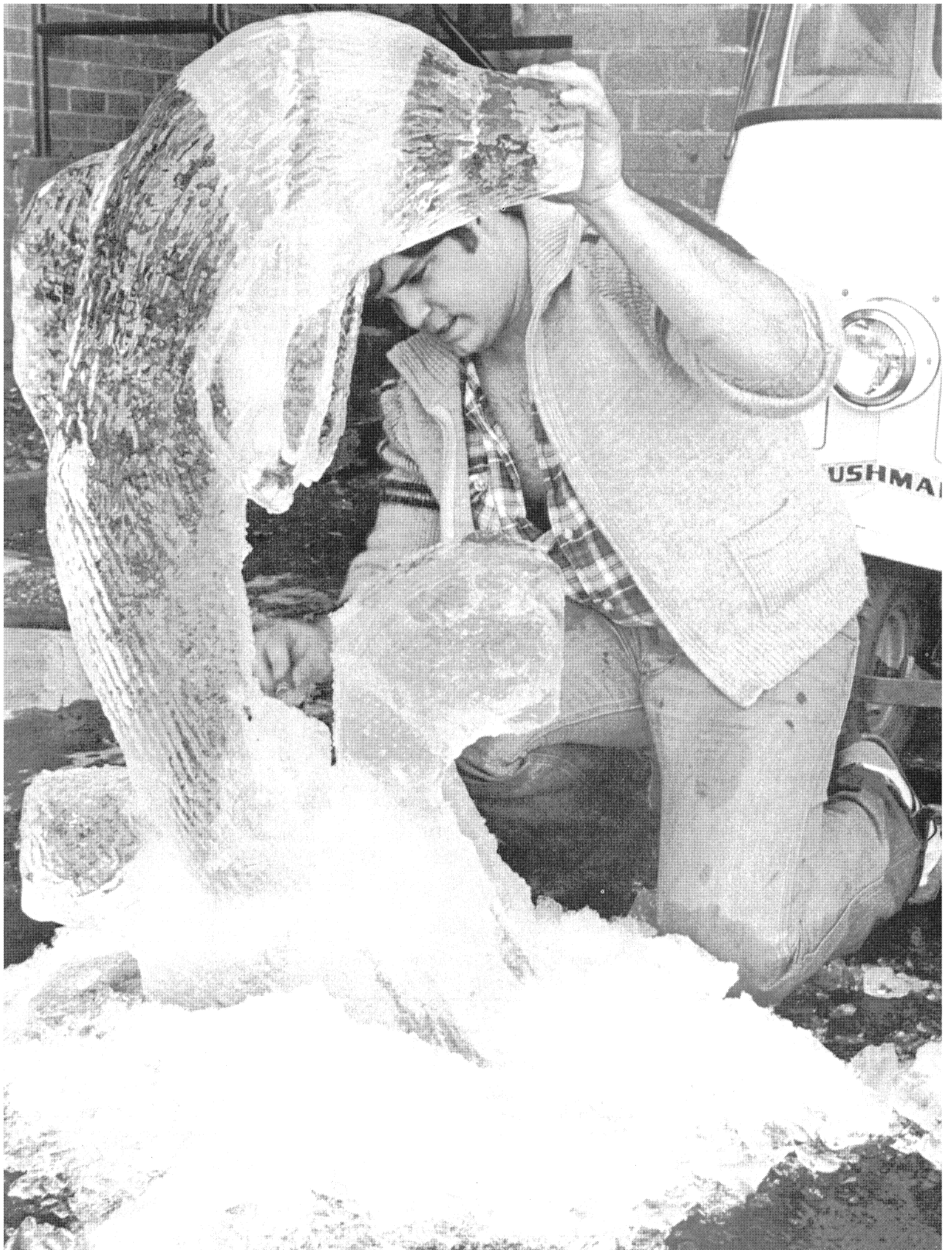
(Any 3 of the following courses)

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

(F) Offered in fall semester only.

(S) Offered in spring semester only.

Note: If you plan to graduate from Longview, check with the coordinator of the Urban Agribusiness program about the Missouri Constitution requirement.



Course Descriptions

ACCOUNTING

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. 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 managerial use of financial statements. Class meets three hours a week. Three credits.

ACCOUNTING II BAC 5096

Prerequisite: BAC 4092. Continuation of BAC 4092 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.

FEDERAL INCOME TAXES I 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.

FEDERAL INCOME TAXES II BAC 4487

Prerequisites: BAC 2360 and BAC 5096. Procedures for reporting federal income taxes with emphasis on income and deductions for sole proprietorships, partnerships and corporations. Practice given in preparing federal income tax returns on official forms. Class meets three hours a week. Three credits.

ACCOUNTING FOR NONPROFIT

ORGANIZATIONS BAC 4218

Introduction to not-for-profit accounting and its primary users—federal, state and local governments; hospitals; and schools. Topics will include the primary funds and accounting groups, the budget process and practice variances among the major not-for-profit users according to the user's authoritative pronouncement. Class meets three hours a week. Three credits.

FIELD STUDY: ACCOUNTING SEMINAR

. BAC 3871

Prerequisite: BAC 5096. The seminar is designed for review of accounting principles and practice through the completion of several accounting cycles and practice sets. Class meets two hours a week. Two or three credits.

FIELD STUDY: BUSINESS MATH BAC 3872

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. Two or three credits.

FIELD STUDY: HUMAN RELATIONS . . . BAC 3870

Emphasis is 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. Two or 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

BASIC POLICE TRAINING COURSESLE 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 thirteen weeks. One to fifteen credits.

INTRO. TO ADMIN. OF JUSTICESLE 2080

Emphasis is on the historical and philosophical development of the criminal justice system. Participation in field and classroom experiences gives students the opportunity to explore career opportunities within the criminal justice system. Also included is examination of law enforcement processes, entry-level requirements for local, state and federal agencies. Class meets three hours a week. Three credits.

POLICE AND THE PUBLICSLE 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 SYSTEMSLE 7108

Analysis and identification of the subsystems of the criminal justice system. Class meets three hours a week. Three credits.

FUNDAMENTALS OF CRIMINAL INVESTIGATIONSLE 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.

INTRODUCTION TO CRIMINALISTICS . SLE 7292

Prerequisite: SLE 5137. 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.

SUPERVISORY TECHNIQUES FOR POLICEMENSLE 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.

JUVENILE DELINQUENCYSLE 3166

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. Three credits.

CRIMINAL LAWSLE 4588

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



MOTOR VEHICLE LAWSLE 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.

POLICE ORGANIZATION AND MANAGEMENTSLE 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 INVESTIGATIONSLE 6653

Study of traffic safety and enforcement. Identification and analysis of the accident and investigative function of the police. Preparation of scale diagrams of accident situations. Class meets three hours a week. Three credits.

CONSTITUTIONAL CASE LAWSLE 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. Three credits.

CRIME PREVENTIONSLE 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. 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. Three credits.

PATROL PROCEDURESSLE 4033

Prerequisites: SLE 2080 or SLE 7108. Analysis of basic techniques of the police patrol function. Emphasis on record 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. Three credits.

RETAIL SECURITYSLE 4163

Study of retail security supervision and management techniques, including survey of employment practices, safeguards against employee dishonesty, methods of controlling shoplifters, and building and perimeter physical protection. Class meets three hours a week. 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.

READINGS IN POLICE SCIENCESLE 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.

PRINCIPLES OF CORRECTIONSSLE 7581

Prerequisite: Approval of division director. Topics in this course include the historical development and philosophy of corrections; ancient codes; medieval justice; development of corrections including parole, proba-

tion and community treatment. Class meets three hours a week. Three credits.

CORRECTIONS IN THE COMMUNITY . . SLE 7580

Prerequisite: SLE 7581 and division director approval.

This course will cover community correctional programs; diversion; half-way programs; prerelease centers; group homes; probation; and parole. Also discussed will be community processes needed to support these programs. Class meets three hours a week. Three credits.

CORRECTIONAL PSYCHOLOGYSLE 7582

Prerequisite: Approval of division director. In this class students will hear about psychological theories of crime and delinquency; diagnostic approaches used in correctional settings; psychopathology; classification procedures; and individual and group counseling techniques. Class meets three hours a week. Three credits.

THEORY OF CHILD CARE WORK IN RESIDENTIAL TREATMENTSLE 7583

Prerequisite: Approval of division director. The role of the child care worker will be explored in this course as well as basic theory of treatment; organizational structure; and problem-solving skills. Class meets three hours a week. Three credits.

METHODS OF INTERACTING WITH EMOTIONALLY SENSITIVE CHILDRENSLE 7584

Prerequisite: SLE 7583 and approval of division director.

The goals and needs of children, especially emotionally sensitive children, will be discussed in this course. Other topics include selecting, implementing and evaluating procedures for intervention in problem behavior and practical application of methods. Class meets three hours a week. Three credits.

INTERNSHIP IN CORRECTIONS ISLE 7585

Prerequisites: SLE 7581 and approval of division director.

This internship is designed to provide on-the-job training in corrections. Fifteen hours a week. Three credits.

INTERNSHIP IN CORRECTIONS IISLE 7586

Prerequisites: SLE 7585 and approval of division director.

This internship is designed to provide on-the-job training in corrections. Fifteen hours a week. Three credits.

CORRECTIONAL ADMINISTRATION . . .SLE 7587

Prerequisite: SLE 7581 and approval of division director.

This survey of current management patterns in correctional agencies includes discussion of management by objectives and accountability; public relations; training; budgeting; record keeping; and custody and treatment classifications. Class meets three hours a week. Three credits.

AGRIBUSINESS

INTRODUCTION TO AGRIBUSINESS . . . NAB 2853

A survey of agribusiness and its relationship to the general economy. Occupational opportunities in the field of agribusiness will be explored. Class meets two hours a week. Two credits.

AGRICULTURAL ECONOMICS NAB 2854

Role of agriculture in today's economic system is studied in order to provide an understanding of current and persisting problems of managing food production and distribution. Basic microeconomics and concepts of supply and demand, profit maximization, price determination and marginal analysis will be studied and applied to agricultural problems. Class meets three hours a week. Three credits.

PLANT SCIENCE NAB 2852

Prerequisite: NLS 5402. Course emphasizes the principles of the production of economic plants including morphology, taxonomy, physiology, ecology, propagation, preservation and utilization. Class meets six hours a week. Four credits.



PRINCIPLES OF ANIMAL SCIENCE . . . NAB 2846

Prerequisite: NLS 4241. Course covers basic principles which apply to the broad field of animal agriculture; survey of the industry types, purposes and products of livestock; principles of breeding, selection, nutrition, lactation, reproduction, management and marketing. Class meets six hours a week. Four credits.

AGRICULTURAL CHEMISTRY NAB 2849

Prerequisite: NPS 6634. Course in agricultural chemistry emphasizing fertilizers, soil chemistry and pesticides. Class meets seven hours a week. Five credits.

SEMINAR IN AGRIBUSINESS INTERNSHIP

. NAB 2856
Prerequisite: Completion of first year of agribusiness program. Supervised work experience in an approved area of agribusiness. Class meets by arrangement. Five 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. Class meets one hour a week. One credit.

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 study work represented in the major museums and important commercial galleries, particularly those representing the New York school. One credit.

DIRECTED READING IN CONTEMPORARY

AMERICAN ART HAR 3333

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

DESIGN, 2D HAR 2880

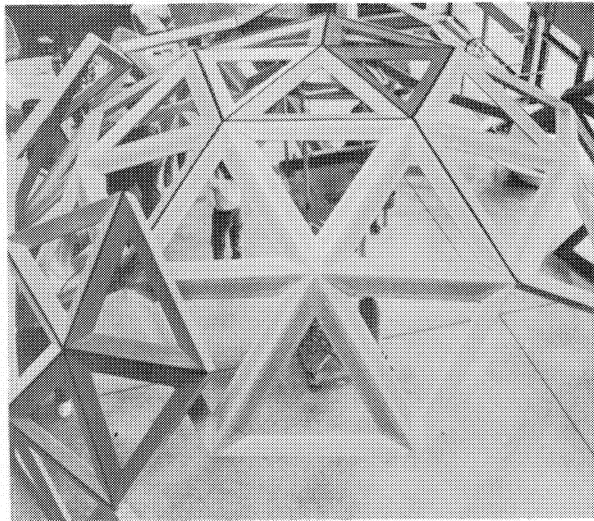
An introductory study of the basic principles of visual perception, two-dimensional space organization and the visual elements of line, shape and texture. Class meets six hours a week. Three credits.

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.



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.

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.

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.

WATERCOLOR PAINTING HAR 5405

Prerequisite: HAR 7576 or HAR 5004. Students will work from a variety of representational and non-objective situations using watercolor as a means to study color, value and composition in transparent media. Subject matter includes still lifes, models and landscapes as well as abstract problems with mixed media. Two hours lecture and four hours lab each week. Three credits.

STUDIO WORKSHOP HAR 6879

Prerequisites: HAR 5004 or HAR 7576 and permission of division director. 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

Prerequisites: HAR 2880 and either HAR 7576 or HCA 6862. 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

Prerequisites: HAR 2880 and either HAR 7576 or HCA 6862. 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 CERAMICSHAR 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 IHAR 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 week. Three credits.



CERAMICS IIHAR 2211

Prerequisite: HAR 6193. 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.

CERAMICS WORKSHOP I.....HAR 5177

Prerequisites: HAR 6193 and HAR 2211 and by permission of division director. This course is for the student who wishes to pursue advanced individual projects under the direction of an instructor. Emphasis is on individual skill building in areas not covered in regular ceramic classes. Class/lab meets six hours a week. Three credits.

METAL AND SILVERSMITHING I.....HAR 3495

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.

METAL AND SILVERSMITHING II.....HAR 3496

Prerequisite: HAR 3495. 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 IHAR 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. Continuation of 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

In this introductory fiber course, projects range from two-harness weaver controlled techniques to more complex procedures involving the use of four-harness floor looms. Three-dimensional woven forms and other fiber techniques will be explored. Class meets six hours a week. Three credits.

WEAVING IIHAR 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 TECHNIQUESHAR 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.

AUTOMOTIVE TECHNOLOGY

AUTOMOTIVE TRANSMISSIONS & DRIVELINESTAU 5606

In this course the focus is on the theory of the transfer of power from the engine flywheel to the drivewheels. The student will be exposed to the skills necessary to accurately perform troubleshooting procedures for transmission, driveline and differential components. Three hours lecture, three hours lab. Fall, four credits.

AUTOMOTIVE BASIC ELECTRICITY .. TAU 5604

Prerequisite: MTH 5722. This course focuses on the fundamentals of series and parallel circuits, magnetism, inductance, capacitance and semi-conductors in relation to direct current. The student will also be able to properly connect meters and make correct analysis of circuit problems. Two hours lecture, three hours lab. Spring, three credits.

AUTOMOTIVE ENGINES I TAU 5607

The student will have the opportunity to learn about the theory of the 4-stroke cycle internal combustion engine; the skills for computing compression ratio, piston displacement, horsepower and torque; how to analyze and correct internal engine malfunctions. Two hours lecture, three hours lab. Spring, three credits.

AUTOMOTIVE SUSPENSION, STEERING & BRAKES TAU 5605

This course stresses the theory of steering geometry, suspension design and brake fundamentals, front and rear suspension problems and the steps in proper sequence for diagnosing brake and steering systems. Two hours lecture, three hours lab. Spring, three credits.



AUTOMOTIVE FUELS AND CARBURETION TAU 5609

Prerequisites: EGR 7094, MTH 5722, TAU 5604 and TAU 5607. Topics include the function, operation and construction of carburetors, fuel pumps, injection pumps and injectors in diesel and gasoline engines. Also discussed will be the maintenance of components. Class/lab meets five hours per week. Three credits.

AUTOMOTIVE HEATING, AIR CONDITIONING AND EMISSIONS TAU 5611

Prerequisites: TAU 5604, EGR 7094, MTH 5722, TAU 5607. Topics include the function, construction and operation of automotive heating, air conditioning and emission systems. There will be discussion of the safety procedures needed when working on these systems. Troubleshooting for all systems will be stressed. Class/lab meets six hours a week. Four credits.

AUTOMOTIVE DIAGNOSIS AND EVALUATION TAU 5612

Prerequisites: TAU 5604, EGR 7094, CEN 7612. Skills necessary for entry-level employment are stressed in this course. Students will be asked to perform tasks related to all phases studied in the first three semesters. Evaluation is based on industry standards. Class/lab meets eight hours a week. Four credits.

AUTOMOTIVE DEALERSHIP OPERATION TAU 5614

Prerequisite: MTH 5722. This course focuses on a familiarity with the operation of an auto dealership. This course covers building design and physical requirements for covered and uncovered areas. Topics include finances and manpower required, local and state regulations, insurance and factory organization. Class meets three hours a week. Three credits.

AUTOMOTIVE ELECTRICAL SYSTEMS TAU 5608

Prerequisite: TAU 5604. The function, construction and operation of the starting, ignition and charging systems will be covered in this course. The instructor also will explain how to rebuild electrical components and properly test and diagnose all vehicle electrical systems. Two hours lecture and three hours lab each week. Three credits.

BIOMEDICAL EQUIPMENT TECHNOLOGY

BIOMEDICAL EQUIPMENT TECHNOLOGY I EMT 7975

Prerequisites: NLS 6186, EET 9826, EET 6036 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. Discussion of microshock and electrical safety testing. Class meets for three hours lecture and three hours lab each week. Fall, four credits.

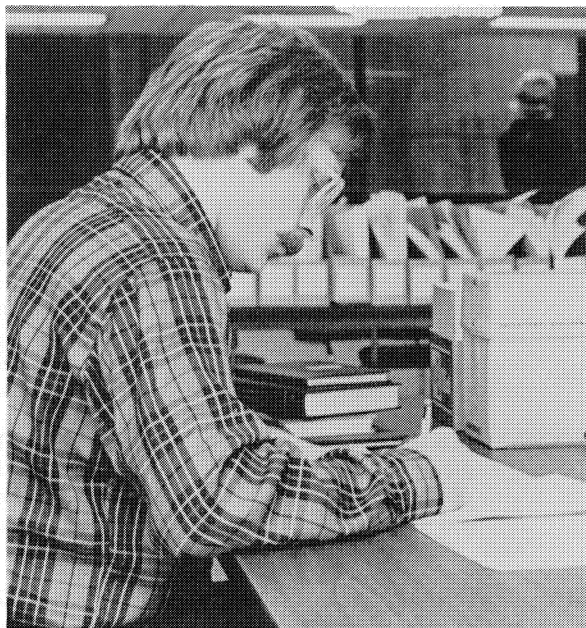


BIOMEDICAL EQUIPMENT TECHNOLOGY II

EMT 9824
Prerequisite: EMT 7975. 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 lab each week. Spring, three credits.

BIOMEDICAL INTERNSHIP EMT 4505

Corequisite: EMT 9824. 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 I BUS 2259

Techniques of money management and the preparation of spending plans in order to fulfill financial goals. Planning consumer spending and allocations resulting in wealth maximization. An understanding of consumer sovereignty and how the consumer functions in the private enterprise system. Use of consumer credit and computing costs of credit; understanding credit instruments; applying compound interest tables in projecting financial goals; understanding how interest is computed on savings accounts; procedures and costs in buying and selling owner-occupied real estate; insurance – life, automobile, property, medical and disability; consumer protection techniques. Class meets three hours a week. Three credits.

PERSONAL FINANCE II BUS 2848

Course focuses on financial planning procedures and explains how to establish financial objectives and identify various types of investments. Topics include how the tax system works in regard to short-term and long-term investments; the ownership of owner-occupied and non-owner occupied real estate; the function of security markets and other types of security investments; investing in collectibles; and the overall development of portfolio of investments based on investment objectives. Class meets three hours a week. Three credits.

SAVINGS AND INVESTMENTS BUS 6038

Investment techniques and procedures to give a broad overview of savings and investment media and tools for financial planning. Basic investment principles; risk and return; developing individual or family investment objectives; compound interest; capital gains and their taxation; savings accounts; time deposits; government securities; money market instruments and funds; pension planning including tax-sheltered programs; financial analysis in making stock, bond and other security investments; real estate investments which are non-owner occupied; and estate planning relating to legal requirements and tax planning. Class meets three hours a week. Three credits.

PERSONAL LAW BUS 3566

Provides a knowledge of law from a personal standpoint. The course is designed to allow the student to become better informed of personal rights and duties in social and business life through a survey of the fundamental laws. Emphasis is on how law facilitates making life orderly, efficient and reasonably just in our highly interdependent society. 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 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.

BASIC ECONOMICS BUS 4512

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 introduction to the subject. Topics to be selected according to the interests of the class. Class meets three hours a week. Three credits.

ECONOMICS I BUS 2253

Fundamental problems and contemporary approaches to economics. 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. Continuation of 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.

BUSINESS COMMUNICATIONS BUS 1007

Prerequisite: CEN 7612. This course encompasses four basic areas: reading skills, listening skills, verbal and nonverbal communications and written communications including memos, letters and reports. Class meets three hours a week. Three credits.

PRINCIPLES OF REAL ESTATE I BUS 2970

A course in the fundamentals, principles and procedures followed in the ownership or transferring of real estate along with the rights and interests held. Topics include what real estate represents; the

economic characteristics of real estate resources; property rights and ownership interests; contracts in real estate transactions; deed and conveyance instruments; mortgages; title and legal descriptions; basic financial concepts regarding capitalization and present value; and sources of real estate credit. Class meets two hours a week. Two credits.

PRINCIPLES OF REAL ESTATE II BUS 2971

Prerequisite: BUS 2970. Course includes the fundamentals of brokerage; title conveyance procedures, including title insurance and abstracts; title closing; valuation of real estate; property insurance; real estate investment analysis; property management; and techniques and tools of land-use controls. Class meets two hours a week. Two credit.

REAL ESTATE CONTRACTS BUS 2975

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

REAL ESTATE FINANCE BUS 2974

Coverage of the most commonly used methods of financing real property, and institutions involved. Emphasis on the familiarity with financing terminology and providing a familiarity with the economic effects of money and interest rates along with the role of the secondary markets. Class meets two hours a week. Two 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.

GENERAL INSURANCE BUS 1390

Covers basic terminology, principles of insurance, risk and risk management and insurance contracts. Reviews all lines of insurance, including life, health and disability, property and liability. Also analyzes the inroads of social insurance and its impact on the insurance industry. The course program has been coordinated with the Insurance Institute of America. Class meets three hours a week. Three credits.

PRINCIPLES OF INSURANCE BUS 1446

Prerequisites: BUS 4282 and BUS 2259. This course is for students seeking a basic understanding of the principles of insurance. It will cover the basic terminologies of insurance and review the major categories such as life, health, property and liability. Class meets three hours a week. Three credits.

MANAGEMENT ATTITUDES AND MOTIVATION BUS 4029

Class discussion, group projects and role-playing situations are designed to let the student experience awareness of self; examine own attitudes; improve

communication skills, management skills, and problem solving skills; and learn to motivate self and others. Emphasis is on techniques for self improvement; conflict resolution; and respect for individual differences. Three credits.

TRANSPORTATION RATES I BUS 4127

Introductory course for motor carrier transportation. The emphasis of the course will be on motor carrier tariffs and rates. Students will combine knowledge and application of tariff rates as they apply to classified shipments. Class meets three hours a week. Three credits.

TRANSPORTATION RATES II BUS 4128

Course will reinforce the material studied in *Transportation Rates I* and will introduce the student to Midwest Freight Bureau Tariff 125 and MWB 226 (commodities). Class meets three hours a week. Three credits.

TRANSPORTATION RATES III BUS 4129

Course will cover the Midwest Motor Freight Bureau Tariff 129 (rule for discounts and allowance), MWB 600 local distribution and Rocky Mountain Motor 303 (class and commodity rates). Materials for *Transportation Rates I and II* will be used to apply to advanced rate determination. Class meets three hours a week. Three credits.

COMMERCIAL ART

BASIC REPRESENTATION I HCA 6862

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

BASIC REPRESENTATION II HCA 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.

LETTERING HCA 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.

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.

LAYOUT HCA 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.



VISUAL COMMUNICATIONS I HCA 1689

Prerequisite: Permission of the coordinator. An exploration of the techniques and imagery used in symbolic visual communications, 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.

PREPARATION OF PORTFOLIO HCA 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.

COMMERCIAL ART FIELD STUDY HCA 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.

AIRBRUSH TECHNIQUES HCA 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.

CONSTRUCTION AND MAINTENANCE TECHNOLOGY

INTRODUCTION TO ELECTRICITY . . . TCM 9122

In this thorough introduction to the electrical field, students will be exposed to the theory as applied to the technologies; D.C. circuits; A.C. installations; bench projects typical of simple and complex circuits; basic knowledge of generators and motors. Students will be required to assemble circuits with emphasis on safety, troubleshooting, diagnosis and installation methods. Basic code regulations will be reviewed as they apply to each individual application. Two hours lecture and three hours lab each week. Three credits.

CONCRETE AND MASONRY TCM 9134

This course is designed to enable the student to explain the history, manufacture, characteristics and types of Portland cement; properly design a concrete mix; hand mix, machine mix and place concrete; properly design a mortar mix; hand mix and machine mix mortar; and lay masonry units. Two hours lecture, three hours lab. Fall, three credits.

ENVIRONMENTAL SYSTEMS TCM 9135

This course will emphasize how to identify and properly use the basic plumbing tools; perform maintenance procedures on and install typical plumbing fixtures; identify and properly use the basic electrician's tools; demonstrate a knowledge of wiring materials and methods; make electrical connections and install circuits. Two hours lecture, three hours lab. Fall, three credits.

MILLWORK AND FINISH TCM 9127

In this course emphasis will be on how to identify and properly use basic hand tools, portable power tools and stationary power tools associated with the building trades; build, hang and trim a door unit; properly trim a window; install baseboard with a coped and miter joint; machine and fit cabinet joints, doors and hardware; recognize quality millwork and finish. Two hours lecture, three hours lab. Three credits.

MATERIALS AND PROPERTIES TCM 9136

The focus of this course will be how to perform basic ASTM Standard Quality Control Tests on concrete, and to demonstrate a basic knowledge of the physical properties of concrete. Two hours lecture, three hours lab. Spring, three credits.

SITE PLANNING AND FOUNDATIONS TCM 9123

This course is designed to teach students how to identify a piece of property by legal description, to locate the property corner and boundaries and to stake out a building site; set footing and foundation forms; place concrete and screed level in footings and foundations. Two hours lecture, six hours lab. Spring, four credits.



FIELD STUDY AND CONFERENCE . . . TCM 9215

Prerequisite: 24 semester hours of credit in construction or maintenance. Ten weeks or 350 hours of on-the-job training designed to provide the student with the opportunity to work and gain knowledge in construction or a related occupation. Four credit hours.

CONCRETE CONSTRUCTION TCM 9126

Topics in this course include the design and structural strength of reinforced concrete; development of reinforcement; the control of deflections; and the design of rectangular and T-beams. Two hours lecture, three hours lab each week. Three credits.

CONSTRUCTION MANAGEMENT . . . TCM 9137

Prerequisite: MTH 5722. In this study of personnel management, topics will include personnel selection; preparation of progress schedule; contracts; daily project reports; weekly cost reports; monthly progress meetings; estimates for payments; letters; documentations; damages; and job close out. Three hours lecture each week. Three credits.

BUILDING CONSTRUCTION I TCM 9120

Prerequisite: MTH 5722. In this course, students can get field experience in building construction. Students will study the layout of all framing members in residential construction and roofing and exterior trim and will assemble these components and materials on an actual residential home. Theory will be covered in lectures. One hour lecture, six hours lab. Three credits.

BUILDING CONSTRUCTION II TCM 9131

Prerequisites: TCM 9127 and TCM 9120. In this course on the finish aspect of construction, students will install and finish drywall and interior trims and construct and finish cabinets in a residential home. Students also will install wall and floor coverings and paint. Theory will be covered in lecture. One hour lecture, six hours lab each week. Three credits.

DATA PROCESSING

BUSINESS DATA PROCESSING BDP 7135

This nontechnical course will include 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

This technical course is designed to prepare an individual for enrollment in any programming language course. Key punch and advanced terminal usage are covered. 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.



EDITOR BDP 5105

Prerequisite: BDP 6699. In this introductory course, the focus will be on how students can use an EDITOR to create and manipulate files on a computer. The class will cover how characters, strings of characters or entire lines of characters can be inserted, deleted, replaced, modified, searched for and otherwise manipulated by using an EDITOR. Three hours lecture and five hours lab each week for three weeks. One credit.

FUNDAMENTALS OF BASIC BDP 4049

This technical course 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.

COBOL I BDP 4700

Prerequisite: BDP 6699 and BDP 5105. BDP 5105 may also be taken as a corequisite. 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.

ASSEMBLER LANGUAGE I BDP 1698

Prerequisite: BDP 6699 and BDP 5105. BDP 5105 may also be taken as a corequisite. 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.

FORTRAN BDP 6703

Prerequisite: MTH 3001 and BDP 5105. BDP 5105 may also be taken as a corequisite. Use of FORTRAN programming language in solving typical problems. Em-

phasis 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.

OS/VIS JOB CONTROL LANGUAGEBDP 6005

Prerequisite: BDP 4700 or BDP 1698 or equivalent work experience. Use of OS/VIS JCL with typical applications. Emphasis on Rules of Coding JCL, optimizing resources, overriding statements, use of symbolic parameters. Computer applications of JCL. Class meets three hours a week. Fall, three credits.

PASCALBDP 4023

Prerequisite: BDP 4700 or BDP 1698 or BDP 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. Four credits.

RPG II BEGINNINGBDP 7683

Prerequisite: BDP 6699 and BDP 5105. BDP 5105 may also be taken as a corequisite. Use of various approaches to RPG II problem solving. Define, code, test, debug and document RPG II programs. Control levels and subroutines are covered. Computer used in compiling and executing programs. Class meets three hours a week. Laboratory by arrangement. Spring, four credits.

RPG II ADVANCEDBDP 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.

TELEPROCESSINGBDP 7224

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

DATA FILE MANAGEMENTBDP 1036

Prerequisites: 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 SYSTEMSBDP 6451

Prerequisite: BDP 1698 or BDP 4700 or equivalent work experience. Basic concepts and principles of a digital computer operating system. Interrelationships between hardware and software and how they are controlled are illustrated through study of a typical digital computer system. Class meets three hours a week. Spring, three credits.

APPLICATION PROGRAMMING: APPLICATIONS

BDP 3868

Prerequisite: Permission of coordinator. Corequisite: 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, two or three credits.

APPLICATION PROGRAMMING: DATA

PROCESSING TOPICSBDP 3869

Prerequisite: Permission of coordinator. Corequisite: 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, two or three credits.

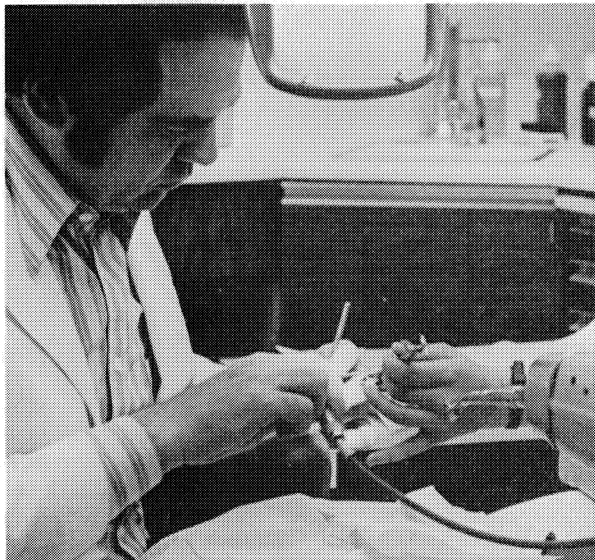
DENTAL ASSISTING

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. Histology, embryology, dental materials and the manipulation of the dental materials in a laboratory procedure. 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 2855. 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 PRACTICE NDA 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 I NDA 1047

Prerequisite: NDA 1044 and 1052. The student will have the opportunity to 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 II NDA 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 I NDH 7252

Prerequisite: Admission to Dental Hygiene Program. *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.

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 and 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 and 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 and 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, NLS 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 IV NDH 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 grade 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 ANATOMY NDH 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 MATERIALS NDH 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 RADIOLOGY NDH 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.

DRAFTING TECHNOLOGY

GRAPHIC COMMUNICATIONS EDT 7674

This course is open to students experienced or inexperienced in drafting. Students may use this course for exploration or to determine aptitudes in the field of drafting. Credits earned are applicable to the drafting technology program. Two hours of class/lab a week per credit hour. One to seven credits.

TECHNICAL DRAFTING I EDT 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 II EDT 2811

Prerequisite: EDT 5810 or permission of 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 DRAFTING EDT 7812

Prerequisite: EDT 5810 or permission of 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 I EDT 1813

Corequisite: EDT 5810. Reproduction processes and techniques typically used by industry. Diazo-white printing, sepia intermediates, wash-off film. Practical applications of photodrafting, microfilming, overlays, scissors drafting and metal plate making. Class/lab meets four hours a week. Fall, two credits.

REPROGRAPHICS II EDT 4010

Prerequisite: EDT 1813. Advanced applications of photo reproduction used for engineering documentation; halftones, screening and product photography; use of 35mm, view, industrial and process cameras. Class/lab meets four hours a week. Spring, two credits.

ARCHITECTURAL DRAFTING EDT 2915

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

STRUCTURAL DRAFTING EDT 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, steel and heavy timber. Class/lab meets six hours a week. Spring, three credits.

ELECTRICAL DRAFTING EDT 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/lab meets six hours a week. Spring, three credits.

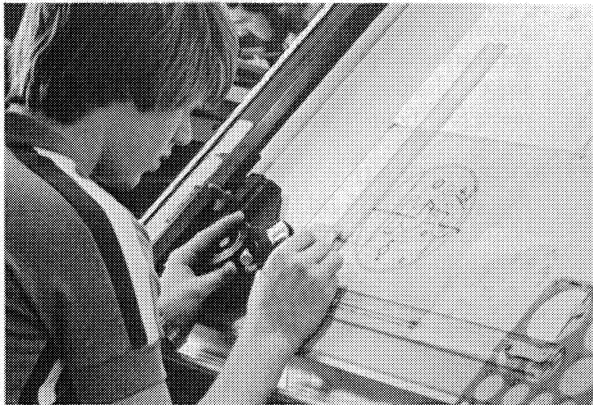
PROCESS PIPING I EDT 4014

Prerequisites: EDT 5810 and 7812 or permission of program coordinator. Introduction to the drawings required in fabrication and erection of process piping systems. Emphasis on symbols, terminologies, 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 ILLUSTRATION EDT 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 photoreproduction processes. Class/lab meets six hours a week. Fall, three credits.



TOOL DESIGN EDT 7407

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

INTERPRETING ARCHITECTURAL DRAWINGS EDT 4011

A beginning course providing fundamentals in the interpretation of architectural type drawings (blueprints). Involves theory of engineering drawings, dimensioning, sectioning and details. Actual construction plans are used in the areas of residential, commercial and industrial. Class meets two hours a week. Fall, two credits.

INTERPRETATION OF WELDING DRAWINGS EDT 6016

An introductory course in the interpretation of welding drawings (blueprints) with emphasis on view visualization, sectioning, dimensioning, abbreviations and symbols. ANSI and AWS standards are followed. Sketching and use of actual industrial prints provided. Class meets two hours a week. Fall, two credits.

INTERPRETING MACHINE DRAWINGS EDT 4012

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

BUILDING CONSTRUCTION ESTIMATING EDT 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 SURVEYING EDT 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, operations 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.



CIRCUIT ANALYSIS I EET 3409

Prerequisites: EET 5290 and MTH 9000 or concurrent enrollment. Fundamental AC and DC circuit concepts such as Kirchoff's Laws, Ohm's Law, Thevenin's Theorem, Norton's Theorem, Superposition Theorem and nodal analysis. Class meets three hours a week. Three credits.

CIRCUIT ANALYSIS II EET 6029

Prerequisites: MTH 9001 or concurrent enrollment and EET 3409. Fundamental concepts of AC circuit analysis and transient circuit analysis as applied to circuits containing resistors, capacitors and inductors. Class meets three hours a week. Three credits.



ELECTRONIC PRINCIPLES I EET 5886

Prerequisites: EET 3409 and MTH 9000. The first course in a three-course sequence in analog electronics. A study of semiconductor theory, diodes, diode circuits, transistors and transistor biasing circuits. Two hours of class and three hours of laboratory a week. Three credits.

ELECTRONIC PRINCIPLES II EET 9826

Prerequisites: EET 5886 and 6029. The second course in a three-course sequence in analog electronics. A study of small signal transistor amplifiers; class A, B and C power amplifiers; field effect transistors; and FET circuitry. Two hours of class and three hours of laboratory a week. Three credits.

ELECTRONIC PRINCIPLES III EET 4464

Prerequisite: EET 9826. The third course in a three-course sequence in analog electronics. A study of integrated circuits, frequency effects in amplifiers, negative and positive feedback, oscillators, voltage regulation, OP-amp applications, differential amplifiers and frequency domain analysis. Two hours of class and three hours of laboratory a week. Three credits.

DIGITAL ELECTRONICS I EET 9086

Prerequisite: EET 5290. First course in a three-semester sequence in digital electronics. A study of binary numbers and codes, binary arithmetic, logic circuits, arithmetic circuits, flip-flops and counters. Three hours of class and two hours of laboratory a week. Four credits.

DIGITAL ELECTRONICS II EET 6036

Prerequisite: EET 9086. Second course in a three-semester sequence in digital electronics. A study of registers, counters, memories, computer architecture and computer instructions. Three hours of class and two hours of laboratory a week. Four credits.

ELECTRONIC COMMUNICATION SYSTEMS EET 2468

Prerequisite: EET 9826. 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.

MICROPROCESSORS EET 4503

Prerequisite: EET 6036. 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.

EMERGENCY MEDICAL TECHNOLOGY

EMERGENCY MEDICAL TECHNOLOGY 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 and will be required to pay an examination fee. 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.

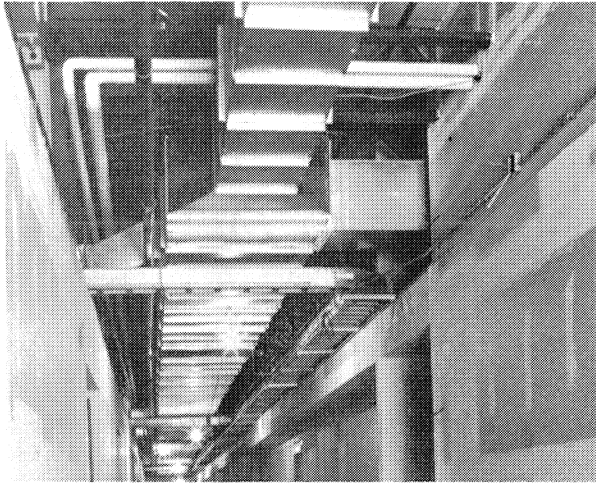
BASIC CARDIOLOGY AND EKG RECOGNITION NET 2142

Prerequisite: Consent of the program coordinator. Basic anatomy and physiology and electrophysiology of the cardiac system. Introduction to EKG monitoring equipment designed to provide 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.

ENERGY TECHNOLOGY

BASIC PRINCIPLES OF HVACTEN 6541

The class covers the function, design, construction features, operation, adjustment, inspection and repair of small-scale residential heating and cooling systems, and various commercial refrigeration and air movement systems. Three hours of lecture and three hours of lab a week. Fall, four credits.



RESIDENTIAL HVAC SYSTEMSTEN 6546

Prerequisite: TEN 6541. Detailed study of major components and accessories as they relate to the total heating system. Topics include load calculation for steam and hot-water systems design, application of boilers, unit ventilators, unit heaters, make-up air and infrared heaters. Laboratory work includes testing and balancing procedures; fuel equipment adjusting and servicing; electrical system adjusting and servicing; troubleshooting; installation of steam, water and electric heating systems. Also covered will be the design conditions and capacity requirements for the selection of proper air conditioning equipment; design and construction of piping and duct work required to properly distribute conditioned air; performance requirements of air handling equipment using the psychometric chart to predict performance and to measure results; air balancing and hydronic balancing for proper performance; and electrical aspects of the systems and various types of controls. Two hours of lecture and three hours of lab a week. Three credits.

RESIDENTIAL HVAC ESTIMATINGTEN 6567

This course covers the techniques and procedures used by industry in making interpretations from drawings and specifications and in determining labor costs for the installation of various air conditioning, refrigeration and heating systems. Students will be required to make estimates from mechanical plans for specific structures. Three hours of lecture each week. Three credits.

FLUID DISTRIBUTION SYSTEMSTEN 6542

Corequisite: TEN 6541. A theory and applications course dealing with the movement of various fluids such as air, oil and Freon. The student will make various tests and diagnoses and repair the majority of HVAC used in residential and light commercial construction today. Students will perform various air balancing and hydronic balancing for proper performance of various systems. Two hours of lecture and three hours of lab a week. Fall, three credits.

INSTRUMENTATION AND CONTROL DEVICESTEN 6543

Prerequisite: TEN 6541. An introduction to various controls for HVAC system such as flow switches, thermostats, motor controls and float valves. The exploration of cooling towers and heat pump applications. Three hours of lecture and three hours of lab a week. Four credits.

ELECTROMECHANICAL SYSTEMSTEN 6544

An electrical course in the relationship of all components and the various repair and troubleshooting techniques. Students will study sizing, retrofitting, load calculations and repair applications. Two hours of lecture and three hours of lab a week. Spring, three credits.

COMMERCIAL SYSTEM AND DESIGNTEN 6550

Prerequisites: TEN 6544, TEN 6541. A study of commercial and industrial application of refrigeration for efficiency and economic use. The students will calculate heat loads for coolers and freezers; select and match equipment for efficiency and economy and determine the size of cooling towers, evaporative condensers, water cooled condensers, air cooled condensers, pumps and refrigerant lines needed for a specific installation. Three hours of lecture and three hours of lab each week. Four credits.

DIAGNOSIS AND SERVICE PROCEDURESTEN 6548

Prerequisites: TEN 6544 and TEN 6541. This course provides instruction in maintaining, installing and troubleshooting commercial and industrial application of refrigeration. Students will have the opportunity to troubleshoot and wire control circuits, diagnose malfunctions with testing equipment; and correct malfunctions in commercial and industrial refrigeration units. Two hours of lecture and three hours of lab each week. Three credits.

ENERGY ALTERNATIVESTEN 6547

This course concentrates on the diverse methods of alternate energy production and emphasizes the most effective technologies available. Technologies discussed include wind energy, photoelectric energy, biomass and alternate fuel vehicles. Students will study the advantages of using various alternate energy

technologies, the impact and by-products of each and possible problems. Three hours of lecture each week. Fall, three credits.

INTRODUCTION TO SOLAR ALTERNATIVES . . .
..... **TEN 6557**

This is an overview of solar installations, data sources and elements used in the passive and active solar activities and the relationship for small-scale applications. Students will be exposed to other solar alternatives such as photovoltaic, wind, biomass and related topics. Also included will be discussion of conservation techniques, shelter design, fuels and nuclear power. Two hours of lecture, three hours of lab each week. Fall, three credits.

SOLAR DESIGN AND INSTALLATION . . .TEN 6558

This course covers practical approaches to the design of solar systems for the production of heat and electricity; optimum systems for different types of building structures and needs; and types of active solar components and methods. The course will include a brief overview of hybrid systems which combine conventional heating sources and systems with solar. Site-built and commercially manufactured solar components and systems will be compared. Students will be required to build working systems and models from designs. Three hours lecture and three hours lab each week. Fall, four credits.

PASSIVE SOLAR FUNDAMENTALSTEN 6559

In this study of solar technologies, students will deal with architectural treatments of existing structures including greenhouses; solariums; sun spaces; trombe walls; direct and indirect solar gain; and other solar options. Also covered will be calculation of expected heat input of various passive solar additions. Students will be required to design a home using passive solar applications. Three hours lecture each week. Fall, three credits.

SOLAR PROJECTTEN 6560

Prerequisites: TEN 6558 or TEN 6559. In this course on the design and construction of active and passive solar systems, students will work with professional equipment. The course will emphasize effective, practical solar designs and systems. Students will study in-field working active and passive solar applications; examine the solar system selection process; and weigh cost, design and materials in choosing the best system. Two hours of lecture and six hours of lab each week. Spring, four credits.

APPLICATION OF SOLARTEN 6563

This course covers various types of solar system applications. Topics include photovoltaic; solar heating and cooling; solar process heat; solar collectors and concentrators; and other solar energy conversions. Students will study residential, commercial, agri-

cultural and industrial uses for solar energy; examine case studies of many existing solar and alternate energy systems, and explore the identification of effective solar applications. Class meets three hours a week. Three credits.

SOLAR INTEGRATION AND CONTROL TEN 6564

Prerequisite: TEN 6541. Students will explore types of conventional heating and cooling devices that can be combined with solar and alternate energy applications; how solar systems can be used in lieu of standard energy products and methods; how to distribute the end product – heated water, cooled air and other mediums – where they are needed; overall system control; and advanced concepts on energy control and monitoring. Students will study how to develop energy system information and plan overall systems. Two hours of lecture and three hours of lab each week. Spring, three credits.

ENGINEERING

ENGINEERING GRAPHICS IEGR 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/lab meets six hours a week. Three credits.



ENGINEERING GRAPHICS IIEGR 2276

Study and application of detail and assembly drawings, dimensioning, auxiliary views, sectioning and developments. Emphasis on creative design processes and visualization. Class/lab meets six hours a week. Three credits.

TECHNICAL PHYSICS IEGR 7094

Prerequisite: MTH 5722. A study of selected topics in physics including motion, forces, energy, mechanical advantage, heat, friction, fluids and properties of matter. Two hours of lecture and three hours of lab each week. Three credits.

TECHNICAL PHYSICS II **EGR 9017**
Prerequisite: EGR 7094. Continuation of Technical Physics I. Subjects include momentum, wave motion, sound, light, atomic structure, static electricity and magnetism. Two hours of lecture and three hours of lab each 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.

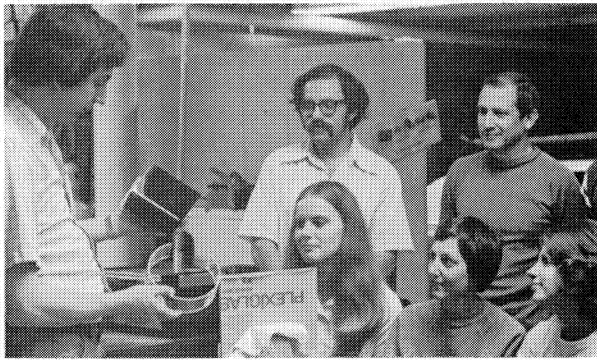
PROCESSES AND MATERIALS OF MANUFACTURING **EGR 4661**
 Basic principles and theory of production processes for metal and plastics. Class meets three hours a week. Three credits.

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

ENGINEERING LAND SURVEYING I . . . **EGR 3169**
Prerequisite or corequisite: MTH 2594 or MTH 7091. Basic applications of plane surveying procedures which include measurement of horizontal distances, directions, angles, leveling, traversing, curves, stadia and coordinates. Topographical, property and construction surveying. Field operations using equipment such as auto levels, theodolites and EDM. Class meets six hours a week. Three credits.

ENGINEERING ORIENTATION **EGR 7651**
 Introduction to several engineering disciplines, presentations and opportunities for discussions with professional engineers and representatives of engineering faculty of regional universities. Includes field trips, current transfer requirements and scholarship information. Class meets one hour a week. One credit.



ENGLISH

ENGLISH AS A SECOND LANGUAGE . . . **CEN 5576**
 Introduction to written communication for those whose native language is not English. Emphasis on grammar, sentence structure, organization, idiomatic usage, spelling and vocabulary necessary to clear written and spoken communication. Class meets three hours a week. Three credits.

FUNDAMENTALS OF ENGLISH **CEN 2651**
 Basics of standard edited (written) English with emphasis on grammar, usage and sentence structure leading to clear, correct composition. Class meets three hours a week. Three credits.

INTRODUCTION TO WRITING **CEN 1000**
 Beginning with a review of basic sentence skills, the course focuses on paragraph development, including subject selection, topic sentences, methods of development, transitional devices and conclusions. The last part of the course will focus on developing the multi-paragraph essay. Class meets three hours a week. Three credits.

COMPOSITION I **CEN 7612**
 An introduction to writing focusing on invention, 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.

COMPOSITION II CEN 5732

Prerequisite: CEN 7612. 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.

ADVANCED COMPOSITION CEN 5577

Prerequisite: CEN 5732. Practice in effective writing for students who wish to continue their study beyond the two semesters of Composition 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 CEN 5578

Prerequisite: CEN 7612. Emphasizes various methods of written communication relevant to manufacturing and engineering, including short reports, letters and resumes. Class meets three hours a week. Three credits.

CREATIVE WRITING CEN 5579

Prerequisite: CEN 5732. 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 CEN 5580

Prerequisite: CEN 5579. Advanced practice in writing the short story, novel, essay, article, play and 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.

INTRODUCTION TO FICTION CEN 3898

Prerequisite: CEN 5732. Introduction to fiction from different countries and eras, emphasizing fictional techniques and themes in selected novels and short stories. Students will read, discuss and write about the assigned fiction. Class meets three hours a week. Three credits.

POETRY AND DRAMA CEN 5581

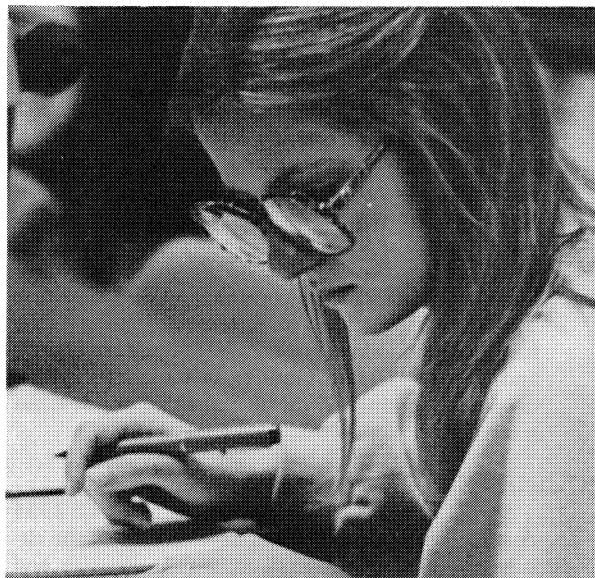
Prerequisite: CEN 5732. Introduction to poetry and drama for insight and appreciation. Selected plays and poetry of all types and styles will be read. Related writing assignments. Class meets three hours a week. Three credits.

AMERICAN WRITERS CEN 5582

Prerequisite: CEN 5732. 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 and their art. Class meets three hours a week. Three credits.

WORLD MASTERPIECES CEN 5583

Prerequisite: CEN 5732. 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.



MASTERPIECES OF THE CINEMA CEN 5584

Prerequisite: CEN 5732. Major American and foreign films are shown in class and discussed. Group presentations and written film critiques are required. Additional video and short-shorts are used for variety and interest. Related reading assignments. Class meets for three hours one day each week. Three credits.

THE LITERATURE OF SCIENCE FICTION

. CEN 5585

Prerequisite: CEN 5732. The various themes and myths of major science fiction writers are presented. Group presentations, simulations and guest speakers are included. Major science fiction movies and short subjects are viewed. Related reading and writing assignments. Class meets three hours a week. Three credits.

CHILDREN'S LITERATURE CEN 5586

An exploration and analysis of what is best in children's literature both past and present. Emphasis on children's needs, criteria used in selecting books for children and the types of children's literature, and a study of the best authors and illustrators of children's books. Class meets three hours a week. Three credits.

ADOLESCENT LITERATURE CEN 5587

An explanation and analysis of the most representative books in adolescent literature. Emphasis on needs and interests of young adults (ages 10-14), criteria in selecting books for them, current issues in books for adolescents and various themes and styles of these selections. Class meets three hours a week. Three 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, lounging, 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.



BEGINNING HUNT SEAT EQUITATION SES 1880

An introduction to Hunt Seat 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 HUNT SEAT EQUITATION

. SES 4140
A continuation of *Beginning Hunt Seat Equitation* with emphasis on development of intermediate skill level in riding and showing. Class meets four hours a week. Two credits.



ADVANCED HUNT SEAT EQUITATION . SES 3762

A continuation of Intermediate Hunt Seat 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
Prerequisite: SES 1395. A continuation of Western Equitation with emphasis on development of intermediate skill level in riding and showing. Class meets four hours a week. Two credits.

ADVANCED WESTERN EQUITATION . . . SES 2430

Prerequisite: SES 4139. A continuation of Western Equitation with emphasis on development of advanced skill level in riding and showing. Four hours of riding a week in a sixteen week term or eight hours a week in an eight week term. 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 horse shows. 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 meets five hours a week. Four credits.

EQUINE HEALTH, DISEASE AND DISORDERS

SES 3820
Prerequisite: SES 2335. 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
Prerequisite: SES 1880. 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.

INTERMEDIATE DRESSAGE

SES 3644
Prerequisite: SES 4141. A continuation of basic dressage with emphasis on calmness and obedience. 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. 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.

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.

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 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.

TEXTILES BFM 1195

Natural and synthetic textile fibers, weaves, knits, dyeing and printing methods. Emphasis on selling techniques, care and use of textiles. 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 emphasize a 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 3863

Prerequisite: Admission to the Fashion Merchandising Program. Work experience in an approved training situation under instructional supervision. The study of how people can work effectively in groups to satisfy both organizational goals and personal needs. From both the managerial and worker's point of view good human relations are necessary if people are to achieve economic, social and psychological satisfaction from the work they do. Class meets two hours a week with a minimum of fifteen hours a week on-the-job training by arrangement. Fall, two or three credits.

FASHION SEMINAR: SUPERVISORY

DEVELOPMENT BFM 3865

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, two or three credits.

FASHION SEMINAR: CAREER OPTIONS

. BFM 3864

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, two or three credits.

FASHION SEMINAR: MARKET RESEARCH

. BFM 3862

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, two or three credits.

HISTORY OF DRESS BFM 2568

Historical evolution of dress in the Western World from Egypt to today. 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 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. 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.



FIRE PROTECTION AND PUBLIC SAFETY

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.

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.

FIRE PHOTOGRAPHYEFS 4089

An introduction to basic photography as it relates to the fire service. This course deals with the types of camera equipment used in the fire service. The course demonstrates how photography can be used in relation to the fire department goals and objectives. Class meets three hours a week. Three credits.

FIRE INVESTIGATIONEFS 1529

The emphasis in this course is on the skills needed to determine the cause of a fire. This course does not deal with arson investigation, except as it relates to determining the cause. Class meets three hours a week. Three credits.

ARSON INVESTIGATIONEFS 1527

Prerequisites: EFS 4089 and EFS 1529. Arson investigation techniques and procedures will be covered in this course. Topics include evidence preservation, interviewing and interrogation and courtroom procedures. Class meets three hours a week. Three credits.

LIFE SAFETY CODESEFS 1528

Find out how to read and interpret codes and ordinances in this course. Emphasis will be on the Life Safety Codes which are used extensively in fire prevention. Class meets three hours a week. Three credits.

EXTINGUISHING, DETECTION AND ALARM SYSTEMSEFS 1525

This course introduces the types of extinguishing, detection and alarm systems and how they operate. Class meets three hours a week. Three credits.

FIRE SCIENCE LAWEFS 1526

The fire department—like any other business—is affected by the law. This course explores the law as it pertains to fire service. Topics include tort law and business law. Class meets three hours a week. Three credits.

EMERGENCY MANAGEMENT OPERATIONSEFS 1524

This course covers planning for disaster control, disaster management, communications for disaster management and types of disasters. Class meets three hours a week. Three credits.

INTRODUCTION TO FIRE SCIENCEEFS 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.

FIRE HYDRAULICSEFS 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 LABORATORYEFS 2577

Prerequisite: EFS 1748 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 APPARATUS AND EQUIPMENTEFS 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 TACTICS AND STRATEGYEFS 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.

RESCUE PRACTICESEFS 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.

RESCUE PRACTICES LABORATORYEFS 4481

Prerequisite: EFS 6755 or concurrent enrollment. Practical application of rescue theories and techniques. Includes auto extrication, repeling and CPR. Class meets three hours a week. One credit.



SPRINKLER AND STANDPIPE SYSTEMS . EFS 1523

This course concentrates on sprinkler and standpipe systems used in fire protection. Emphasis is on the types of sprinkler and standpipe systems and how to operate them. Class meets three hours a week. Three credits.

HAZARDOUS MATERIALS EFS 1531

Prerequisite: NPS 6634. Here is information on how to recognize hazardous materials and how to manage incidents involving hazardous materials. Topics include explosives, radioactive material, flammables and compressed gases as well as transporting hazardous materials. Class meets three hours a week. Three credits.

ESSENTIALS OF FIRE FIGHTING EFS 7981

This course offers instruction in the skills required for basic firefighting. Focus is on the theory of fire protection and on identifying and using equipment safely. Three hours of lab and three hours of lecture each week. Four credits.

FIRE VEHICLE MAINTENANCE FOR OPERATORS AND MECHANICS EFS 4256

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 one hour a week. One credit.

FIRE SERVICE COMMUNICATIONS SYSTEMS EFS 4245

An introduction to the basic fire alarm operator's area of specialized knowledge, duties and performance objectives. A general course on the functioning of the alarm office, the laws relating to the alarm office, and communication procedures. The course is for operators and potential operators. Class meets three hours a week for five weeks. One credit.

FIRE SERVICE RECORDS AND REPORTS EFS 4250

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 one hour a week. One credit.

MUNICIPAL FIRE ADMINISTRATION . . EFS 1532

This course covers techniques and methods used in managing a fire department. Topics include the budget process, fire department administrative functions and types of political systems which affect a fire department. Class meets three hours a week. Three credits.

FOREIGN LANGUAGE

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. One half-hour lab session a week also required. Five credits.

ELEMENTARY GERMAN II CFL 6207

Prerequisite: CFL 3196 or one year of high school German. Continuation of Elementary German I, completing the presentation of the sounds, vocabulary and basic structural patterns of beginning German with further practice and development of listening comprehension, speaking, reading and writing skills. Class meets five hours a week. One half-hour lab session a week also required. 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. One half-hour lab session a week also required. 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 with some additional practice in listening, speaking and writing. Class meets three hours a week. One half-hour lab session a week also required. 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. Class meets five hours a week. One half-hour lab session a week also required. Five credits.

ELEMENTARY FRENCH II CFL 2293

Prerequisite: CFL 4570 or one year of high school French. Continuation of Elementary French I with graded reading selections to be used as the basis for conversation. One half-hour lab session a week also required. 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. Emphasis placed on conversation and composition in French. A grammar review of level I and II also is integrated into the course. Class meets three hours a week. One half-hour lab session a week also required. Three credits.

ADVANCED FRENCH CFL 5574

Prerequisite: CFL 1442 or three years of high school French.
Continuation of 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. One half-hour lab session a week also required. Three credits.

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. One half-hour lab session a week also required. Five credits.

ELEMENTARY SPANISH II CFL 1239

Prerequisite: CFL 3285 or one year of high school Spanish.
Continuation of Elementary Spanish I. Graded reading selections added as basis for conversation and composition in the discussion periods. Class meets five hours a week. One half-hour lab session a week also required. 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. One half-hour lab session a week also required. Three credits.

ADVANCED SPANISH CFL 6626

Prerequisite: CFL 7221 or three years of high school Spanish.
Continuation of Intermediate Spanish with extensive study of Hispanic literature. Advanced reading. Grammar review continues. Class meets three hours a week. One half-hour lab session a week also required. Three credits.

BEGINNING CHINESE CFL 2646

Introduction to the Chinese language known as "The Common Speech" as spoken natively in the Peking area. A self-instructional program with tapes, texts and tutors. Class meets by arrangement. 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. A self-instructional program with tapes, texts and tutors. Class meets by arrangement. Five credits.

HEARING IMPAIRED

BASIC MANUAL COMMUNICATIONS AHP 7029

Basic American Sign Language (ASL) used to communicate with deaf adults is taught. Subject material based on developing eye strength and body language skills for basic ASL communication. Class meets three hours a week. Three credits.

LAB FOR BASIC MANUAL COMMUNICATIONS

. AHP 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

. AHP 4488

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

BASIC ENGLISH FOR HEARING IMPAIRED PERSONS (HIP) AHP 6083

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 AHP 6084

Prerequisite: AHP 6083. Continuation of AHP 6083. 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 AHP 6085

Prerequisite: AHP 6084. Practice in expression through written compositions. Emphasis on organization, clarity of expression and style. Class meets five hours a week. Three credits.



ADJUSTMENTS INTO ADULT LIVING (HIP) AHP 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.

SPEECH THERAPY AHP 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.

FUNDAMENTALS OF MATH (HIP) MTH 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.

DEVELOPMENTAL READING FOR THE HEARING IMPAIRED CLC 4609

These small group sessions are designed to help the hearing impaired student develop reading skills. The course 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 credits.

DEVELOPMENTAL READING II CLC 4626

Group sessions to help continue the development of reading skills and vocabulary through the use of selected readings, Line 21 decoder and discussion.

HOME ECONOMICS

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 areas will be studied. New trends and ideas in housing materials and equipment will be observed by field trips and demonstrations. Class meets three hours a week. Three credits.

HOME MANAGEMENT BLH 7004

Emphasis will be on a systems approach to management particularly as it relates to the dual-career family. Goal setting, planning and decision-making skills will be applied to individuals and families. Techniques will be developed concerning managing time, energy and money which will promote efficiency in home management tasks. Class meets three hours a week. Three credits.

NUTRITION AND MEAL PLANNING . . BLH 2859

Study of food and nutrition as it applies to personal and family living. Emphasis on the basic food groups and their use in meal planning as well as the functions and sources of each nutrient. Students will evaluate their diets. Consideration will be given to current trends in eating patterns, diet and exercise, fad diets 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. Strategies are developed for coping with stressful situations. The adult and family life cycle will be explored as a means of analyzing change. Current issues facing the family such as violence, drugs and divorce will be surveyed. Class meets three hours a week. Three credits.

HOSPITALITY MANAGEMENT

HOSPITALITY MANAGEMENT FUNDAMENTALSBHM 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.

BASIC FOOD PREPARATIONBHM 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.

SUPERVISORY MANAGEMENTBHM 4489

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

FOOD MANAGEMENTBHM 3006

Prerequisite: BHM 7028 and admission to the Hospitality Management Program. Menu planning and meal service for all phases of food service and 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 promotion and competitiveness studies. Class meets five hours a week. Three credits.

HOTEL-MOTEL OPERATIONSBHM 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.

DESIGN TECHNIQUESBHM 3903

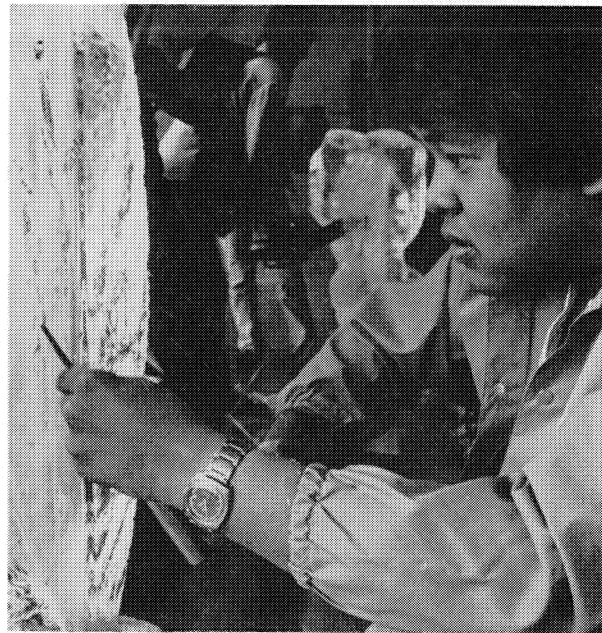
Prerequisite: BHM 7028 and BHM 1287. A course in which food service design is studied in detail in relation to the menu, the location and the type of clientele expected. Layout, design and equipment specification will be included. Class meets three hours a week. Three credits.

FOOD SPECIALTIES—GARDE-MANGERBHM 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.

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.



ADVANCED HOSPITALITY MANAGEMENTBHM 1388

Prerequisites: BHM 4489, 4592, 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.

HOSPITALITY LAWBHM 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. Two credits.

FUNDAMENTALS OF BAKINGBHM 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.

**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 IN BEVERAGE CONTROL . . . BHM 4594
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, internal control systems as well as local and state alcoholic beverage control laws. Class meets two hours a week. Two or three credits.

**SEMINAR IN HOSPITALITY MANAGEMENT:
PURCHASING BHM 4593**
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. Two or three credits.

**SEMINAR IN HOSPITALITY MANAGEMENT:
ACCOUNTING BHM 4592**
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. Two or three credits.

**SEMINAR IN MENU PLANNING AND SALES
PROMOTION BHM 4591**
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. Two or 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. Two credits.

CULINARY ARTS PRACTICUM II BHM 4941
Prerequisite: BHM 2913. A continuation of Culinary Arts Practicum I. Two credits.

CULINARY ARTS PRACTICUM III BHM 5942
Prerequisite: BHM 4941. A continuation of Culinary Arts Practicum II. Two credits.

CULINARY ARTS PRACTICUM IV BHM 7943
Prerequisite: BHM 5942. A continuation of Culinary Arts Practicum III. Two credits.

CULINARY ARTS PRACTICUM V BHM 6944
Prerequisite: BHM 7943. A continuation of Culinary Arts Practicum IV. Two credits.

CULINARY ARTS PRACTICUM VI BHM 9945
Prerequisite: BHM 6944. A continuation of Culinary Arts Practicum V. Two 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 also is 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.

PHILOSOPHY OF RELIGIONHUM 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.

HISTORY OF ANCIENT PHILOSOPHY HUM 5966

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

LOGICHUM 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.

ETHICSHUM 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.

ETHICAL ISSUES IN AMERICAN HEALTH CAREHUM 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. Class meets one hour a week. One credit.

INTERIOR MERCHANDISING

INTERIOR DESIGN IBFM 5149

A basic course in interior design emphasizing the elements and principles of design, color and color theory, as well as practical application of materials used in today's home. Class meets three hours a week. Three credits.

INTERIOR DESIGN IIBFM 2925

Prerequisite: BFM 5149. 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.

INTERIOR PRODUCTSBIM 2561

Comprehensive study of materials used for interiors, their characteristics, application and availability. This product information will offer competencies for employment in the interior products industry and practical home use. Areas covered will include floor, wall and window coverings, and furniture. New trends and ideas in housing will be observed through field trips and demonstrations. Class meets three hours a week. Three credits.



SPACE PLANNINGBIM 4035

A series of practical problems designed to develop a sense of utilization of interior space from a functional and psychological point of view. Interpretation of architectural floor plans, symbols and use of templates. Perspectives and lettering will be included. Three credits.

HISTORY OF INTERIOR DESIGNBIM 3032

A chronological study of furniture and interiors with specific information in the areas of materials, construction, motifs, colors and contributing influences. Emphasis on current interpretations of historical styles within today's home. Class meets three hours a week. Three credits.

INTERIOR MERCHANDISING SEMINAR: PRACTICES AND PROCEDURES . . BIM 6602

Work experience in an approved training situation under instructional supervision. Study of various types of interior product business formations, contracts, papers and procedures necessary for effective business management. Discussion of job opportunities and business ethics. Class meets two hours a week with a minimum of fifteen hours a week on-the-job training by arrangement. Two or three credits.

INTERIOR MERCHANDISING SEMINAR: BUDGET AND ESTIMATING BIM 5021

Work experience in an approved training situation under instructional supervision. Projects done in residential and commercial jobs that will require specification writing and cost control. Emphasis on accurate measurement of materials and figuring actual costs. Class meets two hours a week with a minimum of fifteen hours a week on-the-job training. Two or three credits.

INTERPRETER TRAINING

ELEMENTARY AMERICAN SIGN LANGUAGE

(ASL) AIT 4687
Extensive exposure to ASL allowing the development of beginning communication skills used with deaf persons. Emphasis on comprehension skills, as well as linguistic features of the language taught in context. Five hours of lecture, six hours of lab a week. Eight credits.

INTERMEDIATE AMERICAN SIGN LANGUAGE (ASL) AIT 4688

Prerequisite: AIT 4687. Intensive exposure to ASL allowing the continued development of intermediate level communication skills used with deaf persons. Emphasis on comprehension and production skills. Linguistic and cultural features will be presented in the context of language learning experiences. Five hours of lecture, four hours of lab a week. Seven credits.

ADVANCED AMERICAN SIGN LANGUAGE I AIT 4689

Prerequisite: AIT 4688. Continued exposure to ASL allowing greater development of ASL communication skills. Emphasis on comprehension and production skills. Linguistic and cultural features will be presented in the context of language learning experiences. Three hours of lecture, four hours of lab a week. Five credits.

ADVANCED AMERICAN SIGN LANGUAGE II AIT 4694

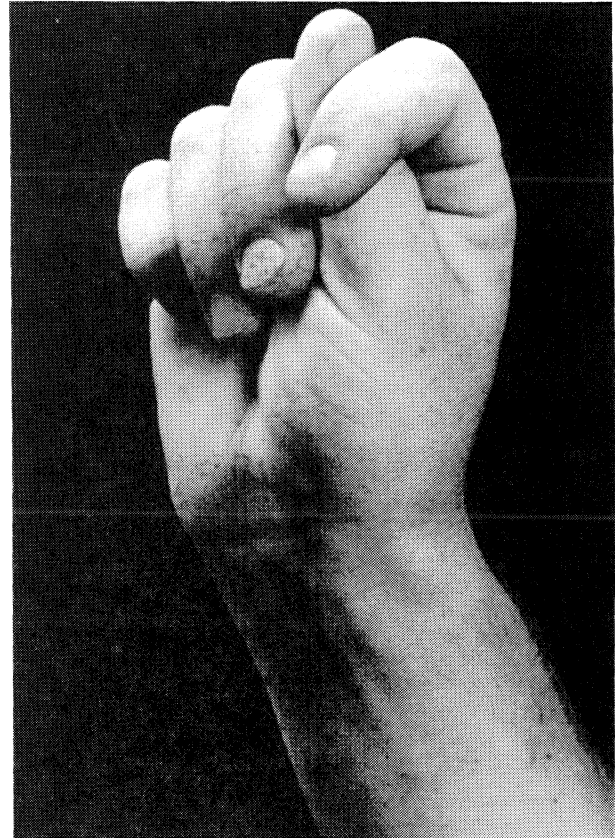
Prerequisite: AIT 4689. Continued exposure to ASL allowing greater development of ASL communication skills. Emphasis on comprehension and production skills. Linguistic and cultural features will be presented in the context of language learning experiences. Three hours of lecture a week. Three credits.

ADVANCED AMERICAN SIGN LANGUAGE III AIT 4699

Prerequisite: AIT 4694. Continued exposure to ASL allowing greater development of ASL communication skills. Emphasis on comprehension and production skills. Linguistic and cultural features will be presented in the context of language learning experiences. One hour of lecture a week. One credit.

THEORY OF AMERICAN SIGN LANGUAGE AIT 4698

Prerequisite: AIT 4688. A course to examine the structural and grammatical principles of ASL. An introductory study of the linguistic and semiotic problems of equivalency in English and American Sign Language. By incorporating linguistic information into the text analysis process, quality interpretation of English and ASL should result. Three hours of lecture a week. Three credits.



FINGERSPELLING I AIT 4690

This course will develop beginning expressive and receptive fingerspelling skills based on word and phrase recognition principles. Two hours of lecture, three hours of lab a week. Three credits.

FINGERSPELLING II AIT 4695

Prerequisite: AIT 4690. This course will continue the development of expressive and receptive fingerspelling skills based on word and phrase recognition principles. One hour of lecture and one hour of lab a week. One credit.

SIGN SYSTEMS AND SPECIALIZED SIGN VOCABULARY AIT 4696

Prerequisite: AIT 4689. An introduction to various sign systems such as Manually Coded English and Pidgeon Sign English. English and sign vocabulary development for specialized interpreter settings: medical, legal and educational. Three hours of lecture and one hour of lab a week. Three credits.

NON-VERBAL COMMUNICATION AS A SIGN LANGUAGE BASE AIT 4686

Sequenced series of readiness activities designed to help the student develop skills in communicating without words, utilizing the vital elements of expressive communication (facial expression, body language, pantomime and gesture), and the vital elements of receptive communication (face reading, body reading and eye training). Three hours of lecture a week. Three credits.

ORIENTATION TO INTERPRETING AIT 4691

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

UNDERSTANDING DEAFNESS AIT 5169

This course focuses on the study of the deaf culture; the problems faced by the deaf; understanding the impact of being deaf; a cursory study of the hearing system; and audiological terminology. Three hours of lecture a week. Three credits.

INTERPRETING I AIT 5170

Prerequisite: AIT 4689 and AIT 4691. Introduction to interpreting principles with emphasis on English-to-ASL and ASL-to-English skills development in sequential drills and practical application. Class meets three hours a week. Three credits.

INTERPRETING II AIT 5171

Prerequisites: AIT 5170. Advanced course with concentration on voice and expressive ASL interpreting skills interfaced to simulate actual employment situations. Class meets three hours a week. Three credits.

INTERPRETERS & PHYSICAL "BURN OUT" AIT 4073

Discussion of the mental and physical stress caused by interpreting. Therapeutic exercises to prevent negative physical effects. Class meets one hour a week. One credit.

INTERPRETING PRACTICUM AIT 5172

Prerequisite: Concurrent enrollment in AIT 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.



INTERPRETING TECHNIQUES AIT 4705

Course is intended to upgrade interpreting/transliterating skills of persons with advanced ASL and signed English skills. Analysis of English sentences and transposition required for ASL interpretation will be emphasized. Class meets three hours a week. Three credits.

JOURNALISM

MASS MEDIA AND SOCIETY CJO 4161

Survey designed to emphasize the content, structure, persuasive influence, responsibilities and problems of mass communication. The focus will be on television, radio, newspapers, magazines, public relations and advertising. Class meets three hours a week. Three credits.

NEWS REPORTING I CJO 3901

Prerequisite: Basic typing skills or concurrent enrollment in BSC 1263. Basic news writing and news style principles emphasized. Interviewing techniques developed. Practical application gained as students write stories for the campus newspaper. Class meets three hours a week. Three credits.

NEWS REPORTING II CJO 3902

Prerequisite: Beginning Typing or equivalent and CJO 3901. An evaluation of how various news is gathered, written and published. Specialized reporting techniques are studied. Practical experience gained as students write stories for 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

Principles of advertising copywriting with practice in developing copy for a variety of products. Each class member prepares an advertising campaign. Class meets three hours a week. Three credits.

JOURNALISM FIELD STUDY I CJO 7464

Prerequisite: By permission of division director. 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 of division director. 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 of division director. 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.

LEARNING CENTER

JOB SEARCH SKILLSCLC 1300

The techniques and procedures for getting a job are described in this course. How to write a job application, develop a resume and interview for a job are covered in lecture, assignments and role playing. Upon completion of the course, the student will have a personal resume and experience in completing a job application and in interviewing from the employer's and employee's viewpoint. One credit.



STUDY SKILLS MINI COURSECLC 4608

Small group sessions to help develop study skills in test taking; taking notes and using a 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 lab. Class meets one hour each week. One credit.

STUDY SKILLSCLC 4611

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.

ENGLISH GRAMMAR REVIEWCLC 4612

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.

SPELLING IMPROVEMENTCLC 4613

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

INTRODUCTION TO READINGCLC 4601

A structured reading class aimed at developing literal and critical reading comprehension skills and application of these skills in academic areas. Class meets three hours a week. Three credits.

READING COMPREHENSIONCLC 4614

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 RATECLC 4615

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.

DEVELOPMENTAL READING IICLC 4626

Prerequisite: CLC 4609. Group sessions held in this course are designed to enable the hearing impaired student to continue to develop reading skills. Emphasis is on reading, comprehension and vocabulary development through the use of selected readings, Lind 21 decoder, discussion and vocabulary building. Class meets three hours a week. Three credits.

VOCABULARY DEVELOPMENTCLC 4616

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 REVIEWCLC 4617

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.



ALGEBRA PREPARATIONCLC 4618

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 PREPARATIONCLC 4619

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.

INDIVIDUALIZED STUDYCLC 4620

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 their own pace and level on self-motivating materials and projects. Areas of study include grammar, spelling, vocabulary, reading rate/comprehension, study skills, mathematics, algebra and chemistry. Three credits.

INDIVIDUALIZED STUDYCLC 4621

Two credits.

INDIVIDUALIZED STUDYCLC 4622

One credit.

LIFE SCIENCE

LIFE SCIENCENLS 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.

PRINCIPLES OF BIOLOGYNLS 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 three hours a week. Three credits.

PRINCIPLES OF BIOLOGY LABNLS 5091

Corequisite: NLS 5020 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 BOTANYNLS 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 ZOOLOGYNLS 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 adaption. Three hours of lecture and four hours of lab each week. Five credits.

GENERAL GENETICSNLS 4248

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

MICROBIOLOGYNLS 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 LABORATORYNLS 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 AND 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 ANATOMYNLS 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 PHYSIOLOGYNLS 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. Four credits.

PATHOPHYSIOLOGYNLS 1037

An introduction to the physiology of disease. Common disorders of the body, from the cellular level to the systemic levels are studied. Included are causes, symptoms, diagnostic tests, treatment and therapies of disease. Class meets three hours a week. Three credits.

GENERAL PHARMACOLOGYNLS 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 NUTRITIONNLS 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 SCIENCENLS 6719

An ecological approach to the study of man's impact on the environment. Topics include population, air and water pollution, land use and energy. Class meets three hours a week. Three credits.

ENVIRONMENTAL SCIENCE LABNLS 4720

Corequisite: NLS 6719. Laboratory work involves sampling the local environment for various types of air, water and noise pollution. Field trips include visiting a local industry, a water treatment plant and a sewage treatment plant to observe pollution control. Class meets two hours a week. In addition, up to five field trips will be required. One credit.

URBAN BOTANYNLS 4026

Basic principles of landscape design, propagation and culture of common house plants, landscape materials, turf, flowers, trees and shrubs. Three credits.

SPECIAL TOPICS IN BIOLOGY:

SOUTHWESTERN FIELD COURSE . NLS 4914

Course is designed to provide students with natural science field experiences illustrating fundamental concepts and principles in the ideal setting of the southwestern United States. Basic biological concepts which can best be learned through first-hand experiences will be examined. Class meets 22 days in the field. Four credits.

MARKETING MANAGEMENT

RETAILINGBMM 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.

SALESMANSHIPBMM 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 SELLINGBMM 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. 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:

MANAGEMENT DECISION MAKING

.BMM 3874

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, two or three credits.

MARKETING AND MANAGEMENT SEMINAR:

ORGANIZATION AND OPERATION

.BMM 3877

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, two or three credits.

MARKETING AND MANAGEMENT SEMINAR:

MANAGEMENTBMM 3873

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, two or three credits.

**MARKETING AND MANAGEMENT SEMINAR:
MARKETING RESEARCH BMM 3875**
Prerequisite: Admission to the Marketing and Management 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, two or three credits.

**MARKETING AND MANAGEMENT SEMINAR:
FINANCIAL ANALYSIS BMM 3876**
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, two or three credits.



MATHEMATICS

FUNDAMENTALS OF MATH MTH 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 ALGEBRA MTH 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.

ALGEBRA MTH 6079
Prerequisite: MTH 3001 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.

GEOMETRY MTH 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.

FINITE MATHEMATICS MTH 2642
Prerequisite: MTH 7246 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.

INTERMEDIATE ALGEBRA MTH 3001
Prerequisite: MTH 7246 or one year of high school algebra and geometry. Polynomials, rational expressions, radicals, equations and inequalities, graphing, relations, functions and systems of equations. Class meets three hours a week. Three credits.

COLLEGE ALGEBRA MTH 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.

TRIGONOMETRY MTH 2594
Prerequisite: MTH 6079 or concurrent enrollment in MTH 3427. 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.

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. Students must complete Calculus I and Trigonometry before taking Calculus II. Class meets three hours a week. Three credits.

CALCULUS II MTH 5329
Prerequisites: MTH 6463 and MTH 2594. The second course of a two-semester sequence in calculus. Techniques of integration, differential equations and func-

tions of several variables with applications in business, statistics, biology and the social sciences. Class meets three hours a week. Three credits.

ANALYTIC GEOMETRY – CALCULUS I MTH 3268

Prerequisite: MTH 3427 or MTH 6079 and concurrent enrollment in MTH 2594. The first course of a three-semester sequence in analytic geometry and calculus. Elements of plane analytic geometry, differentiation and integration of algebraic functions with applications of each. Class meets five hours a week. Five credits.

ANALYTIC GEOMETRY – CALCULUS II MTH 4313

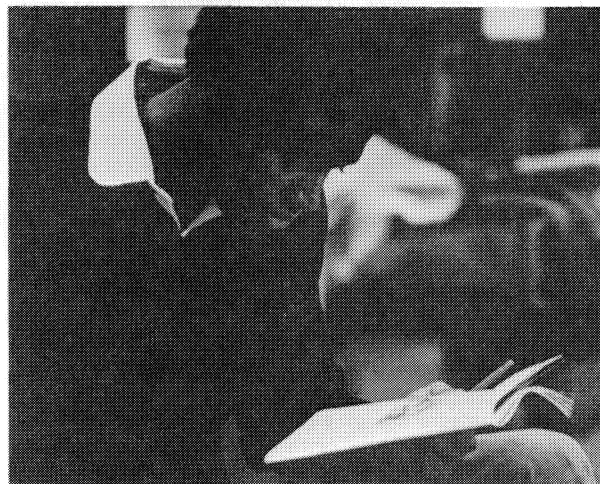
Prerequisite: MTH 3268 or equivalent. The second course of a three-semester sequence in analytic geometry and calculus. Riemann integral, differentiation and integration of transcendental functions, techniques of integration, polar coordinates and applications. Class meets five hours a week. Five credits.

ANALYTIC GEOMETRY – CALCULUS III MTH 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 EQUATIONS MTH 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.



STATISTICS MTH 2084

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



MODERNIZED METRIC SYSTEM MTH 3609

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

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.

TECHNICAL MATHEMATICS I MTH 5722

Prerequisite: MTH 2122 or arithmetic proficiency test in Testing Center. International Standard mensuration; percent, proportion, linear equations and graphs; formulation, trigonometry of right triangles. Emphasis on technological applications from industry. Class meets three hours a week. Three credits.

TECHNICAL MATHEMATICS II MTH 5387

Prerequisite: MTH 5722 or equivalent. Plane and solid geometry quantification; quadratic equations and graphs; trigonometric functions and laws; vectors and complex numbers; exponential and logarithmic equations and graphs; layperson's statistics and financial mathematics. Class meets five hours a week. Five credits.

COMPUTER-ASSISTED LEARNING: BASIC MTH 8304

The computer will progressively instruct the student in BASIC using a conversational approach. Standard instruction set in BASIC as well as Apple's sound and graphics capabilities will be included. Emphasis is on how BASIC commands, statements and other features work together to form programs. Two to three hours a week on the computer suggested. By arrangement. One credit.

MEDICAL LABORATORY TECHNOLOGY

DIAGNOSTIC PARASITOLOGY AND MYCOLOGYNLT 9759

Prerequisites: Completion of first year of the MLT program or completion of NLS 5593 and NLS 6057. 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 integrated closely with the specific disease process and treatment. Class meets one hour a week. One credit.

INTRODUCTION TO THE CLINICAL LABNLT 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 PROCEDURESNLT 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 MICROBIOLOGYNLT 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 and will correlate this with findings in various disease states. Class meets three hours a week. Three credits.

CLINICAL PRACTICUM INLT 9763

Prerequisite: Satisfactory completion of the first year of the MLT program or consent of the instructor. In a clinical setting, the student will observe, practice and perform laboratory procedures under the supervision of

clinical instructors. The student should be able to integrate didactic knowledge with clinical experience. Class meets 35 hours a week. Five credits.

CLINICAL PRACTICUM IINLT 9766

Prerequisite: NLT 9763. The student will observe, practice and apply techniques of hematology and clinical chemistry, both manual and automated. Class meets 35 hours a week. Ten credits.

CLINICAL PRACTICUM IIINLT 9769

Prerequisite: NLT 9766. The student will observe, practice and apply techniques of applied immunology, urinalysis and the other specialty areas of the clinical laboratory. Class meets 35 hours a week. Ten credits.

CLINICAL CHEMISTRYNLT 9764

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

HEMATOLOGYNLT 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.

DEPARTMENTAL SEMINARNLT 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 IMMUNOLOGYNLT 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.

PHLEBOTOMY COLLOQUIANLT 4173

Prerequisite: Consent of the instructor. Students will study phlebotomy with emphasis on practical applications of all modalities used in a clinical setting. Six credits.

MEDICAL RECORDS TECHNOLOGY

INTRO. TO THE MEDICAL RECORD PROFESSIONNMR 1135

Prerequisite: Admission to program. 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 STATISTICS AND RESEARCH METHODSNMR 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.

HEALTH RECORD SYSTEMS: ANALYSIS AND CONTROLSNMR 2681
Prerequisite: NMR 1135 or by permission of coordinator. 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 four hours a week. Three credits.

CLASSIFICATIONS, NOMENCLATURES, INDICES AND REGISTRIESNMR 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 SYSTEMSNMR 2683
Prerequisite: NMR 2682 or by permission of coordinator. 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 RECORDSNMR 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.

DIRECTED PRACTICE INMR 7111
Prerequisites: NMR 1135, 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 IINMR 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 IIINMR 3117
Prerequisite: NMR 2683, NMR 1325. *Corequisite:* NMR 2684. 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 SEMINARNMR 2345
Prerequisite: NMR 2683. *Corequisite:* NMR 3117. 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 two hours a week. Two credits.



MEDICAL TERMINOLOGY

MEDICAL TERMINOLOGY INS 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 IINS 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 IIINS 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 IVNS 2686
Prerequisite: NMR 1135 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.

MEDICAL TRANSCRIPTION

MEDICAL TRANSCRIPTION PRACTICUMNMT 3413

Prerequisite: BSC 4715, NS 2686, NMR 2681 or by permission of coordinator. Supervised work experience in medical transcription. Typing medical reports dictated by physicians from transcriber equipment. Previously acquired knowledge and skills are applied and enhanced by this job related experience. Hours by arrangement. Four credits.

MENTAL HEALTH TECHNOLOGY

MENTAL HEALTH TECHNOLOGY I . . NMH 8881

Prerequisite: Admission to the program. 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

Prerequisite: 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

Prerequisite: 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

Prerequisite: NMH 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.

METAL FABRICATION

INTRODUCTION TO METAL FABRICATIONTMF 8025

Students will have the opportunity to learn basic welding procedures, sheet metal work and other metal

trades and how they interrelate to other technologies. A study of safety in the use and handling of material as well as its relationship and compatibility with other materials used in industry. Students will review various finish methods and applications. One hour of lecture, six hours of lab each week. Three credits.

INTRODUCTION TO METALLURGY . . TMF 8017

In this course about the art of metallurgy, focus is on deriving metals from ores; conditions in which metals are found in nature; the purification process; the admixture with other metals; the environmental impact; and manufacturing metals into usable shapes and forms. The class will review the theory of heat treatment in the fundamental processes and concentrate on transforming theory into application in the fabrication processes. Two hours of lecture, three hours of lab each week. Three credits.

TESTING AND INSPECTION TMF 8016

This course is designed to acquaint students with the use of materials in technology. The course deals with materials; various applications; and how the materials perform under different load conditions and environmental characteristics. Also studied will be the size and shape of good designs; precision tool measurement; safety practices; and testing methods and procedures for various materials. One hour of lecture, six hours of lab each week. Three credits.

INTRODUCTION TO WELDING TMF 8031

A beginning course in oxy-fuel cutting, oxy-fuel welding and brazing, and shielded metal arc welding (SMAW). The SMAW portion will cover all positions but will be limited to fillet welds. All welds will be tested according to industry standards. Six hours lecture/lab a week. Three credits.



MIG AND TIG I TMF 8019

Prerequisite: TMF 8031. The theory of gas metal arc welding (GMAW) and gas tungsten arc welding (GTAW), also known as MIG and TIG, GTAW on mild steel, GTAW on aluminum and GMAW on steel are covered in this course. Application of processes include the use of welding symbols, blueprint reading and testing of welds. Six hours lecture/lab a week. Three credits.

MIG AND TIG II **TMF 8020**
Prerequisite: TMF 8019. Course includes a review of the theory of GMAW and GTAW, GTAW on stainless steel, flux corded arc welding (FCAW) on steel, GMAW on aluminum and GMAW on steel. Six hours lecture/lab a week. Three credits.

V-BUTT ARC WELDING **TMF 8021**
Prerequisite: TMF 8031. Course includes the theory and practice of out-of-position oxy-fuel welding; oxy-fuel brazing; shielded metal arc welding (SMAW) of v-butt plate in five positions; basic air-arc cutting and gouging; and certification requirements with root and face bend tests being performed according to industry standards. Six hours lecture/lab a week. Three 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, 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 submediant 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 common 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.

MIXED VOCAL ENSEMBLE I **HMU 9028**
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.

MIXED VOCAL ENSEMBLE II **HMU 9029**
Prerequisite: HMU 9028. Continuation of Mixed Vocal Ensemble I. Class meets three hours a week. One credit.

MIXED VOCAL ENSEMBLE III **HMU 9030**
Prerequisite: HMU 9029. Continuation of Mixed Vocal Ensemble II. Class meets three hours a week. One credit.

MIXED VOCAL ENSEMBLE IV **HMU 9031**
Prerequisite: HMU 9030. Continuation of Mixed Vocal Ensemble III. Class meets three hours a week. One credit.

CHAMBER CHOIR I **HMU 6529**
Prerequisite: By audition. Rehearsal and performance of vocal music. Choir performs at various student and community activities. Class meets three hours a week. One credit.

CHAMBER CHOIR IIHMU 2305

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

CHAMBER CHOIR IIIHMU 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.



STUDENT JAZZ ENSEMBLE IHMU 6410

Prerequisite: By audition. Performances of jazz and popular music at public concerts and College functions. Class meets six hours a week. Two credits.

STUDENT JAZZ ENSEMBLE IIHMU 6411

Prerequisite: By audition. Continued performance of jazz and popular music at public concerts and College functions. Class meets six hours a week. Two credits.

STUDENT JAZZ ENSEMBLE IIIHMU 6412

Prerequisite: By audition. Continued performance of jazz and popular music at public concerts and College functions. Class meets six hours a week. Two credits.

STUDENT JAZZ ENSEMBLE IVHMU 6413

Prerequisite: By audition. Continued performance of jazz and popular music at public concerts and College functions. Class meets six hours a week. 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. Continuation of Jazz Improvisation I. Creative improvisation and basic pro-

cedures in analyzing chord structures as an outline for organized spontaneous playing. Class meets two hours a week. Two credits.

BAND IHMU 8008

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.

BAND IIHMU 8009

Prerequisite: HMU 8008 or by permission. Continuation of Band I. Class meets three hours a week. One credit.

BAND IIIHMU 8010

Prerequisite: HMU 8009 or by permission. Continuation of Band II. Class meets three hours a week. One credit.

BAND IVHMU 8011

Prerequisite: HMU 8010 or by permission. Continuation of Band III. Class meets three hours a week. One credit.

ORCHESTRA IHMU 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. Continued study and performance of standard literature for ensembles: brass, woodwind and percussion. Class meets two hours a week. One credit.

CHAMBER ENSEMBLE IIIHMU 5202

Prerequisite: HMU 4166. 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. Continued study and performance of standard literature for ensembles: brass, woodwind and percussion. Class meets two hours a week. One credit.

APPLIED GUITAR I (CLASS) **HMU 4771**
 Class instruction with emphasis on learning to play the guitar from the beginning stages. Class meets 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 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 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.

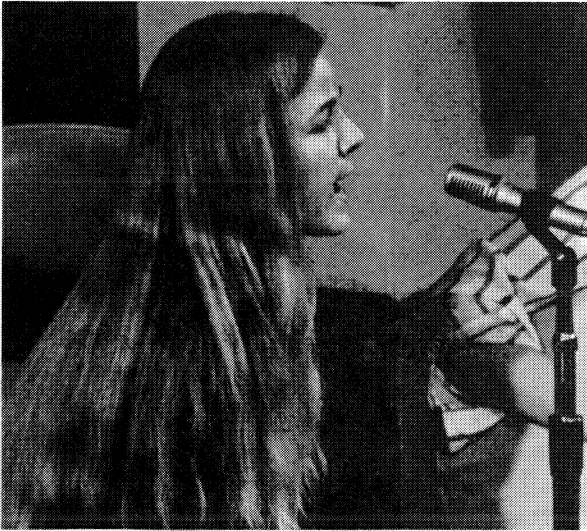
APPLIED BRASS III (PRIVATE) **HMU 9797**
Prerequisite: HMU 7796.

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 7759.

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. Corequisites: NLS 1128 and SS 1068. This is the first of four sequential courses and will serve as an introduction to nursing with emphasis on the maintenance of homeostasis in individuals of various age groups. This course furnishes the concepts and skills needed to provide basic nursing care and provides a foundation for subsequent nursing courses. 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 and SS 3546. This is the second of four sequential nursing courses and provides an opportunity for students to explore the impact of altered homeostasis on the individual and family. This 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 PROBLEMSNRN 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 PROBLEMSNRN 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 rehabilitation, 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.

LPN-RN TRANSITION COURSENRN 3655

Prerequisite: Licensing as Vocational Practical Nurse. Admission with advanced standing to Nursing Program. An orientation to the Associate Degree Nursing Program philosophy and criteria for LPNs seeking advanced standing. The course focuses on group process, relationships, the role of the AD graduate, communication skills and nursing process. Individual assessment and assistance is emphasized. Class meets twenty-four hours a week for six weeks. Eight credits.

NAACOG CERTIFICATION PREPARATION

.NRN 9732
Prerequisites: 1) current licensure as an RN in the U.S. or Canada, 2) verification of two years experience as an RN in inpatient obstetric nursing, 3) documentation of employment in the inpatient obstetric nursing field on either a full-time or part-time basis within the last 24 months. Prepares the Registered Nurse with two years of clinical experience in Obstetric-Gynecology area for credentialing by the Nurses Association of the American College of Obstetricians and Gynecologists (NAACOG). Class meets two hours a week. Two credits.

CERTIFIED MEDICAL AIDENRN 4189

Prerequisites: Valid nurse aide certificate for Kansas nursing home. Written recommendation from administrator of nursing home. Good physical and mental health. Class instruction includes 72 didactic hours and 8 hours clinical practicum leading to Kansas State certification as a medication aide. Eight hours of lecture and one hour of lab each week. Four 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 WRITINGBPL 7740

Prerequisite: BPL 9739 or concurrent enrollment or permission of coordinator. 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 IBPL 2184

Prerequisite: BPL 9739 or permission of coordinator. 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 IIBPL 3320

Prerequisite: BPL 2184 or permission of coordinator. 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 include a further review and preparation of related documents. Class meets three hours a week. Three credits.

REAL ESTATE LAW IBPL 2828

Prerequisite: BPL 9739 or permission of coordinator. 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 in-

clude 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 permission of coordinator. 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 permission of coordinator. 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 permission of coordinator. 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.

LITIGATION I BPL 7917

Prerequisite: BPL 9739 and BPL 7740 or permission of coordinator. 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 permission of coordinator. 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 permission of coordinator. 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 permission of coordinator. 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 permission of coordinator. 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 provisions of the Uniform Commercial Code. Class meets three hours a week. Three credits.

RETIREMENT PLANS—QUALIFICATIONS AND ADMINISTRATION BPL 4036

Prerequisites: BPL 2184, BPL 3866 or BPL 3867 or permission of coordinator. Study of qualified retirement plans with emphasis on their design, funding and operation. Course will include the preparation of documents necessary for qualification, administration and termination. Also will discuss related retirement plans such as KEOGH and IRAs. Class meets three times, five hours each session. One credit.

SEMINAR: LEGAL INTERVIEWING AND INVESTIGATION BPL 3867

Prerequisites: BPL 9739 and at least nine credits in other paralegal courses. Work experience in an approved training situation under instructional supervision. Designed to provide practical experiences 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. Two or three credits.

SEMINAR: WORKERS' COMPENSATION AND BANKRUPTCY BPL 3866

Prerequisites: BPL 9739 and at least nine credits in other paralegal 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 workers' compensation. A minimum of fifteen hours on-the-job training a week by arrangement. Class meets two hours a week. Two or three credits.

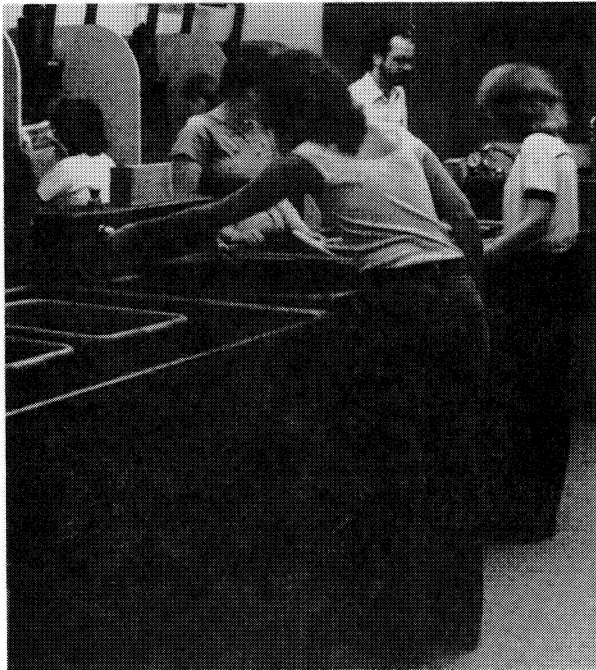
PHOTOGRAPHY

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 classroom lecture/critique and three hours of instructor-supervised lab/demonstration 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 exposure and development control using the "zone system," natural light photography, advanced darkroom techniques, chemistry and toning. Also, introduction to basic view camera techniques. Class meets for three hours of classroom lecture/critique and three hours of instructor-supervised lab/demonstration each week. Three credits.



PHOTOGRAPHY III HPH 3880

Prerequisite: HPH 6666. Emphasis on commercial photography applications. Includes view camera techniques, artificial lighting with photoflood, spot, and electronic flash equipment, product illustration, portraiture, copy work. Also, introduction to color transparency processing. Class meets for three hours of classroom lecture/demonstration and three hours of instructor-supervised lab/studio 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.

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 credits.

ISSUES IN CONTEMPORARY PHOTOGRAPHY HPH 3417

Prerequisite: HPH 4009. Here is a survey of current photography as it relates to the broader aspects of modern culture and thought. Discussion will cover important contemporary photographers, new color photography, recent criticism and photography's relation to the art world. Class meets three hours a week. Three credits.

PHYSICAL DEVELOPMENT

INTRODUCTION TO PHYSICAL EDUCATION PD 6340

Principles of 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, golf 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

Course covers the importance of sport in society; issues brought up in sport; career opportunities in the field of sports. 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 (spring 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 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

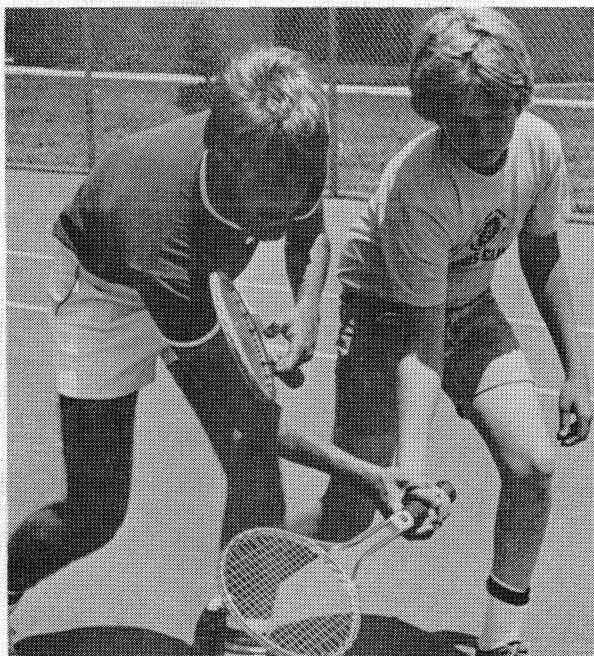
Individualized instruction of rules, fundamentals and history of the sport. Includes survey of the origin of archery and how to select and take care of equipment. Class meets two hours a week. One credit.

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 (BEGINNING) PD 1026
 Basic instruction in the fundamentals of cheerleading includes working together, learning timeout cheers, chants for sideline cheers and pom pom routines. Cheerleaders represent the College in community activities. Class meets four hours a week from September to March. One credit.

CHEERLEADING (INTERMEDIATE) PD 1027
Prerequisite: PD 1026. Additional responsibilities include making up original cheers and presenting them to the group. Students also will work closely with the instructor in planning and coordinating activities. Class meets four hours a week from September to March. One credit.

BALLET (BEGINNING) PD 2655
 Introduction to the fundamentals of ballet. Attention given to terminology, skills and participation. Class meets two hours a week. One credit.

BALLET (INTERMEDIATE) PD 7165
Prerequisite: PD 2655 or equivalent. Continuation of Beginning Ballet. Attention given to terminology, more advanced skills and participation. Class meets two hours a week. One credit.

RHYTHMIC AEROBICS (BEGINNING) . . . 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 two hours a week. One credit.

RHYTHMIC AEROBICS (INTERMEDIATE) PD 1440
 Exercise program of choreographed routines combining motor skills, jogging and dance steps, done at a higher pace and for a longer period of time than in Rhythmic Aerobics. Exercise routines are vigorous, challenging and fun, and should improve muscle tone and cardiovascular fitness. One hour of lecture and one hour of lab each 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 planets. 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: NPS 6634 or NPS 4455. Organic chemistry centered on biochemistry and body function. Biologically important concepts are introduced into the basic functional groups and extended into traditionally biological topics such as lipids, steroids and carbohydrates. Four hours lecture and three hours laboratory each week. Five credits.

GENERAL CHEMISTRY I LECTURE NPS 4515

Prerequisite: Concurrent enrollment in MTH 6079 or equivalent high school math and concurrent enrollment in NPS 4516. 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. Class meets four hours a week. Four credits.

GENERAL CHEMISTRY I LAB NPS 4516

Prerequisite: Concurrent enrollment in NPS 4515. The student's understanding of bonding concepts, solutions, gas laws and stoichiometry will be enhanced by laboratory experiments. Class meets three hours a week. One credit.

GENERAL CHEMISTRY II LECTURE NPS 4455

Prerequisites: MTH 6079, NPS 4515, NPS 4516 and enrollment in NPS 4456. A continuation of NPS 4515 to include topics such as kinetics, acid-base chemistry, equilibrium, chemical thermodynamics and electrochemistry. Class meets four hours a week. Four credits.

GENERAL CHEMISTRY II LAB NPS 4456

Prerequisite: NPS 4516 and concurrent enrollment in NPS 4455. 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

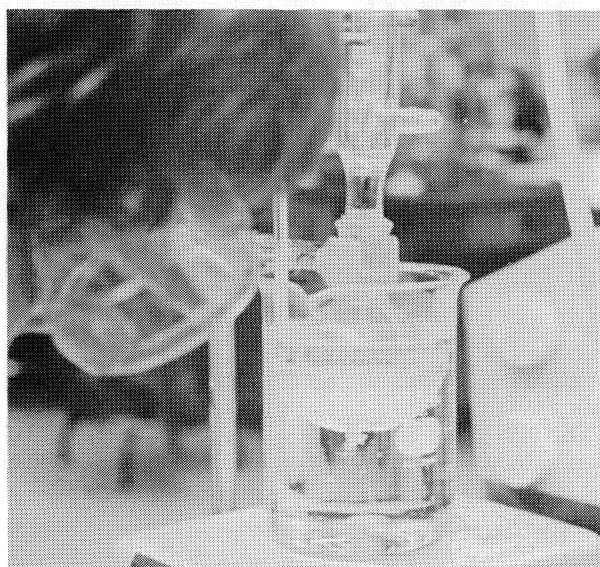
Prerequisites: NPS 4455 and 4456. The nomenclature, principles and theories of organic chemistry with emphasis on electronic theories and reaction mechanisms. Laboratory is supportive and emphasizes developing lab techniques and preparation of representative compounds. Class meets nine hours a week. 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, energy, thermodynamics and wave motion. Class meets for four hours of lecture and three hours of lab each week. Fall, five credits.



GENERAL PHYSICS II NPS 4356

Prerequisite: NPS 3308. Continuation of General Physics I. Subjects include electricity and magnetism, light, atomic and nuclear structure, quantum theory, relativity and particle physics. Class meets for four hours of lecture and three hours of lab each week. Spring, five 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. 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
Prerequisites: NPS 4515 and 4516. 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.

SCIENCE PROBLEMS ON THE COMPUTER

.....NPS 3084
Prerequisite: Completion of at least one college-level physical science or life science course. Course covers elementary skills in programming a micro-computer using BASIC language. Techniques are developed for solving various science problems on the computer. Various "output" will be studied in relation to specific needs. One hour lecture, two hours lab each week. Two credits.

MICROCOMPUTER PROGRAMMING WITH EDUCATIONAL APPLICATIONS

...NS 3082
Elementary programming skills for the micro-computer will be explained in this course. Also covered will be how to apply these skills to educational situations such as self-paced study programs, quizzes and testing, grading records, cataloguing and graphing. Three hours lecture and two hours lab each week. Four credits.

PHYSICAL THERAPY

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.

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.

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.

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 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 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 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. One hour of lecture a week. One credit.

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 emergency procedures related to patient care in the Radiology Department. Class meets three hours a week. Three credits.

RADIOLOGIC TECHNOLOGY II NRD 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.

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 EXPOSURES II NRD 9806
Prerequisite: NRD 9803. Covers quality control of radiographic images, technique charts, calibration of equipment, standard exposure systems and factors used for conversion of techniques for variables in the exposure systems. Special techniques used in producing radiographic images also are covered. Class meets four hours a week. Three credits.

PHYSICS OF X-RAY EQUIPMENT NRD 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.

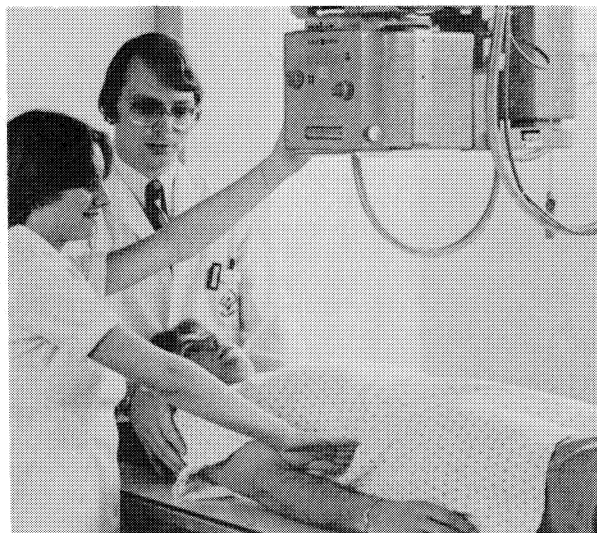
RADIOGRAPHIC POSITIONING I NRD 9804
Prerequisite: Admission to the program. Study of anatomy and positioning for the abdomen, chest, upper and lower extremities, upper gastrointestinal track, colon, gall bladder/biliary exams and kidney studies. Class meets four hours a week. Three credits.

RADIOGRAPHIC POSITIONING II NRD 9808
Prerequisite: NRD 9804. Covers anatomy and positioning related to the upper and lower extremities, the vertebral column, skull and thorax and includes mammography. Class meets four hours a week. Three credits.

RADIOGRAPHIC POSITIONING III NRD 9809
Prerequisite: NRD 9808. Course covers anatomy and positioning for the skull, sinuses, facial bones and teeth. Emphasis is on special views of the skull. The student also will study methods of positioning the trauma patient. Three credits.

SPECIAL PROCEDURES NRD 8012
Prerequisites: NLS 6186, NRD 9804, NRD 9808, NRD 9809. 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. Three credits.

CLINICAL TRAINING I NRD 9805
Prerequisite: Admission to the program. The student will receive training in performing basic radiographic examinations and related tasks. The student must demonstrate the ability to perform seven examinations unassisted by the end of the term. Class meets for an average of 20 hours each week. Two credits.



CLINICAL TRAINING II NRD 9807
Prerequisites: NRD 9801, 9802, 9803, 9804, 9805. The student will receive training in performing examinations of the upper extremities, lower extremities, cervical, thoracic and lumbar spine, ribs, skull and mammographic exams. Class meets an average of 20 hours a week. Two credits.

CLINICAL TRAINING IIINRD 9815

Prerequisites: NRD 9806, 9807, 9808. Continued training in performing examinations of the ribs, cervical, thoracic and lumbar spine, gall bladder, biliary system and retrograde pyelograms and infusion pyelograms using tomography. Students will be assigned to evening training experiences during the summer months. Class meets an average of 24 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 an average of 20 hours a week. Two credits.

CLINICAL TRAINING VNRD 9817

Prerequisites: NRD 9809, 9816. The student will be assigned training experiences in areas of training need. The student will be expected to perform most department routine examinations under limited supervision. Students will work on areas of deficiency and will demonstrate progress in clinical skills. Class meets 20 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 specialty rotations. Class meets 24 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. Students will be making final preparations to enter the profession as a registered technologist. Assignment will be made to all areas of the department on a rotational basis. Class meets thirty-nine 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.

SPECIALTY TRAINING (ELECTIVE)NRD 9820

Prerequisite: Consent of the instructor. Additional 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.

RADIOLOGY AND ELECTRONIC PROCEDURESNAT 8909

Intensive study and practice in radiological techniques. Positioning, exposure, developing, establishing a technique chart, evaluation of technical errors and studies in contrast radiography. Theory of radiology, types of machines, films and cassettes, and radiation safety. Class meets three hours a week. Two 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.



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.

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.

RESPIRATORY THERAPY

BEGINNING PRINCIPLES OF RESPIRATORY THERAPY NRT 3370

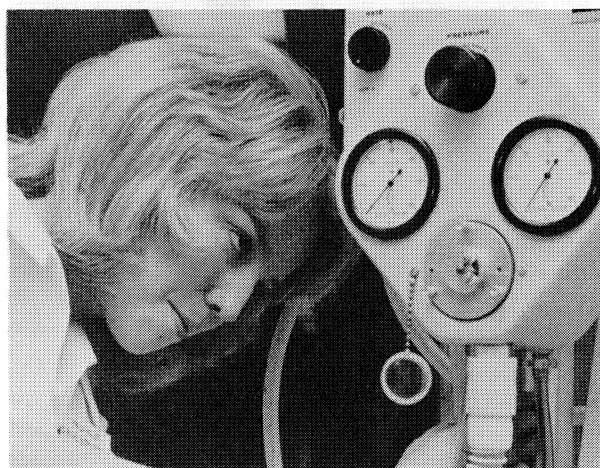
Prerequisite: Admission to the Respiratory Therapy Program. Introduces the student to the field of respiratory therapy and to the hospital world. Involves basic anatomy, physiology, pathophysiology and respiratory therapy techniques necessary to begin giving patient care to pulmonary disease patients. 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 EQUIPMENT NRT 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 I NRT 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.



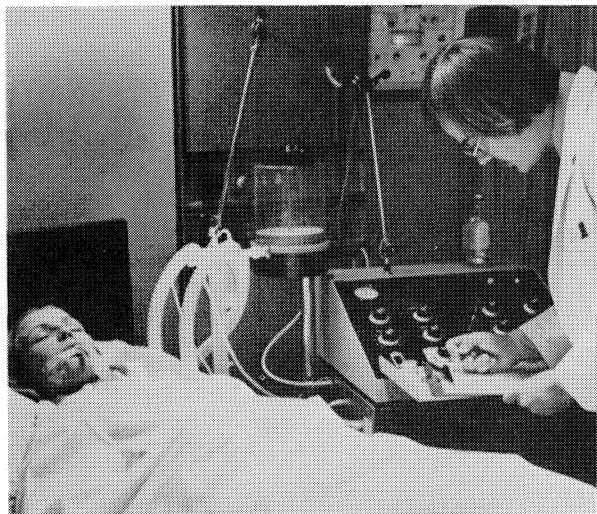
CLINICAL CARDIOPULMONARY PHYSIOLOGY NRT 3373

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 I NRT 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 PHARMACOLOGYNRT 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 for two hours of lecture a week. Spring, two credits.

CLINICAL PRACTICE IINRT 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

TYPING I: SHORT COURSEBSC 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.

BEGINNING TYPINGBSC 1263

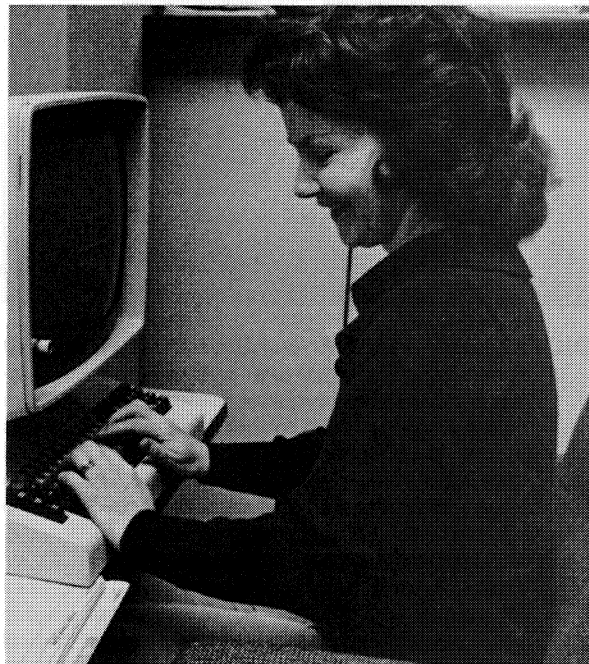
Mastery of the keyboard and machine techniques. Instruction in personal and business letters, outlines, manuscripts, tabulation and centering. Individualized instruction and scheduled use of secretarial laboratory. Class meets three hours a week. Students should schedule two hours of lab a week. Three credits.

INTERMEDIATE TYPINGBSC 2376

Prerequisite: BSC 1263. 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 TYPINGBSC 7633

Prerequisite: BSC 2376. 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.



AUTOMATIC TYPEWRITERSBSC 5188

Prerequisite: BSC 2376. 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.

SHORTHAND REFRESHER: SHORT COURSEBSC 3018

Review of theory and vocabulary. Emphasis on increasing speed in the writing of shorthand. Class meets one hour a week. One credit.

SHORTHAND IBSC 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 materials. Class meets three hours a week with a required lab two hours a week. Three credits.

SHORTHAND IIBSC 4590

Prerequisites: BSC 1263 and BSC 1519. Designed for students with prior limited experience with shorthand. Review of shorthand theory, transcription techniques, spelling, punctuation and grammar through use of tapes and materials. Class meets three hours a week with a required lab two hours a week. Three credits.



DICTATION AND TRANSCRIPTION . . . BSC 3630

Prerequisite: BSC 4590 and 2376. Emphasis on increased speed and accuracy in writing shorthand from dictated material and transcribing notes. Class is instructor-directed but includes individualized materials. Student works at own ability level. Class meets three hours a week with a required lab two 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.

KEYBOARDING BSC 4137

This course is designed for data processing students who cannot touch type as well as for employees in such areas as medicine, law, sales, travel and education who need keyboarding skills. Accuracy at the keyboard in alpha, numeric and symbol keys is stressed. Class/lab meets four hours a week for six weeks. One credit.

STENOSCRIP SPEEDWRITING SHORTHAND . . .

. BSC 3325

This course is designed especially for secretaries who need to learn dictation skills in a short period of time and for students who must take notes in class. Students in the course will begin taking dictation using abbreviated longhand after the second session. It is possible to work up to 70-80 words per minute by the end of the course. Class will include theory, practice, speedbuilding and transcription. Three hours of lecture, two hours lab each week. Three credits.

MACHINE TRANSCRIPTION BSC 5189

Prerequisite: BSC 2376. 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.

ELECTRONIC CALCULATORS BSC 5190

The student will apply the fundamental operations of arithmetic and basic applications to business problems on electronic printing calculators. This functional knowledge includes using proper techniques in the basic operation, 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.



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.

SECRETARIAL PROCEDURES I BSC 1272

Prerequisite: BSC 2376 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 3857

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. Two or three credits.

SECRETARIAL FIELD STUDY II BSC 3858

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. Two or three credits.

SECRETARIAL FIELD STUDY III BSC 3859

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. Two or three credits.

SECRETARIAL FIELD STUDY IV BSC 3860

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. Two or three credits.

SECRETARIAL FIELD STUDY V BSC 3861

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. Two or three 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 justification 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.

SANITATION AND ANIMAL CARE NAT 1895

Cleaning and sanitation, personal hygiene, vermin recognition, control and cleaning of cages and equip-

ment, 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.

CLINICAL MATH NAT 7896

Metric systems and conversion units. Apothecaries' equivalents and vocabulary. Preparation of solutions, vocabulary, strengths, procedures and computations. Drug administering, calculating and measuring dosages. Class meets one hour a week. One credit.

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.

CLINICAL PATHOLOGICAL TECHNIQUES I

. NAT 2901

Emphasis on urinalysis, blood analysis, fecal analysis and preparation of smears and staining techniques. Introduction to hematology, differentiation of blood cells and serum chemistries. Class meets seven hours a week. Four credits.

CLINICAL PATHOLOGICAL TECHNIQUES II

. NAT 6004

Advanced work in hematology and serum chemistries. Emphasis on evaluation of laboratory specimens and basis of clinical chemistries. Class meets eight hours a week. Five credits.

ANIMAL HEALTH INTERNSHIP NAT 1902

Prerequisite: Two semesters of first-year animal health course. Supervised intensive clinical study under the direction of a cooperating veterinarian to provide actual work experience. 420 work hours. Six 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. Class meets five hours a week. Three credits.

ANIMAL HOSPITAL TECHNOLOGY II

.....NAT 6906
Continuation of Animal Hospital Technology I. Study of orthopedic procedures, electrocardiography, pharmacology and anesthesia. Laboratory exercises in surgical assisting, blood transfusions, anesthetic emergencies, bandaging and fluid therapy. Class meets five 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.

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.

LARGE ANIMAL TECHNOLOGYNAT 6006

Prerequisites: NAT 6897 and NAT 3899. Large animal handling and restraint. Oral and parenteral medications, blood collection, sanitation and housing. Study of diseases affecting large animals and preventive medicine. Class meets six hours a week. Four credits.

RADIOLOGY AND ELECTRONIC PROCEDURES

.....NAT 6909
Intensive study and practice in radiological techniques. Positioning, exposure, developing, establishing a technique chart, evaluation of technical errors and studies in contrast radiography. Theory of radiology, types of machines, films and cassettes, radiation safety. Class meets three hours a week. Two credits.

SMALL ENGINE TECHNOLOGY

BASIC SMALL ENGINE SERVICETSE 7240

This course is designed to prepare the student to distinguish between characteristics of a four-stroke cycle and a two-stroke cycle engine; to list the functions of the lubricating, cooling, fuel and governor systems; to troubleshoot engine problems and to inspect engine components; and to service the fuel, cooling and exhaust systems. Two hours of lecture and three hours of lab each week. Three credits.



SMALL ENGINE ELECTRICAL SYSTEMS TSE 7241

Prerequisite: TSE 7240. This course emphasizes the types of current and the relationship between electricity and magnetism; types of electrical circuits and the ability to solve problems using ohm's law; the identification of components and the purpose of the ignition system; testing the coil, condenser, armature and flywheel magnets; servicing the ignition system; and testing and servicing the charging and starting system. Two hours of lecture and three hours of lab each week. Three credits.

SOCIAL SCIENCES

INTRODUCTION TO PSYCHOLOGYSS 1068

Introduction to the basic concepts and methods of general psychology. Covers the brain, consciousness, sensation and perception, motivation and emotion, learning and memory, maturation and development, normal and abnormal personality, and social psychology. The course is a prerequisite for other courses in psychology. 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.

TRANSPERSONAL PSYCHOLOGYSS 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, interpersonal encounter, extrasensory phenomena, ultimate values and eternal meanings. 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, skills, memory, generalization of learning, assessment and measurement of learning, and intelligence. Practicum in a structured setting is required. Class meets three hours a week. Three credits.

PERSONALITY AND ADJUSTMENTSS 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 determinants of behavior, relating to others, personal growth process, enhancement of growth, assertiveness, aggression, stress reduction, relaxation, sexism, sex roles, racism and career development. 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.

HUMAN POTENTIAL SEMINARSS 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 PLANNINGSS 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.



MARRIAGE AND THE FAMILYSS 5716

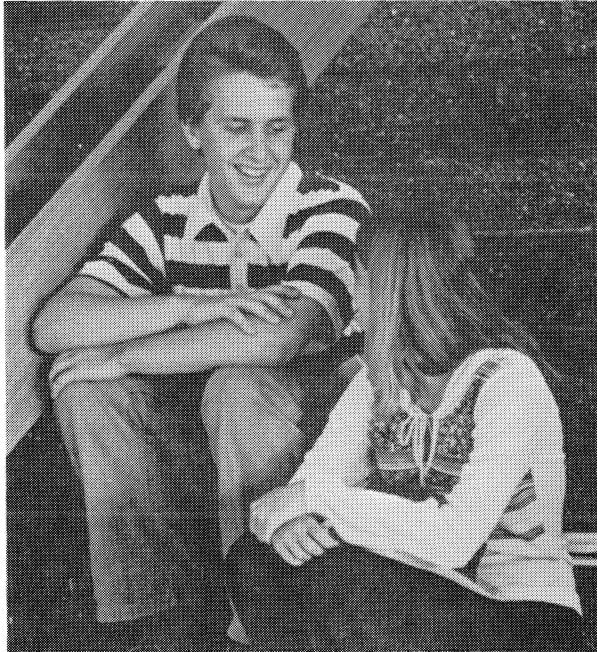
An examination of the institutions of marriage and family in the United States. Emphasis on human sexuality, changing roles, family formation, socialization, domestic conflict, interaction among family members and marriage partners, and the relationships between these institutions and society. Class meets three hours a week. Three credits.

SOCIOLOGYSS 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 WELFARESS 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 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.

SOCIAL PROBLEMS SS 3428

Selected social problems—from crime to drug abuse—are analyzed from a variety of sociological and cultural perspectives. Emphasizes the history and development of the problems and considers solutions. 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.

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 ideas and institutions that have shaped 20th century politics. Class meets three hours a week. Three credits.

STATE AND LOCAL GOVERNMENT SS 2678

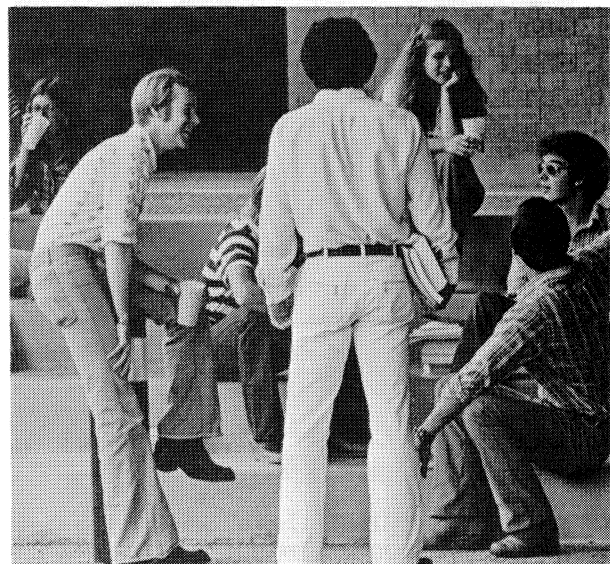
Survey of theories and practices of state and local governments throughout the United States. The Kansas models in particular will be studied. Major topics are structure of these governments, intergovernmental relations, types of services, the taxing and budgeting process, the role of the citizen, and 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 studied include the Constitution; political parties; the executive, legislative and judicial branches; and public policy formulation and implementation. Class meets three hours a week. Three credits.

INTRODUCTION TO COMPARATIVE GOVERNMENT SS 5852

Introduction to the comparative study of political systems. Ideology, socio-economic institutions and decision-making structures will be examined in competitive and non-competitive political systems; industrially-developed and industrializing nations; and Western and non-Western nations. Both contemporary and non-contemporary systems will be considered. 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.

U.S. HISTORY TO 1877 SS 1055

This survey course in U.S. history emphasizes the study of developments and trends in American society from the early period of discovery and settlement through Reconstruction. Topics include the Colonial Era, the Revolutionary period, the Constitution, the Federalist Era, expansion of the Republic during the mid-19th century and the Civil War and Reconstruction. Class meets three hours a week. Three credits.

U.S. HISTORY SINCE 1877 SS 2000

This survey course in U.S. history emphasizes the study of developments and trends in American society from the 1870s to the mid-20th century. Topics include the Reconstruction Era, Industrialization, Immigration, Reform Movements, the two World Wars and Foreign Policy. Emphasis is on analysis and interpretation of these developments. Class meets three hours a week. Three credits.

MODERN RUSSIAN HISTORY SS 4087

This is a survey of the history, culture, foreign policy, politics and socio-economic events in Russia from the time of Peter the Great through today. Three hours lecture each week. Three credits.

EUROPEAN HISTORY FROM 1750 SS 9922

Survey of the major historical trends in Europe from the period of the Industrial Revolution. Topics will include industrialization, nationalism and the two World Wars. 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. Emphasis is placed on out-of-class reading by the students with small group discussions arranged five to seven times during the semester. Three credits.

WESTERN CIVILIZATION: READINGS AND DISCUSSION II SS 2006

Covers major ideas in western civilization dealing with social, economic, political and ethical relations. Emphasis is placed on out-of-class reading by the students with small group discussions arranged five to seven times during the semester. Three credits.

GREAT DECISIONS I: ISSUES IN U.S. FOREIGN POLICY SS 3656

In this course on current issues in international politics, students will review the history of and U.S. policy options for selected problems. Topics will include current political and social issues and will vary from year to year. Class meets one hour each week. One credit.

APPLIED PSYCHOLOGY SS 5191

Emphasis in this course is on how students can use psychological principles to better understand their own experiences and those of other people. Topics include recent popular approaches to psychological problems, behavior management principles and a survey of the student's view of self, values and goals. Class meets three hours each week. Three credits.

SPEECH AND DEBATE

PUBLIC SPEAKING CSP 4130

A fundamental speech course with emphasis on speech organization, development of ideas, audience analysis and delivery. Students will deliver informative and persuasive speeches in the impromptu, extemporaneous and manuscript styles. Class meets three hours a week. Three credits.



INTERPERSONAL COMMUNICATION . . CSP 4950

A 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 may be given but everyday communication is stressed.) Class meets three hours a week. Three credits.

GROUP DISCUSSION CSP 1150

Study of communication within small groups emphasizing the experiences and principles necessary for developing effective group dynamics and leadership skills. A variety of experiential mechanisms are employed. Class meets three hours each week. Three credits.

ELEMENTARY DEBATE CSP 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 I CSP 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 II CSP 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 DEBATE CSP 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.

CHILDREN'S THEATER I CDR 3407

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.

CHILDREN'S THEATER II CDR 3408

Prerequisite: CDR 3407. 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. Three credits.

THEATER

INTRODUCTION TO THEATER CDR 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.

IMPROVISATION FOR THEATER CDR 5001

Introduction to theater improvisation, emphasizing creative stage activities not requiring a written script. Class meets one hour a week. One credit.

ACTING I CDR 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, TV studio performances and stage performances for classes. Three credits.

ACTING II CDR 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, TV studio performances and stage performances for classes. Three 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.

THE SHAKESPEARE PLAYS CDR 5588

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

URBAN AGRIBUSINESS

INTRODUCTION TO URBAN AGRIBUSINESS . . .

. NUA 6888
Job opportunities and careers in horticulture. Class meets one hour a week. One credit.



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. Three hours of lecture and four 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. Three hours of lecture and four hours of lab a week. Five credits.

LANDSCAPE HORTICULTURE NUA 2930

Prerequisite: NUA 8887 and NUA 3889. 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.

PLANT MATERIALS I NUA 2891

Prerequisites: NUA 8887 and NUA 3889. 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. 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. Arboriculture and turf grass management. Maintenance of trees. Establishment and maintenance of turf. Class meets four hours a week. Three credits.

COOPERATIVE WORK EXPERIENCE I NUA 5890

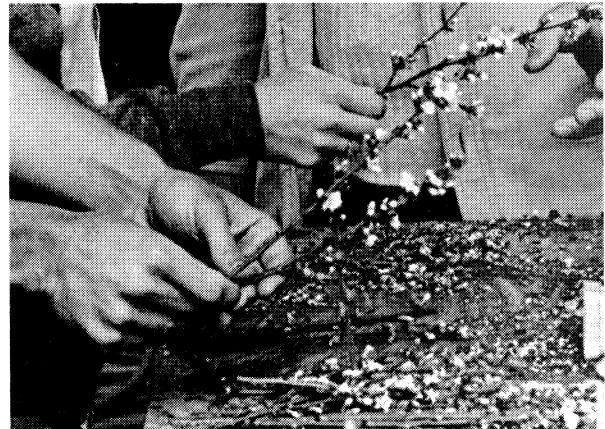
Prerequisite: Approval of coordinator. On-the-job training in a field directly related to the Urban Agribusiness Program. Fifteen hours a week. Three credits.

COOPERATIVE WORK EXPERIENCE II NUA 7892

Prerequisite: NUA 5890. On-the-job training in a field directly related to the Urban Agribusiness Program. Fifteen hours a week. Three credits.

SPECIAL TOPICS IN HORTICULTURE I NUA 8937

Prerequisites: NUA 8887 and NUA 3889. 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.

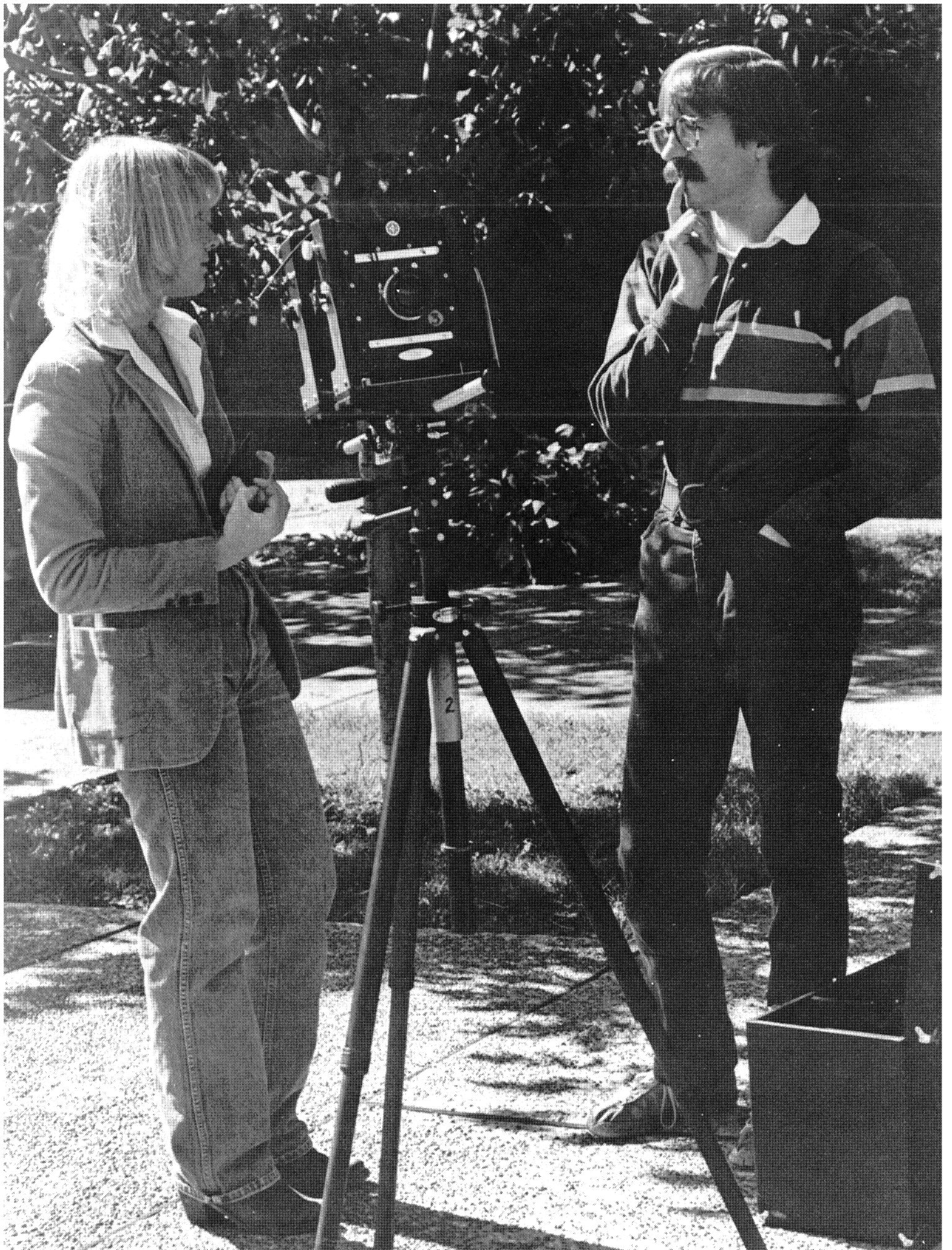


SPECIAL TOPICS IN HORTICULTURE II NUA 2938

Prerequisites: NUA 8887 and NUA 3889. 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. 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.



Student and Instructional Services

Counseling
Adults Unlimited Program
Testing/Assessment
Career Planning/Placement
GED Program
Learning Center
Writing Center
Project CLEAR
Hearing Impaired Program
Gallaudet College
Child Play Center
Dental Hygiene Clinic
Student Activities
Campus Ledger
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. You may see a counselor on a walk-in basis or by 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.

Adults Unlimited Program

If you're an adult returning to school, you can get assistance in educational, career and personal decision-making and goal-setting through the Adults Unlimited program. Counseling, information and referral services also are provided. The program publishes a monthly newsletter for adult students and sponsors support groups and non-credit workshops. The services are available on a walk-in basis or by appointment in the Counseling Center.

Testing/Assessment Center

The center provides a wide variety of testing services to you and the community including new student assessment testing; administration of standardized examinations (CLEP, PEP, ACT, GED and Vocational Interest Inventories); instructional make-up exams; credit by examination; and correspondence/TV course testing. The Testing/Assessment Center also coordinates the experience-based education process through which you can gain credit for your life experiences. For more information, contact the Testing/Assessment Center.

Career Planning and Placement Center

Career education, individual and group career planning and information on more than 20,000 occupations are among the services available through the center. Hundreds of current job openings are listed and extensive community resource files are available. You can receive help in doing research for classroom assignments and on topics related to career/life planning and job hunting. Workshops and individual appointments are available throughout the year. Stop by the center for an appointment.

GED Program

If you plan to obtain a high school equivalency certificate by taking the General Educational Development Test (GED), contact the Testing/Assessment Center for details. If you are ready now 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 test admission notice.

Help in preparing for the GED Test is available at no charge through a variety of classes including twelve-week, eight-week and six-week classes and through individual instruction.

How do you decide if you need help in preparing? The official GED Practice Test is available through the Testing/Assessment Center to help you decide if you're ready to take the GED Test. It will help you identify areas of strength and weakness and determine whether you need more study before you take the test.



Learning Center

The Learning Center 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 and 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 Learning Center for details.

Writing Center

Need help in writing an essay, research paper, journal, business letter, resume, book report or other assignment? Come to the Writing Center. Instructors and student tutors are on hand to help you solve specific grammar, spelling and word usage problems. 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 support for admission and orientation and supportive services such as notetaking, interpreting and counseling. A variety of courses is available each semester including speech therapy, manual communications and the fundamentals of math and English.

In addition, the program makes an effort to inform the community and others throughout Kansas how to better deal with the hearing-impaired population. For more information, contact the Special Services Division.

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. For more information, contact the Special Services Division.



Child Play Center

Need a place for your child to stay while you're on campus for class? Try the Child Play Center, a child care service designed especially for JCCC students. Our qualified staff provides planned activities and creative play for your child. The fee is \$1 an hour per child for reserved time or \$1.50 per hour for drop-in time. In order to meet with Kansas State regulations, enrollment is limited to children at least 2½ years of age and toilet trained up through age 8. You are encouraged to enroll early as there is a maximum capacity for enrollment met on a first-come, first-served 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, Captioned Films for the Deaf Series, 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 theatres.

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.

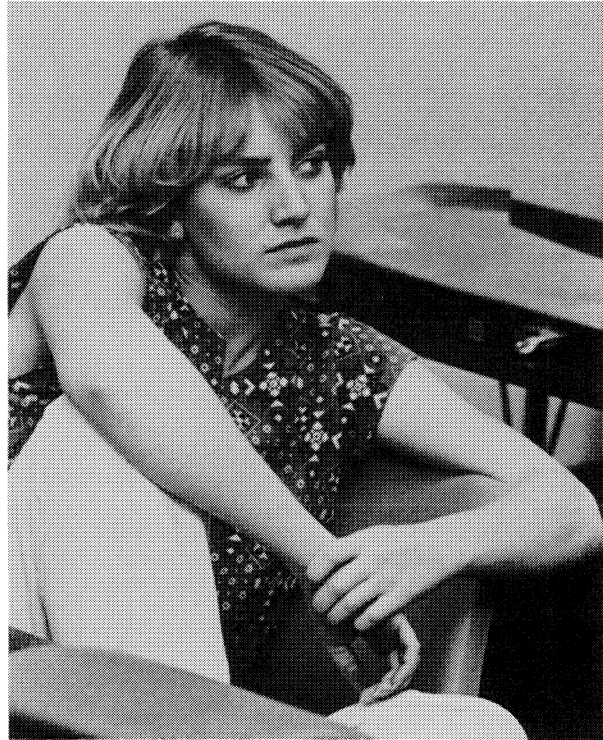
Student activities will give you the chance to develop your leadership skills and may stimulate your interest in a particular class or program. They also will give you the opportunity to interact with staff and students in a friendly, relaxed atmosphere.

For complete information on student activities, contact the director 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 and conference 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 and library aides are on hand to assist you in finding and using the resources.

Currently, the library houses more than 45,000 books, 480 current periodicals, 180,000 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 3, 6 and 10 unless you have a permit.

Handicapped Parking

If you are permanently or temporarily disabled, you may obtain a parking permit from the Special Services Office. This permit will allow you to park in designated spaces on campus. A physician's certification may be required to receive this permit.

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 at the Switchboard.

Handicapped Lot Violation

Your vehicle will be immobilized or towed after you receive two citations for parking in a handicapped lot without a permit, Monday through Saturday, 7 a.m. to 9 p.m. You will be charged \$10 for removal of the immobilizer.

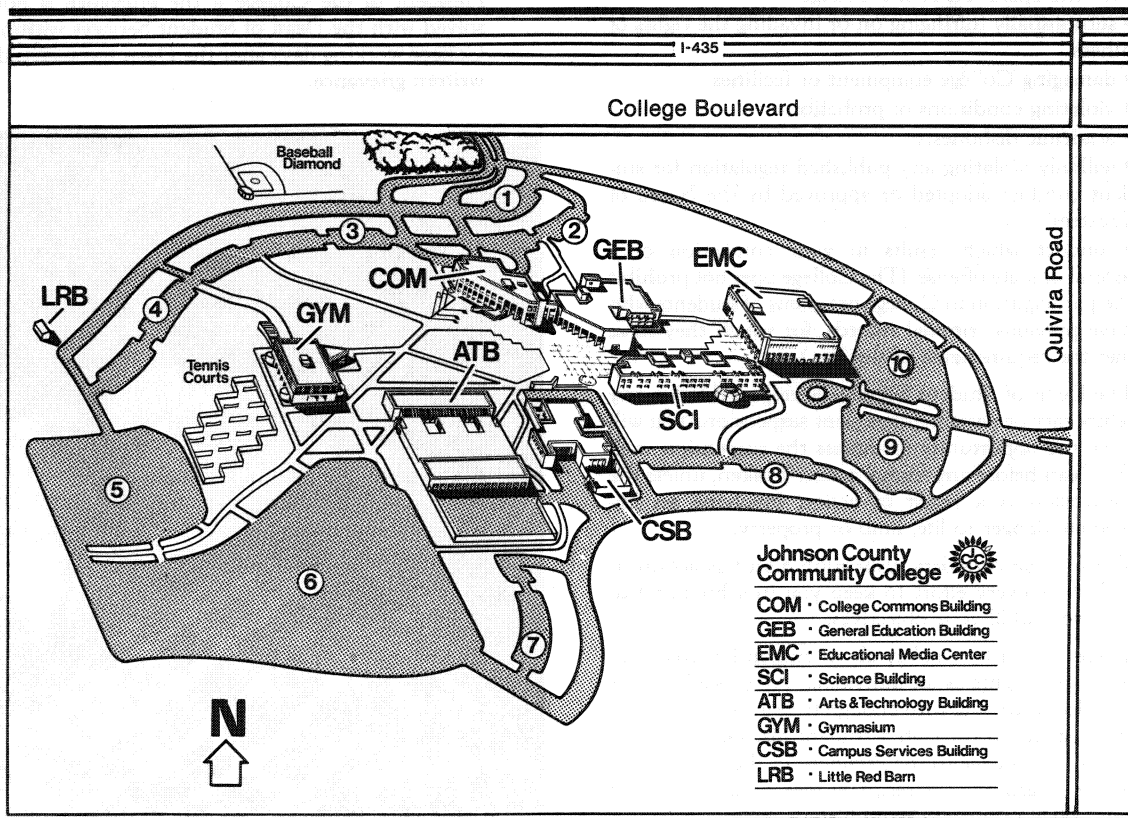
Immobilization or towing

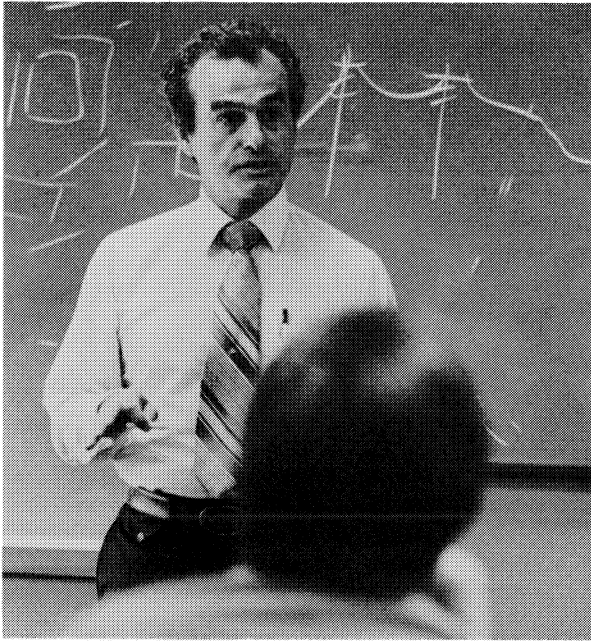
Your vehicle will be immobilized or towed away if:

1. it is parked in a handicapped parking lot 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 the Department of Health, Education and Welfare in the June 17, 1976 Federal Register. The law and regulations published by HEW require educational institutions to:

- provide you an 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 written 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, under 18 years of age, 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 may, upon request, provide the following information to authorized individuals:

- 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 the Department of Education 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., Department of Education
Room 514 E
200 Independence Avenue SW
Washington, DC 20201



Continuing Education and Community Services

Continuing Education
Community Development
Community School Program
A Program for Those Over 60
Employee Development Program
On-Site Education
Clinics for Youth
Speakers Bureau
Child Care Directory
Television Courses
Tours
Special Events
Travel for Credit
Conferences and Workshops
Extension Courses
Use of College Facilities
Community Theater, Chorus, Jazz Band

COMMUNITY EDUCATION AT JCCC

What is community education at JCCC? It's credit and non-credit courses and activities ... formal classes or non-traditional programs ... cultural and recreational offerings designed specifically to meet the needs of the community and using school, college, library and other facilities. Community education activities at JCCC are created using input from you and the community.

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.

Courses and activities are offered in these areas:

Arts, Crafts and Hobbies
Automotive
Aviation
Business and Finance
Career Planning
Childhood Education
Communications
Dance
English as a Second Language
Family Life
Film
Foods
Foreign Language
GED Tests and CLEP
Health and Safety

Horsemanship
Home Management
Industrial Arts
Music
Office Education
Performing Arts
Personal Development
Photography
Physical Development
Reading and Math
Real Estate
Science
Sewing
Sign Language
Sports and Recreation

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
- 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 and co-sponsored by Olathe Unified School District 233; in Stanley-Stilwell, co-sponsored by Blue Valley Unified School District 229; in DeSoto, co-sponsored by DeSoto Unified School District 232; in Spring Hill, co-sponsored by Spring Hill Unified School District 230; and in Gardner-Edgerton-Antioch, co-sponsored by Unified School District 231. Classes are held in local schools and are selected jointly by community advisory committees and JCCC. Each community school also has a resident coordinator who assists in selecting courses and who acts as liaison between the community and JCCC. Community school courses are listed in a separate Community School Bulletin that is mailed every spring and fall to residents of Olathe, Stanley-Stilwell, DeSoto, Spring Hill and Gardner-Edgerton-Antioch. These classes also are listed in the regular JCCC Community Education Bulletin which is mailed to all Johnson County residents.

Cultural Arts Programming

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 programming includes classes, lectures, films, concerts and tours on a variety of subjects—architecture, antiques, anthropology, art, jewelry, theatre, 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.

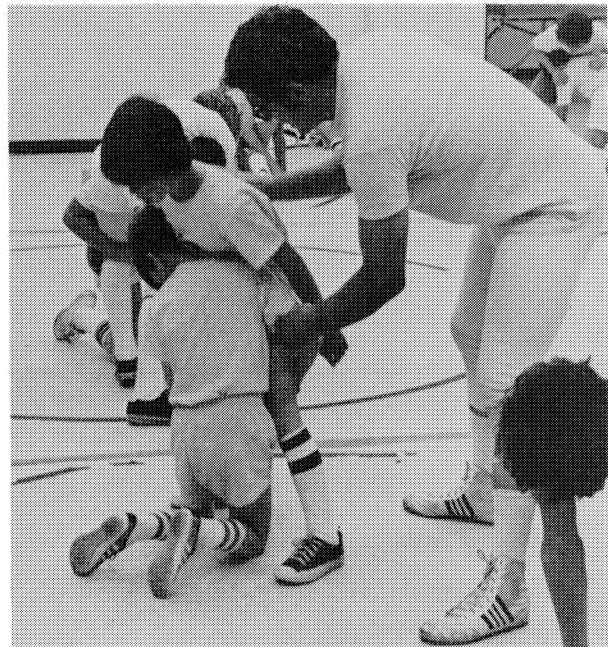
Employee Development Programs

On-Site Education

JCCC has helped many organizations in Johnson County meet their employee training needs by offering a variety of programs in such areas as management, human relations, business writing, financial planning and physical fitness. College staff teaches many courses listed in the College Catalog and Community Education Bulletin on the premises of any business, firm, industry or community organization in Johnson County. If your organization has a specific need that cannot be met by existing programs, JCCC will assist you in designing a program to meet that need. Many organizations have participated in JCCC's employee development programs including Johnson County Library, Montgomery Ward, King Radio and Shawnee Mission Medical Center. Employee development seminars also are offered on campus throughout the year. Contact the Continuing Education Office for more information.

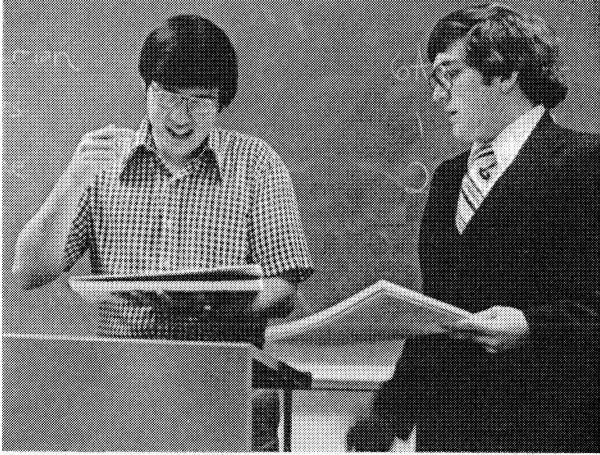
Clinics and Courses for Youth

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 Speakers 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, stamped, self-addressed envelope to JCCC Community Services, 12345 College at Quivira, Overland Park, Kansas 66210.



Tours

Each semester, JCCC offers five "day trips" to nearby communities of historic or artistic interest such as Abilene, Atchison, Lexington, Weston and Jamesport. The tours usually include lunch at a colorful local restaurant. Half-day tours to artistic events, museums and other places of cultural interest also are available.

Special Events

The many special events JCCC offers each year cover a variety of topics including music, theatre, art, astronomy, energy, health, foreign policy, science fiction, film festivals and family fun. Seminars and conferences in parent education, pre-retirement aging and stress management also are offered. In addition, JCCC holds forums on community action throughout the area in cooperation with other organizations.



Travel for Credit

Spend a week scuba diving in Florida or studying in Europe – and earn up to three college credits. It's possible through JCCC's travel-for-credit courses offered each semester. First you will meet in class several times before the trip. Then you will travel to the selected area and experience what you've learned in class and through reading. You will be assigned required reading before, during and after the trip. Check the Credit Bulletin for travel-for-credit courses currently being offered.

Courses by Television

Each semester JCCC offers telecourses which make it possible to earn college credit at your own pace. Non-credit telecourses also are offered. Each lesson is shown several different times a week – you pick the time most convenient for you. And if you miss a lesson one week, you may view it on videotape in the JCCC library.

You also may save time, money and gas through courses by television. There is no need to come to campus except for a few scheduled class meetings and for exams. That means no hassles with traffic, bad weather or babysitters. Simply switch on your cable television and your living room becomes a classroom.

You can apply college credits earned through telecourses to your associate degree program and in most cases these credits will transfer to other colleges. You may be either a full-time or part-time student at JCCC and there is no limit to the number of telecourses you may take.

It's natural to be apprehensive about learning on your own out of the classroom. But if you are self-disciplined and can learn without supervision, you should have no problems. And if you have questions during the semester, a JCCC instructor will be just a phone call away. Contact the Continuing Education Office for details.

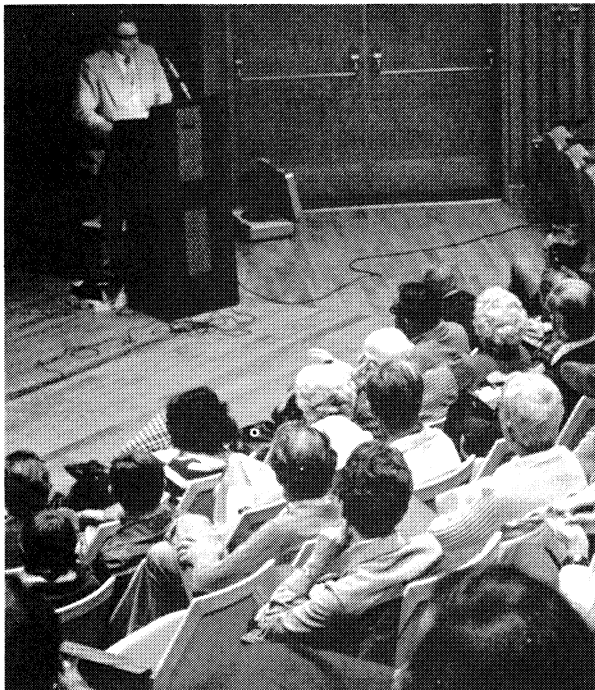


Conferences and Workshops

The College's community service program offers a wide range of services to public and private organizations including planning and arranging for seminars, conferences, institutes, short courses and workshops. The College also conducts and co-sponsors workshops and conferences with other institutions and organizations. For more information, contact the Community Services Office.

Extension Courses

The College provides off-campus community education outreach courses for college credit. All credit courses offered by the College can be offered at any location if there is enough participants and the environment is conducive to learning. For more information contact the Continuing Education Office.



Use of College Facilities

The College encourages community groups to use its facilities for meetings and activities when there is no conflict with College programs. For more information about the use of College facilities contact the Community Services Office.

Community Theatre, Chorus, Jazz Band

The College cooperates with The Barn Players, Inc. to bring community theatre to Johnson County. An all-volunteer crew produces a summer series of five full-length plays as well as other productions and a Readers Theatre throughout the year. Training for beginning actors is offered in the fall and spring. The Senior Acting Troupe produces a series of one-act plays dealing with the concerns of aging.

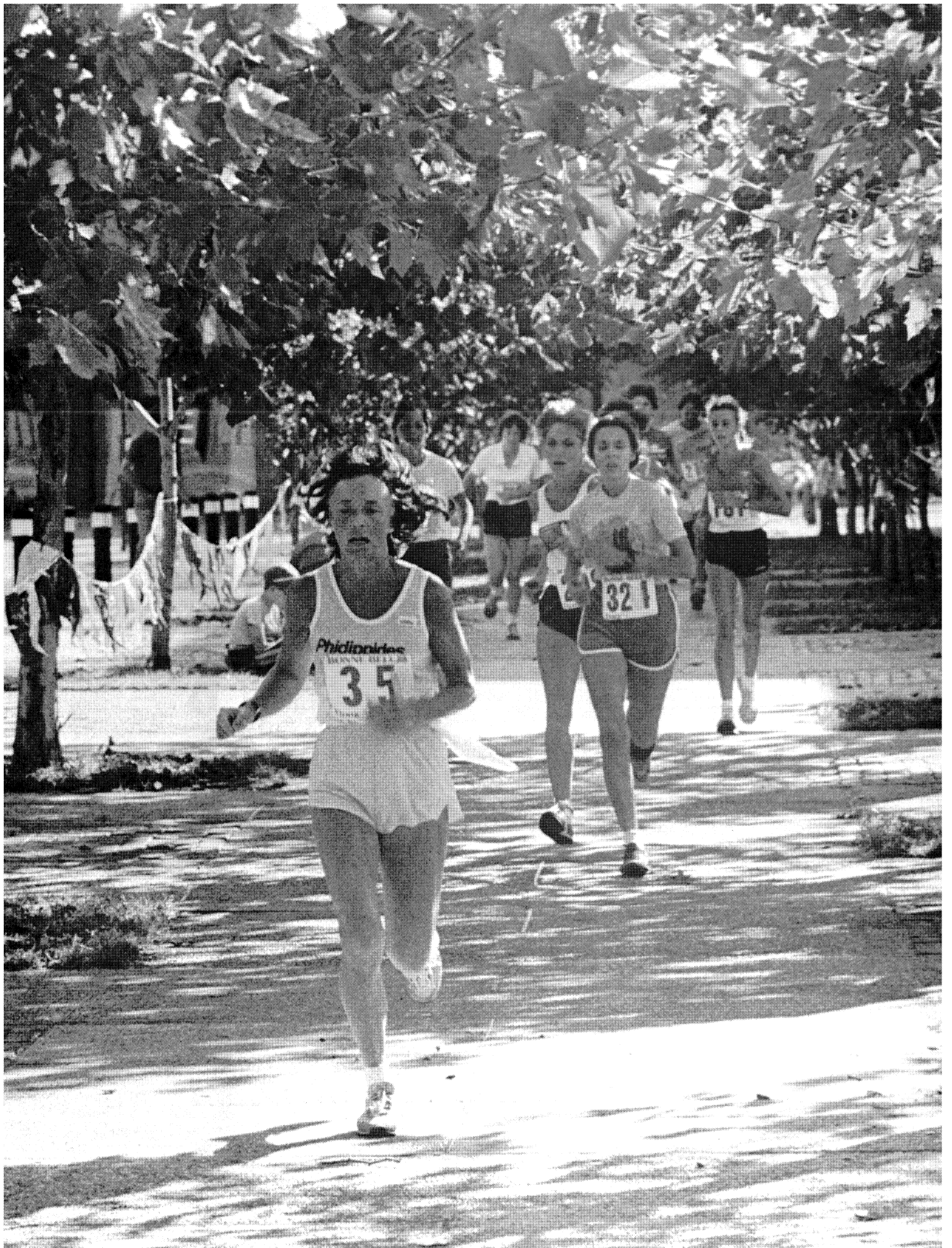
The Johnson County Community Jazz Band presents music in the styles of Count Basie, Stan Kenton, Maynard Ferguson and others at concerts held twice a year in JCCC's Little Theatre. Community concerts also may be booked through the Community Services Office.

The JCCC Community Chorus rehearses weekly and presents concerts on campus and throughout the community during the academic year. Membership is by audition.



Arts Council of Johnson County

As part of the mission to serve as a cultural center, the College has assumed leadership in establishing and sponsoring the Arts Council of Johnson County. An office with a part-time administrator is maintained on the campus. Funding assistance is received from the Kansas Arts Commission, National Endowment for the Arts, Johnson County Park and Recreation District and the Johnson County Library. The ACJC board is a coalition of more than 25 organizations representing art, education and business. ACJC provides a bi-monthly cultural arts calendar and newsletter, an annual major public event and workshops, and cooperates with other community organizations to conduct needs surveys and present arts programs.



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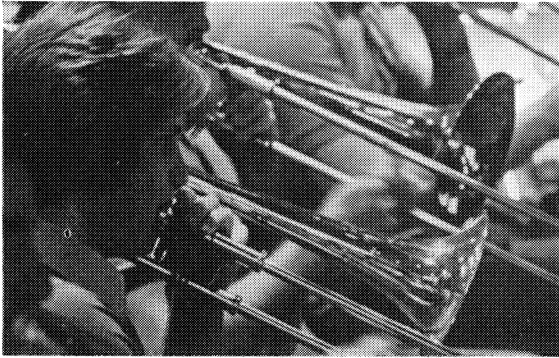
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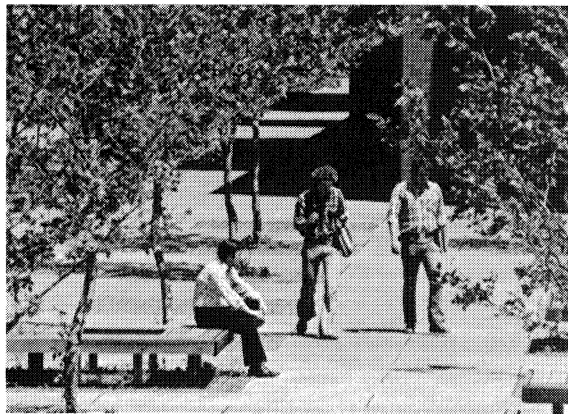
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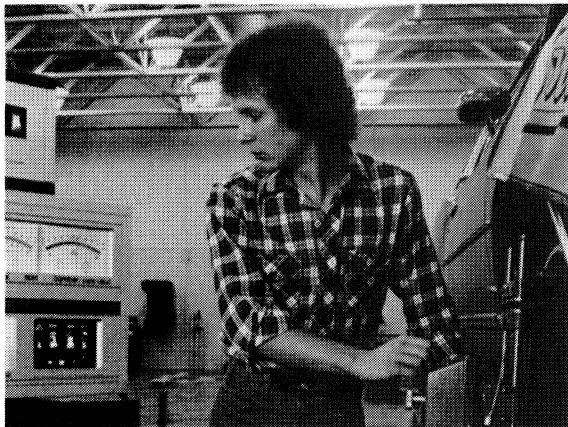
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A“MAZE”ING MINDS

If you like a challenge, see how quickly you can work your way through the maze that links these great minds—Leonardo da Vinci, Socrates, Emily Dickinson and Albert Einstein. The art of Leonardo, the philosophy of Socrates, the poems of Dickinson and the scientific vision of Einstein helped shape our history, our culture and our thought and challenge us all to reach for new meaning and new understanding.

