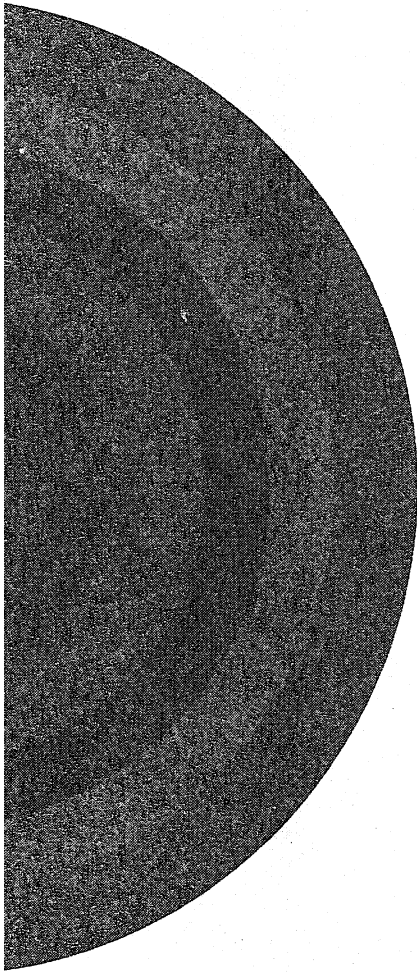
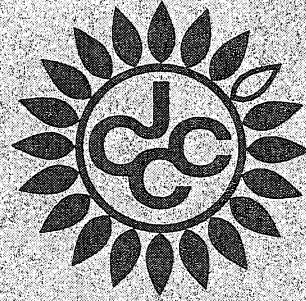


CATALOG

COURSE DESCRIPTIONS



JOHNSON COUNTY COMMUNITY COLLEGE



COMMERCIAL ART . . .

A Program for Unique Individuals

Effective visual communication has become a major concern for diverse business, social and individual interests in our complex society. Commercial artists fulfill an important role wherever the need for graphic communication arises. Their skill lies in the ability to effectively communicate ideas through the use of a wide variety of visual media.

JCCC'S PROGRAM

The Commercial Art program involves a combination of campus instruction and practical work experience at an approved agency. JCCC's program of courses will challenge students to perfect the visual awareness, problem-solving capabilities and technical skills required of the practicing artist. The aim of the program is to develop the knowledge, skills and versatility necessary for effective performance in most areas within a commercial art studio.

Classes are scheduled throughout the day and evening to provide maximum opportunities for all students, full or part-time, who want to participate in the program.

Successful completion of the program may lead to the Associate of Arts degree.

CAREER POSSIBILITIES

The field of Commercial Art provides a wide variety of career opportunities. Advancement to positions offering high levels of responsibility and financial reward are open to those with outstanding ability.

ADMISSION REQUIREMENTS

Applicants must fulfill the general admission requirements as outlined in the current college catalog.

TUITION AND FEES

The tuition for Kansas residents attending Johnson County Community College is \$13.00 per semester credit hour and a College Commons fee of \$1.50 per semester hour. Tuition for out-of-state and foreign students is \$27.00 per semester credit hour and a College Commons fee of \$1.50 per semester credit hour.

SOME ESSENTIAL COURSES

(The following courses are fully described in the current College catalog.)

HAR 4197 Design, 2-D
HAR 7209 Design, Color
HAR 6021 Design, 3-D
HAR 1608 Art Fundamentals
HAR 7576 Drawing I
HAR 7205 Lettering
EPH 2042 Basic Photography

* **Visual Technology I**

4 Credits

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 to the preparation of camera-ready art.

* **Visual Technology II**

4 Credits

Continuation of Visual Technology I with additional practical experience in the production of TV graphics, single and multiple color overhead transparencies and other specific printing and photographic production processes and techniques.

* **Visual Communications I**

4 Credits

Exploration of the techniques and imagery used in symbolic visual communication, focusing on the conversion of verbal concepts into persuasive visual messages. Studio assignments will deal with problems relating directly to social, industrial and commercial needs.

* **Visual Communications II**

4 Credits

Continuation of Visual Communications I but focusing on in-depth research relating to the special interests, or career objectives, of individual students. Their work will require the application of their total design capability to problems of professional scope and complexity.

* **Field Study**

3 Credits

Students work an average of fifteen hours per week in an approved training situation, under instructional staff supervision. Emphasis is placed on an increased understanding of the kind and quality of work done in a professional environment, upon the development and refinement of technical and conceptual skills and the production of additional materials to be included in the student's professional portfolio.

* **These courses are in the process of being developed.**

**For more information about this program, contact Dorothy Wadsworth, Commercial Art Program Coordinator, Johnson County Community College, College Boulevard at Quivira Road, Overland Park, Kansas 66210.
Phone - 888-8500.**



MEMORANDUM

DATE: September 25, 1975
TO: Counseling and Admissions Staff
FROM: College Learning Center
SUBJECT: Cut off dates for CLC-Fall credit enrollment

The last dates for enrolling for CLC credit are as follows:

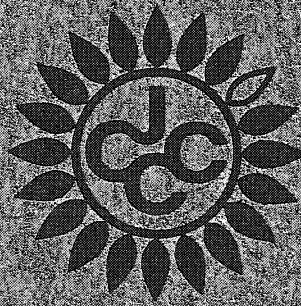
3 hours credit - September 26

2 hours credit - October 10

1 hour credit - October 17

The College Learning Center may be taken for non credit at any time during the semester.

cc: Dr. Lozano
Dave Lonborg
Mel Cunningham



JOHNSON COUNTY COMMUNITY COLLEGE

Accredited by the
North Central Association of Colleges and Secondary Schools

A publicly supported community college
serving residents of Johnson County in suburban Kansas City

This catalog becomes effective August 1, 1975.

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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MESSAGE FROM DR. FINCH



The only constant in life is change; for society, the individual and for institutions charged with meeting human needs.

Such change is evident at Johnson County Community College — *your* relatively young and thriving college that faces the challenges of expanding its role of service to the community while dealing with financial constraints.

The year 1975 has been earmarked as a time for JCCC to begin to expand its career program offerings to meet changing demands of both the local and national job markets. It is a time calling on the College to continue the expansion of services to the more rural areas of our community. It is a time when your community college must closely examine educational priorities and the realities of available financial resources.

Last year saw JCCC enrollment climb to more than 9,000 students in credit, continuing education and community service programs; the launching of programming on commercial, public and cable television; and increasing efforts to serve such special publics as senior citizens.

Your support of the College as a student and as a citizen is the very best testimony possible to the vitality and relevance of JCCC educational programs and services. The 1975 - 76 academic year will hopefully see Johnson County Community College become an even more important and viable part of life in Johnson County, Kansas.

In this time of constant change and almost limitless potential to fulfill a growing variety of interests and needs. Johnson County Community College is here to help *you* on whatever road you choose to travel. We hope that will make all the difference.

A handwritten signature in cursive script that reads "Harold L. Finch". The ink is dark and the signature is fluid and legible.

Harold L. Finch
Interim Chief Administrative Officer



JOHN F. CRAMER
Terms: 1975 - 79



DR. JACK J. HOLDER, JR.
Terms: 1969 - 77



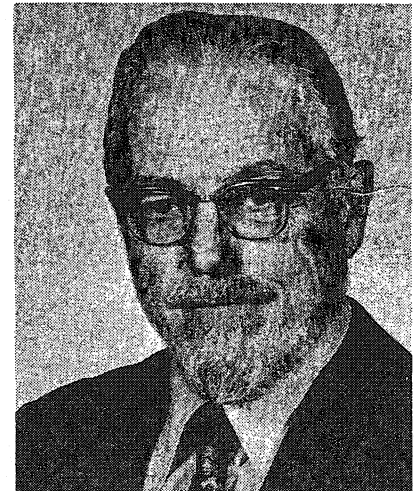
GEORGE H. LANGWORTHY
Terms: 1975 - 79



DR. JOYCE A. SMITH
Terms: 1973 - 77



DR. JOHN R. PRICE
Terms: 1969 - 77



DR. HUGH W. SPEER
Terms: 1967 - 79

PHILOSOPHY OF BOARD OF TRUSTEES

The concept of the community junior college is a major innovation in American education which embraces not only broad considerations but also necessary local adaptations. The goal of Johnson County Community College is to provide a high-quality, comprehensive and flexible program which is available to all individuals in the rapidly growing urban-suburban-rural community.

The major purposes of the College are reflected in the commitment to a comprehensive educational program including transfer, career, general studies and adult continuing education. In addition, the College seeks to become an integral part of the community by utilizing the resources, talents and opportunities of the community to the greatest possible extent and by offering the community its facilities, staff and stimulus.

The Johnson County Community College Board of Trustees and staff are committed to the development of a distinctive institution, definitely attuned to the needs of the community. The Board and the staff believe that each individual should have the opportunity to attain a position in society that is commensurate with his or her ability, talents and desires.

JOHNSON COUNTY COMMUNITY COLLEGE FOUNDATION

The Foundation is a non-profit corporation which was formed by area citizens to promote charitable, cultural, educational and scientific activities of the College. The Foundation provides a means by which private resources can be directed to College programs. Contributions to the Foundation are tax deductible.

The Directors of the Foundation have identified three areas of major emphasis towards which their activities are directed:

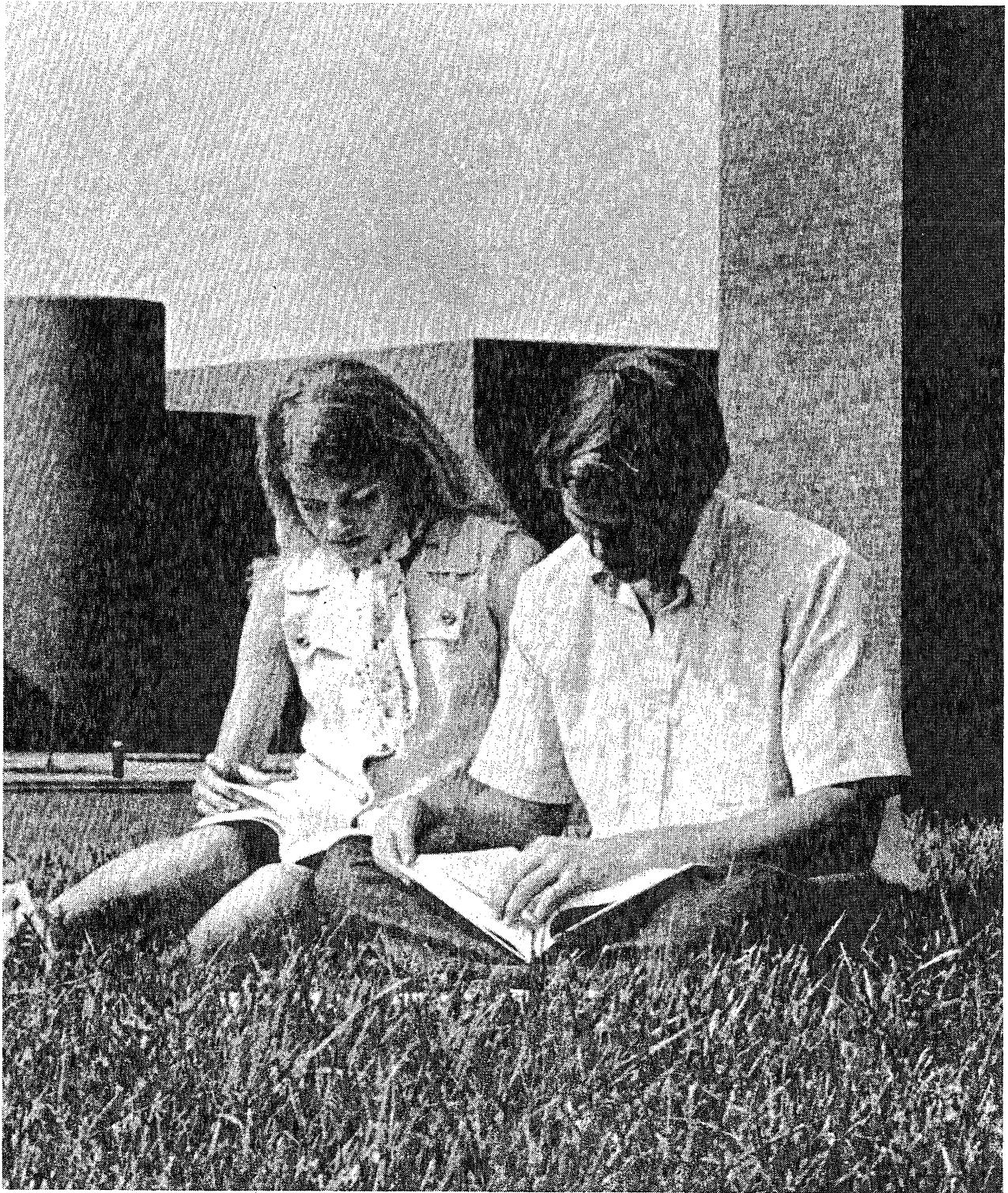
- Financial aid for students attending the College
- Support of the staff and staff projects
- Capital improvements

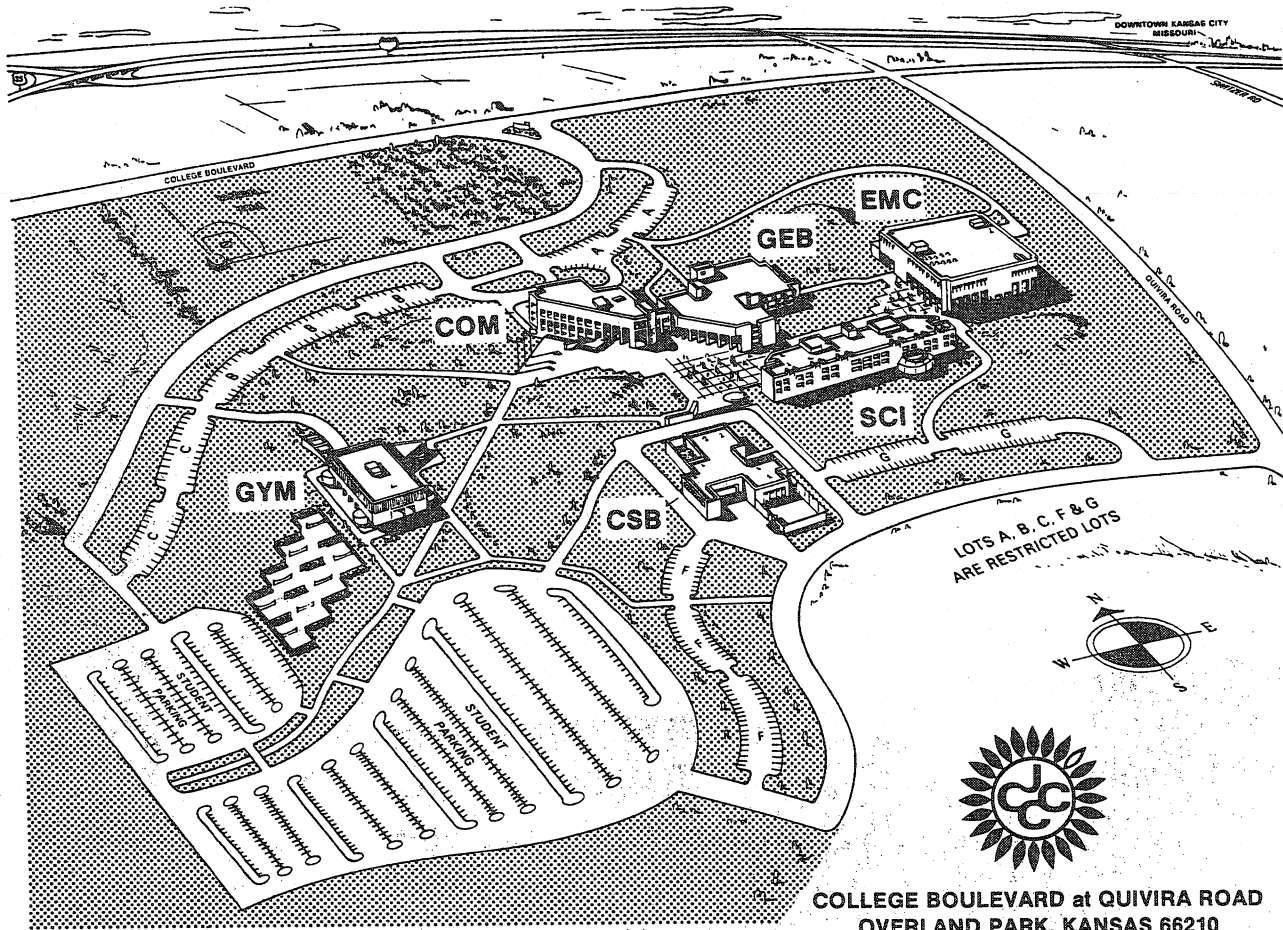
Through the efforts of the Foundation, many organizations and individuals have been encouraged to contribute financial aid to the College. Local needs and interests have been given priority as the Foundation seeks to be responsive to the community. JCCC students and staff members have benefited directly from the work of the Foundation.

The Board of Directors of the Foundation is made up of a cross section of the community and includes the Board of Trustees and President of the College. Current directors are:

| | |
|--------------------------|---------------------------|
| Dr. Wilbur T. Billington | Mr. Richard McAnany |
| Mr. Mel Clingan | Mr. Peter A. Martin |
| Mr. Ben Craig | Mrs. Jan Meyers |
| Mr. John F. Cramer | Dr. John R. Price |
| Mr. Glen Dickinson | Mr. Marvin Rainey |
| Mrs. Margaret Dunmire | Mr. John H. Robinson |
| Mr. Rick Harman | Dr. Joyce A. Smith |
| Dr. Jack J. Holder, Jr. | Dr. O. Dale Smith |
| Mr. Ed King | Dr. Hugh W. Speer |
| Mr. George H. Langworthy | Mr. C. Y. Thomas |
| Mr. Karl Lehman | Mr. Hugh F. Thompson, Sr. |
| Mr. Robert Lytle | Mr. Ben A. Zarda |

GENERAL INFORMATION





COLLEGE BOULEVARD at QUIVIRA ROAD
 OVERLAND PARK, KANSAS 66210
 913-888-8500

GEB - GENERAL EDUCATION BUILDING: Instructional and administrative offices; a 300-seat lecture hall-little theater; general classrooms and specialized rooms; data processing, business management labs; seminar rooms on all floors.

EMC - EDUCATIONAL MEDIA CENTER: Storage and distribution of library materials; production of graphic illustrations, slides, audio and video tapes, motion pictures and printed matter distributed by the College; general classrooms; drafting and electronics, learning center, and a portion of the art program.

SCI - SCIENCE AND TECHNOLOGY BUILDING: Two 75-seat lecture halls and two 100-seat lecture halls; physics room, nursing lab, life science labs, chemistry labs and audio-visual-tutorial labs; dental hygiene clinic with dental facilities for patients.

CSB - CAMPUS SERVICES BUILDING: Security office; telephone communication center; maintenance office and shops; vehicle repair area; central warehouse; instructional space; mechanical room for air conditioning and electrical equipment.

GYM - GYMNASIUM: Three basketball cross-courts which can be converted to a 2,300 seat varsity basketball arena; physical education facilities including weight room, wrestling room, classrooms; staff offices and minor first aid center for the campus; outdoor activities play fields located adjacent to the Gymnasium.

COM - COMMONS: Bookstore, food service and recreational facilities; offices, meeting rooms and lounge space.

PARKING: 1800 parking spaces for students, staff and visitors.

SITE: 220 acres.

SPECIAL USE FACILITIES

Meeting rooms, meals and other College facilities and services are available to community groups whenever the academic calendar permits. A schedule of facility fees and suggested menus may be obtained by contacting the Community Cooperation Division. JCCC welcomes visitors to the College campus who wish to see the facilities and/or obtain information relative to educational and service programs. Guided tours can be arranged for groups whenever three days advance notice is given by calling the JCCC Community Cooperation Division.

RECREATION FACILITIES: The College encourages community residents to use the physical development facilities whenever possible. Lighted tennis and handball courts as well as a weight-training room, basketball and volleyball courts are available for community use. Activities for the entire family are offered throughout the year. Contact the Physical Development Division for information and scheduling assistance.

COLLEGE COMMONS: This building is a meeting place, recreational area and eating facility for students, staff and the community. Food service is available for breakfast, lunch, and dinner Mondays through Fridays. In addition, the College provides catering service for special meals and meetings. A Game Room, with a variety of equipment such as pool tables and pinball machines, is located on Level 1.0 of the Commons. The Book Store, located in the basement, sells all required textbooks and supplies. In addition, many books, magazines, paperbacks, novelties, game and clothing items are kept in stock.

LIBRARY SERVICES: The library maintains a collection of all media - books, periodicals, films, slides, tapes, microforms, etc. - and provides a highly trained staff of librarians, media specialists and media aides to assist patrons in locating, using, and producing the needed media. Any Johnson County resident may use the Library services.

Over 30,000 books, 450 current periodicals, 100,000 documents on microfiche, plus hundreds of slides, video and audio recordings are available to support instruction and independent study in the College. A catalog of these materials is maintained by computer. Printing the catalog in book form rather than on cards enables the EMC to distribute copies of it among the various buildings occupied by the College. Materials are organized according to the Library of Congress classification. Satellite libraries are maintained in the General Education and Science and Technology buildings.

DENTAL HYGIENE CLINIC: Students and community residents can have their teeth checked, cleaned, x-rayed and treated with fluoride for a small fee at the Dental Clinic in Room 228 of the Science Building. Dental hygiene students, working under the supervision of licensed dentists and dental hygienists, provide the services.

COLLEGE LEARNING CENTER: The College Learning Center (CLC), located on the second floor of the Educational Media Center, contains basic learning services; a Hearing Impaired Program; the program for General Educational Development (GED); the Adult Basic Education (ABE) Program; and the English as a Second Language program. CLC services are available to all individuals of the community as well as to students enrolled at JCCC.

The learning services provided by the College Learning Center include improving reading rate and comprehension; phonics; study skills; memory improvement; plus help in improving spelling, vocabulary, in mathematics, science, social science, communications and foreign languages skills.

Diagnostic testing is conducted in order to develop an appropriate program of individualized instruction. JCCC students may receive college credit or they may use the CLC on a no-credit basis.

JCCC—THE COMMUNITY COLLEGE

Johnson County Community College is a public, two-year educational institution governed by a community board of trustees and designed to meet the postsecondary educational needs of the community. It provides individuals of all ages educational opportunities which recognize and satisfy a wide cross section of citizen interests, capacities and aptitudes.

The comprehensive educational program of the College includes university transfer, career, general studies and continuing education. Through a strong program of community service, the College seeks to be a catalyst in community development and self improvement as well as a central focus for cultural, intellectual and social activities within the community. Counseling, guidance and placement are also considered important functions of Johnson County Community College.

The College is accredited by the North Central Association of Colleges and Secondary Schools. JCCC works closely with neighboring colleges and universities to ensure transferability of credits to these and other institutions.

The College is also recognized as a Servicemen's Opportunity College (SOC). A Servicemen's Opportunity College provides the opportunity for active duty service personnel and their dependents to complete their studies for the associate degree by recognizing the exigencies of military service and serving as a repository for credits earned by such personnel.

JCCC is a member of the Kansas Association of Community Colleges and of the Greater Kansas City Community College Conference.

CURRICULUM

UNIVERSITY TRANSFER: JCCC offers courses in liberal arts, science and general education which are comparable to those offered during the first and second years of most four-year colleges and universities. This program is designed for students who are planning to continue their education at a four-year institution.

CAREER PROGRAMS: The College offers more than a dozen career program areas which are planned for the student who wishes to enter the job market in two years or less. These programs have been carefully planned with the aid of advisory committees from the community to meet entry-level career requirements.

GENERAL STUDIES: This curriculum is designed for students who are in the process of determining their educational goals. Fulfillment of individual needs and interests is emphasized. Students may choose courses from any of the curriculum areas and explore a variety of learning experiences. If, at a later date, the student wishes to enroll in a career program area or decides to transfer to a four-year institution, courses taken in General Studies may be applied to meet these requirements.

CONTINUING EDUCATION: Continuing Education is considered a vital part of the curriculum at JCCC. Activities range from skill courses through educational, civic and cultural development to person enrichment. Most Continuing Education activities are not for college credit, are held in locations throughout Johnson County as well as on the campus, and are community-centered. Major areas include art, aviation; business and finance; GED Test preparation; folk arts; foreign languages; home and family; human relations; music; office education; photography; practical know-how; sports and recreation; business and industrial inservice.

COMMUNITY SERVICE: JCCC offers its faculty, resources and facilities to the community. Special events and cultural programming are planned in conjunction with community agencies, and representatives from the community help determine the programs and growth of the College. Community information, development and surveys are offered by the College.

ADMISSION

ADMISSIONS PROCEDURES: Anyone may apply for admission to Johnson County Community College. Age or previous education is not a factor in the admission process, although high school students must have written approval from their school principal before enrolling in College courses. Students with legal residence outside of Johnson County will only be accepted after the demands of resident students are met.

Students who have not previously been enrolled in Johnson County Community College are required to fulfill the following when making application for admission:

- Application: Complete and file an application form with the office of Admissions. The complete social security number must be listed on the form.
- High School Transcripts: Full time students must provide an official transcript of high school work unless they have been out of high school for at least two years. Transcripts should be sent directly from the high school to the Admissions Office.
- College Transcripts: College transcripts from each college attended are required for all students transferring from another institution. Transcripts should be sent directly from the college to the JCCC office of Admissions.
- Residency: Residency in Johnson County requires six months to establish. See the Director of Admissions for specific residency requirements.
- Tests: It is recommended but not required that each full time student filing an application for admission provide American College Testing (ACT) scores. Students are advised to take the ACT test as early as possible on one of the national dates and to list Johnson County Community College as one of the three colleges to receive the test results.
- Foreign Students: Foreign students are required to take the Test of English as a Foreign Language (TOEFL) or present evidence of proficiency in the English language.

All records are expected to be complete and on file in advance of registration.

STUDENT EXCHANGE PROGRAM: The purpose of the Community College Student Exchange Program is to permit the maximum use of academic resources in the region and to allow students with initiative to develop creative educational programs.

A student from one of the Kansas City community colleges may register for one course per semester at one of the other participating institutions, so long as the student is enrolled in an additional course at the home institution and agrees to abide by the academic and student policies of the host institution. Regular tuition is paid at the home institution, and laboratory or special course fees at the host institution. The host institution may defer the registration of the visiting student until after the regular enrollment period and, if it chooses, limit enrollment during a given semester to 20 students from a single institution.

Participating institutions: Johnson County Community College, Longview Community College, Maple Woods Community College, Penn Valley Community College.

ADVANCED STANDING CREDIT: Advanced standing credit may be granted to students for knowledge acquired through self-study, work experience and courses successfully completed at other colleges. The following is Johnson County Community College's advanced standing credit program. (NOTE: no advanced standing credit will be recorded on a student's transcript until one credit course has been successfully completed at JCCC.)

Credit Transferred from Other Colleges: Johnson County Community College may accept appropriate credits earned from a college of recognized standing and may permit up to forty-five semester hours of transferred course work towards completion of the requirements for an Associate of Arts degree.

College Level Examination Program (CLEP): Credit may be granted to those who demonstrate a knowledge of a general or specific nature, equivalent to an undergraduate college course, through the College Level Examination Program. The General Examination tests knowledge of general information comparable to that obtained during the freshman year of college. The Subject Examinations offers the student an opportunity to be tested in selected subject areas. There are no restrictions as to age or educational background for the CLEP examinations.

Application to take the CLEP examination may be made in the Counseling Office at JCCC or at any other CLEP testing center. At the time of application, the students must indicate that they wish to have the results of the examination sent to JCCC.

College Entrance Examination Board (CEEB) Advanced Placement Program: Credit may be granted to students through the Advanced Placement Program tests which are administered at high schools during the third week of May. Students will be granted advanced standing credit upon presentation of scores of 3, 4 or 5.

Credit by Examination: Students wishing to receive credit by examination must submit a written request to the Director of Admissions by the following dates:

| Deadline Date | Testing Dates |
|---------------|--------------------------------|
| July 1 | July 15 through August 15 |
| September 1 | October 15 through November 15 |
| February 15 | March 1 through April 1 |

A fee of \$15 will be charged for each examination.

Area Vocational Technical School-Proprietary School Credits: Credit may be granted for credits earned at an area vocational technical school or a proprietary school if the school is accredited by a recognized accrediting agency. If the school is not accredited, a group of professional people may be selected by the College to equate the experience to college credit. A student must present proof of earned credit as well as descriptions of the classes successfully completed to the Director of Admissions. There is no charge for the evaluation.

Military Service: Credit granted for military service is based upon the recommendation of the Commission of Accreditation of Service Experiences which was appointed by the American Council on Education. To be eligible for such credit, a student must have had a minimum of one year's continuous active duty as a member of an active duty unit. Students currently enrolled may apply for military service credit by presenting a copy of Form DD 214 for discharged personnel or Form DD 295 for active duty servicemen.

Experienced Based Education: Credit may be granted for experience based education. Students who feel that they have acquired knowledge equivalent to college credit through their life experience (work, personal, etc.) may apply for this credit through the Director of Admissions.

A fee of \$15 will be charged for each course at the time of application for credit.

FOREIGN STUDENTS: The College welcomes students from different cultural and sociological backgrounds. As technology brings people closer together, it is important that an awareness of human values be developed which encompasses all cultures. The College encourages foreign students to enroll and works closely with them to ensure that their college experience is meaningful and enjoyable.

Foreign students should make application for admission to JCCC by the following dates:

- June 1 (for fall semester entry)
- October 1 (for spring semester entry)
- March 1 (for summer session entry)

Foreign students transferring from another college or university in the United States must file all additional documents no later than one month prior to the first day of classes. For detailed information, contact the Director of Admissions.

VETERAN'S ELIGIBILITY (G.I. BILL): the Veterans Administration fully approves Johnson County Community College for veterans who wish to secure educational benefits under the G.I. Bill of Rights.

Prospective students who are eligible for veterans' benefits should contact the office of College Services to secure proper forms to establish their eligibility.

Financial benefits to veterans are based on the following schedule: 12 or more semester hours - full time; 9 through 11 semester hours - $\frac{3}{4}$ time; 6 through 8 semester hours - $\frac{1}{2}$ time; 1 through 5 semester hours - less than $\frac{1}{2}$ time.

REGISTRATION

Registration for classes and payment of tuition and fees take place during the dates specified in the College Calendar, pages 63-67. Registration must be preceded by a conference with a College counselor for the purpose of selecting curriculum. Procedures are explained in the class schedules provided prior to registration.

WITHDRAWAL: A student may drop a course(s) without academic penalty at any time before the final day of the semester and receive a "W" grade. A student wishing to drop a course(s) after the final day of the semester will receive a grade other than a "W".

A student dropping a course must consult with a counselor in order to receive a "W" grade before the withdrawal date in a semester.

REFUND OF TUITION AND FEES: The total amount of tuition and fees will be refunded from the time of registration through the withdrawal dates for both the fall and spring semesters as well as the summer sessions. After the withdrawal date no refund will be made unless the student can successfully present a hardship case, such as hospitalization. Such cases must be presented within the two weeks following withdrawal date. In all cases, requests for refunds must be initiated by the student through a College counselor.

COSTS

TUITION AND FEES: The tuition for Kansas residents attending Johnson County Community College is \$13 per semester credit hour and a College Commons fee of \$1.50 per semester hour.

Tuition for out-of-state or foreign students is \$27 per semester credit hour and a College Commons fee of \$1.50 per semester credit hour. The cost of tuition is subject to change from year to year by action of the College Board of Trustees.

Laboratory and/or Course Fees: Laboratory and/or course fees to defray special course expenses such as the cost of breakage or the replacement of expendable supplies, are charged in some courses. Fees are listed in the schedule of classes available at the time of registration.

Textbooks: Textbooks are purchased by the student. The estimated cost of textbooks is from \$40 to \$60 per semester. A bookstore, operated by the College, is located on the campus in the College Commons.

Transcript Fee: All transcripts are free during the time a student is enrolled at the College and for the two semesters immediately following the last semester of enrollment. After that time, a fee of one dollar (\$1) will be charged for each transcript.

STUDENT SERVICES

The function of Student Services is to help each student utilize, to the best possible advantage, the educational opportunities offered by Johnson County Community College. The program is designed to supplement the instructional program by providing specialized services including counseling, testing, advisement, placement, financial assistance and student activities, all of which directly affect a student's progress in college and their progress toward a successful and meaningful life.

COUNSELING: Johnson County Community College provides a staff of professional counselors to assist students in career planning, in selecting a program of academic studies and in solving problems of a personal or social nature.

Emphasis is placed on the students' responsibility for conducting their own lives. Counselors do not make decisions for students nor do they solve their problems for them. Students do find themselves better able to handle their situation in a mature and responsible fashion by coming to know more about themselves through a counseling experience. Students needing more intensive services will be referred.

Following admission, each full-time student has an individual conference with a member of the counseling staff to help them plan their program at the College. Careful consideration is given to high school background, test results, interests, talents, aptitudes and goals. A student who experiences difficulty or dissatisfaction with the curriculum selected is encouraged to discuss the situation with a counselor.

Students are encouraged to use the Education and Career Information Files which are maintained by the Counseling Office. The counselors are readily available to assist students in career and educational planning.

FINANCIAL AID: Johnson County Community College recognizes that financial assistance is a necessary adjunct to its educational program. Consistent with this philosophy, it has developed a program of assistance for students who meet the general requirements for eligibility.

The function of the office of Financial Aids is to provide assistance in the formulation of realistic student financial plans. A number of grants, scholarships, long-term and short-term loans are available to prospective or present students who have demonstrated academic proficiency and have financial need. Part-time employment opportunities are open to all students, but are dependent upon the availability of jobs.

Determining Financial Need: Most financial aid is awarded to students who show financial need. In determining this need, consideration is given to the amount of money the student's family should be able to contribute, and the cost of attending the College. The student's parents are expected to contribute to his or her education to the extent possible based on their income and assets.

The College utilizes the American College Testing Program. This service provides a fair, objective assessment of a student's needs using a simplified form called Family Financial Statement. Students making application for financial aid based on need must submit a copy of this completed form and the required fee to the office designated on the form. Family Financial Statements are available from the Financial Aids Counselor.

A student who is financially independent of his or her parents would follow the same financial procedure as other students but would not be required to provide parents financial information. Instead, they would provide the College with a notarized statement indicating that during the twelve months previous to the application, they (1) had received no financial support from either parent, (2) had not been claimed by either parent as a deduction for income tax purposes, and (3) had not resided with either parent. These statement forms are available from the Financial Aids Counselor.

Application for Financial Aids: Students desiring financial aid should obtain an application for admission and complete all admission requirements prior to making any application for financial aid. Students should obtain the appropriate application form for the type of financial aid they are seeking from the Financial Aids Counselor.

Notification of Awards: Every student will be notified by mail of the decision on his or her application as soon as possible. Students who have been approved for financial aid will receive further directions relative to their award.

Supplemental Educational Opportunity Grant (SEOG): Funds for these grants are provided by the Federal Government and will be awarded to those students with the greatest financial need. The maximum grant under this program is \$1,500. The amount of this grant will be determined by the Need Analysis System.

Basic Educational Opportunity Grant (BEOG): The Federal Government instituted a new program in 1973 for undergraduate students. These grants amount to \$1,400 minus the amount expected from the family contribution. The actual dollar amount depends on the funding level established by the Federal Government. Students enrolled in 6 hrs. or more are eligible for this grant.

National Direct Student Loan (NDSL): Johnson County Community College is a participating member of the National Direct Student Loan Program. Students who are U.S. citizens are eligible to apply for one of these loans. Students may borrow a maximum of \$2,500 for their first two years of college.

College Work Study (CWS): The College provides part-time jobs on campus for students from low income families with the greatest financial need. The present minimum salary is \$2.00 per hour and numerous types of jobs are available on campus (clerical, secretarial, lab assistant, library assistant, etc.).

Federally Insured Loans: The education of young people from middle or upper income groups frequently places a financial burden on their families. The student from the higher income brackets may not show enough need to qualify for other loans or grants. To help these young people and their families, the Federal government authorized the Insured Loan Program. These Loans may be obtained from any local participating lending agency and are underwritten by the Federal government.

Students may borrow as much as \$2,500 per academic year and an aggregate amount not to exceed \$7,500 for undergraduate studies. Students may obtain application forms from the Financial Aids Counselor and must also receive verification of their enrollment from the College. Please note that under this program loans are made or denied at the discretion of the participating lending agency.

Nursing Loan Program: A number of loans are funded by the Federal Government for students enrolled in nursing programs. The amounts are based on funding levels established by the Federal Government, the number of applications and their specific financial need. Nursing students should contact the Financial Aids Counselor for the appropriate applications.

Law Enforcement Education Program Loans and Grants: The loan program makes available ten-year, low-interest-bearing loans of up to \$1,800 per academic year to full-time students enrolled in undergraduate programs leading to degrees in areas directly related to law enforcement. The grant program provides for payment of tuition and fees of not more than \$300 per semester for full-time or part-time enrollment in an undergraduate program leading to a degree or certificate in law enforcement. Applications may be obtained from the Financial Aids Counselor and from most law enforcement agencies.

Board of Trustees Grants: The Johnson County Community College Board of Trustees provides grants which remit tuition for qualified students. Grants are available to Johnson County residents who are full time students and have financial need. Applications may be obtained from the Financial Aids Counselor.

Community Grants and Scholarships: A number of grants and scholarships are provided by interested service, business and industrial organizations and individuals. Some of these are directed towards students enrolled in specific programs at the College but others are open to all. The Financial Aids Counselor can supply information about the requirements for community grants and scholarships. The following individuals or organizations currently provide grants and scholarships for JCCC students:

La Sertoma
American Business Women's Association
B'nai B'rith Women
Johnson County Cosmopolitan Club
American Association of University Women
Yellow Freight System
Preferred Business Corporation
Certified Professional Secretary Fund
Dr. and Mrs. Charles E. Jones
Overland Park State Bank
Sears Foundation
Metcalf State Bank
Dickinson Operating Company
Johnson County National Bank

PLACEMENT OFFICE: The primary purpose of the Placement Office is to assist individuals in learning about effective ways to secure suitable employment.

The Placement Office maintains cooperative working relationships with employers, other college and university placement offices, and both public and private employment agencies throughout the metropolitan area through personal and telephone contact.

In addition to publicizing specific job openings and notifying individuals of such openings, the Placement Office welcomes individual conferences with individuals who wish to discuss present, future, or long-range career plans. The conference may include such topics as writing resumes and letters of application, interviewing, and information about the many sources of finding job openings.

Individuals interested in placement services may visit the Placement Office in person or secure a brochure regarding its services at the Admissions Office.

STUDENT ACTIVITIES: Extracurricular activities are recognized as an essential part of a student's education. At JCCC, the College supports student activities in the same manner it supports academic activities. Student activities are financially supported by General Operating funds of the College and no student fees are assessed for this purpose.

Student Activities Coordinating Council: All students are encouraged to participate in the planning and development of activities. The Student Activities Coordinating Council (SACC) serves as a vehicle for the long range planning and budgeting that is necessary for most activities. Whenever an individual or group of students determine the need and decide to organize an activity, they become a part of SACC and receive assistance and support from other students and the Student Activities Coordinator. Activities in the past have included intramural athletics, drama presentations, dances, debates and the establishment of many special interest clubs and organizations.

Student Participation on College Committees: In addition to the extracurricular activities, students take an active part in the many areas within the College. Students serve on committees for curriculum, admissions, intercollegiate athletics, student discipline, etc. In this way, active participation from the students is encouraged in the organizational structure of the College.

Intercollegiate Athletics: JCCC is a member of the Greater Kansas City Community College Conference. Men compete in basketball, baseball, golf, track and tennis, while women compete in volleyball, basketball and tennis. The College will participate in other intercollegiate athletics as approved by the Board of Trustees.

All athletes participating in intercollegiate athletics must have a physical examination.

Intramural Activities: The College provides extracurricular activities to complement and supplement the instructional programs. The purpose of the intramural program is to develop skills, encourage friendships and provide for enjoyable and healthy use of leisure time.

STUDENT WELFARE: The College does not provide medical services, nor does the College assume responsibility for injuries incurred by students when taking part in any College activity. Medical services are readily available at local clinics and hospitals.

Medical Examination: A medical examination may be required for certain courses and/or activities. When possible this requirement will be designated in the College catalog, otherwise the instructor or activity sponsor will indicate a medical examination requirement at the first meeting. When a medical examination is required a satisfactory medical report must be provided by the student to the instructor or activity sponsor prior to the physical participation in the course or activity. The College will review the medical examination forms and may advise students not to participate in physical activities.

Civil Rights: Johnson County Community College complies with the requirement of Title VI of the Civil Rights Act of 1964 (P.L. 88-352) and all the requirements imposed by or pursuant to the Regulations of the Department of Health, Education and Welfare (45 CFR Part 181) issued pursuant to the title, to the end that no person shall, on the grounds of race, sex, color, or national origin, be excluded from participation in, be denied the benefit of, or be otherwise subjected to discrimination under any program or activity at the College.

Housing: Students attending the College will be responsible for locating housing. The College does not maintain an approved housing list nor assume any responsibility for student behavior off-campus.

Smoking, Gambling, Alcohol and Drug Abuse: Smoking is permitted only in designated areas on the campus grounds. Gambling, alcohol, narcotics and hallucinogenic-type drugs in any form are prohibited at all times on College property.

Personal Appearance: The College recognizes that a wide variety of personal styles concerning appearance and clothing are generally accepted in the local community. It is not the intention of the College to detail what is or is not acceptable. Students should be guided in their personal appearance by their plans for part-time jobs while at the College or for full-time employment upon leaving the College.

ACADEMIC INFORMATION

ATTENDANCE: Regular attendance in all classes is expected. No absence is "excused" in the sense that the student is excused from the work missed. It is the student's responsibility to fulfill all of the requirements of a course.

AUDIO-VISUAL TUTORIAL INSTRUCTION: Audio-Visual Tutorial (AVT) instruction has been developed to supplement classroom teaching in many courses. Individual learning units consisting of films, slides, tape recordings and written material are used by the students. This provides for learning on an individual basis with instructional assistance continuously available. Students may enroll in most AVT courses at any time during the year; instruction and practice periods are available between the hours of 8:00 a.m. and 9:00 p.m. daily.

FIELD STUDY: An interesting aspect of many college programs is the availability of Field Study. Field Study is an on-the-job work experience program which allows the student to gain actual experience in a career field. Placement for this training is made through the specific career program coordinator who makes special arrangements for each student. Students receive course credit (three hours per term) and wages for the time spent at work. Students enrolled in Field Study must average 15 or more work hours per week.

GRADING SYSTEM: Grades measure the student's performance in terms of the goals and objectives of a course, and reflect the degree or extent to which the student has mastered the content, skills and methods relevant to the course objectives. Grades are earned in each course and are recorded on the student's permanent record. The College uses two grading systems, the regular grading system and the credit / no credit grading system.

Regular Grading System: The regular grading system uses the traditional symbols of evaluation understood and accepted by the general public and the business and educational communities. This system provides a range of grade levels indicating the student's achievement of the objectives established for a course. The regular grading system is as follows:

A - *Excellent* or outstanding achievement of the educational objectives.

B - *Superior* achievement of the educational objectives.

C - *Satisfactory* achievement of the educational objectives.

D - *Acceptable* achievement of the educational objectives.

W - *Withdrawal* without academic assessment. (A student may withdraw any time during the semester.)

I - The student will receive an *Incomplete* if he has not yet satisfactorily achieved the objectives of the course within the semester or the prescribed period. For good and sufficient reason, the student may be permitted to complete the requirements of the course without repeating the course. Generally, however, the student must repeat the course and achieve a grade of D or better to remove the I from his record.

***Credit/No Credit Grading System:** The credit/no credit grading system is most often chosen by students wishing to audit a course; those who take courses not directly related to their major objectives and students who wish to explore courses outside their usual range of subject matter.

Courses completed under this option will be shown on the student's transcript; however, grades received under this grading system are not used in computing the student's grade point average.

Under this grading system, a student receives the following grades:

S - Credit earned

I - No credit

W - Withdrawn

A counselor's approval is necessary before a student chooses the credit/no credit grading system. Generally, a student may enroll in only one course per semester under this option.

During the fourth week of the semester, students desiring to exercise this option must complete a card at the Admissions Office. Subsequently, no change may be made in the student's enrollment status with respect to the grading system.

***NOTE:** Some schools, scholarship committees and honorary societies do not accept this grading system and convert grades of S to C and I to F when computing grade-point averages, or otherwise penalize students who use this option. If you have any questions, contact the Counseling Office before choosing the credit / no credit grading system.

Grade Point Average: Semester grades are assigned grade points as follows:

- 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 accumulated by a student are divided by the total semester credit hours successfully completed, excluding the semester credit hours for which a "S", "W", or an "I" were assigned. The result is the student's accumulated grade point average.

Whenever a student repeats a course, only the credit and grades earned in the repeated course will be recorded and used in computing the student's grade point average.

HONORS: The names of students who complete a minimum of twelve (12) hours of credit and who earn an overall grade point average of 3.0 or higher during any semester are published on the Dean's list at the end of the semester.

GRADUATION REQUIREMENTS

EVALUATION OF CREDITS: If a student has received previous credit and wishes to complete either an Associate of Arts degree or a Certificate of Graduation, the credits will be evaluated by the Director of Admissions and a copy of their acceptance will be given the student.

ASSOCIATE OF ARTS DEGREE: Requirements for the Associate of Arts degree include the successful completion of a minimum of sixty (60) semester credit hours in an approved program with a cumulative grade point average of 2.0. An approved program is that program designed to meet the requirements for graduation which is developed by the individual with the approval of a counselor. A cumulative grade point average is based upon all successfully completed course work at this College or another institution. A student must earn a minimum of fifteen semester credit hours with a 2.0 average at Johnson County Community College and be enrolled during the semester in which the degree is received.

Honors: An Associate of Arts degree will be granted "With Honors" if the recipient earns an overall average of 3.5 in all courses applicable to the degree.

CERTIFICATE OF GRADUATION: Requirements for a Certificate of Graduation include the successful completion of an approved program and enrollment during the semester in which the student receives the Certificate.

Honors: The Certificate will be granted "With Honors" if the recipient earns an overall average of 3.5 in all applicable courses.

INTENT TO GRADUATE: A Notice of Intent to Graduate must be filed by each student who wishes to receive either the Associate of Arts degree or the Certificate of Graduation from Johnson County Community College.

COMMENCEMENT EXERCISES: Requirements for graduation may be completed during any semester, but the degree will not be conferred until commencement exercises are held at the close of each spring semester.

PROGRAMS TO MEET SPECIAL NEEDS

Hearing Impaired Program: The Hearing Impaired Program provides the student who has a hearing loss with on-the-job training coordinated with classroom activities. Students in this program attend classes with hearing students and are offered special assistance in the form of interpreters, tutors, note-takers, etc. When the hearing loss of the student is not severe, special equipment to augment hearing is provided. Staff members from the Hearing Impaired Program teach classes in the fundamentals of writing, mathematics and manual communication.

GED Program: Individuals who are interested in obtaining a high school equivalency certificate by taking the General Educational Development Test (GED) may receive help through the College Learning Center. A personalized program will be designed to assist the student in preparing for the test. Instructional material is available in the Center. Students work at their own speed, without formal class meetings. Other methods of preparation for the GED test are available, including tutoring and organized classes.

English as a Second Language: For those individuals whose native language is not English, a course in English as a Second Language is available at the Center. Designed for students who have already mastered the basic concepts of English, the course stresses conversation, pronunciation and idioms. Participants enjoy a unique opportunity to meet people from other countries at the same time they are improving their fluency in English.

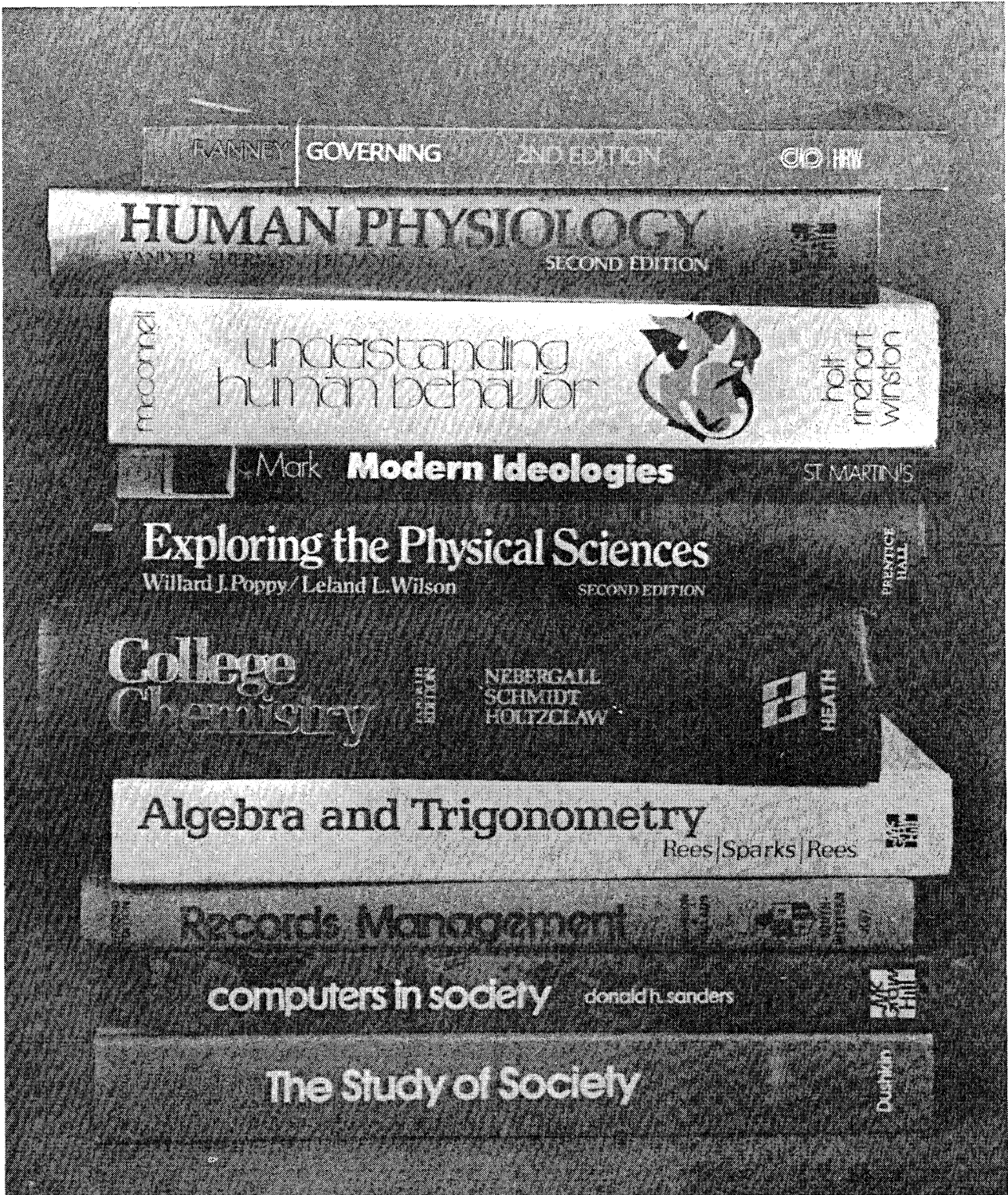
Operation Quick Step: The Quick Step program at JCCC offers high school seniors the opportunity to take college courses while they are still enrolled in high school. If the high school schedule permits, students may enroll in most courses offered by the College. Certain courses are scheduled at times especially convenient for high school students with beginning dates which coincide with local high school schedules. Interested students should contact their high school counselor for more information.

Extension Courses: College junior/senior and graduate level courses are offered on JCCC's campus by several four-year colleges and universities. Registration and the granting of credit is handled by the sponsoring institution. Several junior/senior and graduate level college courses are offered on the College campus through the statewide academic extension telenetwork. The telenetwork programs generally originate on the campus of a state college or university in Kansas and are linked to JCCC classrooms via telephone line. Complete information on upper division and graduate level courses can be obtained by contacting the office of Continuing Education.

Mini Courses: Many of the regular credit courses have been designed to be offered as Mini Courses which offer an unusual educational opportunity for those students who are interested in obtaining instruction in less than a semester. Students who for some reason are forced to enroll late may earn regular semester credit through Mini Courses. Although Mini Courses are shorter in duration than regularly scheduled courses, they are more intensive and generally meet for more hours per day. For more information about Mini Courses, check the current class schedule or contact the Counseling Office.

Television Courses: Certain courses which are shown on local television are now being offered for credit. For more information about current offerings, contact the Dean of Instruction.

COURSE DESCRIPTIONS



The number shown in parentheses at the end of most course descriptions refers to the course's previous number. If no number appears in parentheses, the course is new.

AVIATION

Within this area of the College curriculum, students can develop individualized programs which will enable them to learn to fly for business and pleasure; to develop or upgrade aviation trade skills or to increase their knowledge of the field of aviation. Career possibilities include commercial pilot, aviation secretary, private pilot, air traffic controller, airline stewardess, airport manager plus a host of other career options which are included in the broad spectrum of aviation.

For those students who are interested, Aviation Flight Instruction is offered by the College. Often considered an integral part of training in any of the areas of aviation specialization, Aviation Flight courses are designed to develop proficiency in flying both single and multi-engine aircraft. All flight operations are conducted in College-owned aircraft which are based at the Johnson County Airport. Students are taught specific flight maneuvers, ground school and are taught to operate during cross-country flight, air-traffic control, and varying weather conditions. Upon completion of this program students take the FAA examination for single-engine ratings. Applicant's Aviation Flight instruction must pass the required FAA physical examination before flight training begins.

INTRODUCTION TO AVIATION AV 6349

Development of aviation and its importance to the American economy. Special emphasis on the history of aviation, the airlines, general aviation and the aviation industry. Class meets three hours per week. 3 Credits (AV 110)

INTRODUCTION TO POWERPLANTS AV 7284

Fundamental principles of aircraft engines, operation, basic construction, induction, ignition and lubrication systems. Class meets three hours per week. 3 Credits (AV 112)

INTRODUCTION TO AIRFRAMES AV 1335

Examination of methods and materials used in the construction of airframes. Emphasis on safety and inspection techniques. Class meets three hours per week. 3 Credits (AV 113)

AIR TRANSPORTATION AV 5654

Development and present status of air transportation. Organization and function of the Federal Aviation Agency and the Civil Aeronautics Board. Class meets three hours per week. Spring 3 Credits (AV 217)

AIRPORT MANAGEMENT AV 3646

Survey of major functions of airport management. Special attention to areas of organization, zoning, financing, planning, safety and the social-economic effect on the community or region served. Class meets three hours per week. Spring 3 Credits (AV 215)

PRIVATE PILOT GROUND SCHOOL AV 3649

Preparation for the FAA private pilot's written examination. Instruction in use of Federal Aviation regulations, weather reports, aircraft flight manual, Airman's Information manual, maps and E6B in planning safe and expeditious cross country flights. Class meets three hours per week. 3 Credits (AV 105)

COMMERCIAL GROUND SCHOOL AV 3665

Prerequisites: AV 3649, or FAA private pilot rating—Preparation for the FAA commercial pilot written examination. In-depth study of meteorology, radio navigation, instruments, flight information publications, charts, aircraft performance characteristics, rules and regulations for single and multi-engine operations and cross country flights. Class meets three hours per week. 3 Credits (AV 106)

AVIATION PROGRAM
NO LONGER AVAILABLE

COMMERCIAL PILOT I AV 6647

Prerequisite: FAA third class medical certificate—Basic course providing flight instruction to qualify the student for an FAA private pilot rating. A total of 38 dual and solo flying hours. Flight hours by arrangement. 2 Credits (AV 101)

COMMERCIAL PILOT II AV 4425

Prerequisites: FAA second class medical certificate, AV 6647—The first of two phases of flight training in preparation for the FAA commercial pilot's rating. Emphasis on procedures and maneuvers. A total of 60 hours of dual and solo flying. Flight hours by arrangement. 2 Credits (AV 102)

COMMERCIAL PILOT II AV 5430

Prerequisite: AV 4425—Continuation of Commercial Pilot I (AV 4425). Second half of the two phase flight and ground training necessary to complete requirements for the FAA commercial pilot's rating. Hours by arrangement. 4 Credits (AV 201)

Prerequisites shown with courses on this page may be found as listed below.

AV 3649 - pg. 19

AV 4425 - pg. 19

AV 6647 - pg. 19

INSTRUMENT PILOT**AV 1256**

Prerequisites: AV 6647, AV 5430—Preparation for the FAA flight instrument rating. Instrument practice on holding patterns, time-distance problems, ADF and VOR tracking procedures and enroute and terminal navigation procedures. All flight time is with a certified instructor. Hours by arrangement. 3 Credits (AV 202)

MULTI-ENGINE PILOT**AV 1157**

Prerequisites: AV 6647, AV 5430—Preparation for the FAA multi-engine pilot rating. All flight time in a modern twin-engine aircraft. Hours by arrangement. 2 Credits (AV 203)

INSTRUMENT PILOT**AV 1258**

Prerequisites: AV 6647, AV 5430—Preparation for the FAA certified instrument rating. Hours by arrangement. 3 Credits (AV 202)

**AVIATION PROGRAM
NO LONGER AVAILABLE**

GROUND INSTRUCTION TECHNIQUES AV 7671

Teaching techniques and supervised practice in the instruction of ground school aviation subjects. Class meets three hours per week. 3 Credits (AV 219)

AVIATION SEMINAR**AV 4274**

Group discussion and reports on equipment, airport development, air traffic control and other current topics in the field of aviation. Tours and field trips include FAA facilities, manufacturing plants and airports. Class meets three hours per week. 3 Credits (AV 216)

BUSINESS & MANAGEMENT

The area of business within the College curriculum offers a wide variety of educational opportunities. Career possibilities include accounting, data processing, fashion merchandising, hospitality management, marketing and management, medical records technology or one of the many secretarial options, including legal and certified professional secretary.

Students who are interested in earning a baccalaureate degree from a four-year college or university will find that JCCC courses will let them begin work on a degree in such fields as accounting, finance and banking, marketing, transportation or computer science. The counseling staff at JCCC has carefully examined the programs of other institutions and can assist individuals in selecting courses to meet their requirements.

The number shown in parentheses at the end of most course descriptions refers to the course's previous number. If no number appears in parentheses, the course is new.

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 our environment; multinational character of business; external and internal forces that comprise our business and economic system. Class meets three hours per week. 3 Credits (BUS 111)

BUSINESS WRITING**BUS 1142**

Introduction to business communication, emphasizing the business letter; letter of inquiry; resume; letter of application; letter of complaint and office memorandum. Class meets three hours per week for five weeks. 1 Credit (COM 101.4)

PERSONAL FINANCE**BUS 2259**

Techniques of money management and the preparation of a spending plan. Proper use of consumer credit; buying; selling; financing home loans; real estate; shopping for and financing automobiles and automobile insurance; food planning and food shopping; health insurance coverages; Social Security benefits; stocks, bonds and mutual funds; general estate planning. Class meets three hours per week. 3 Credits (BUS 114)

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 Codes and includes introduction to the study of law, business crimes and torts, contracts, agency and partnerships. Case studies are used. Class meets three hours per week. 3 Credits (BUS 212)

BUSINESS LAW II**BUS 5134**

Prerequisite: BUS 1121—Continuation of BUS 1121 (Business Law I). Includes negotiable instruments, personal property, real property, secured transactions, and corporations. Case studies are used. Class meets three hours per week. 3 Credits (BUS 213)

SURVEY OF ECONOMICS**BUS 5123**

Survey of the basic principles governing the economy and its economic units. Designed primarily for the student planning to take only a single course in economics. Topics include elements of supply and demand; national income accounting; money and banking and market structures. Class meets three hours per week. 3 Credits (BUS 191)

Prerequisites shown with courses on this page may be found as listed below:

AV 5430 - pg. 19

AV 6647 - pg. 19

BUS 1121 - pg. 20

ECONOMICS I**BUS 2253**

Prerequisite: By permission—Fundamental problems of economics and contemporary approaches to these problems. Topics include the basic elements of supply and demand; prices; national income determination; money and banking; monetary and fiscal policy and international trade and finance. Class meets three hours per week. 3 Credits (BUS 201)

ECONOMICS II**BUS 3093**

Prerequisites: BUS 2253 or SS 2253 or by permission—Continuation of BUS 2253 (Economics I) with emphasis on supply and demand, theory of the firm and market structures. Class meets three hours per week. 3 Credits (BUS 202)

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 per week. 3 Credits (BUS 214)

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 per week. 3 Credits (BUS 200)

FUNDAMENTALS OF MATHEMATICS **BUS 2122**

Review of fractions, decimals and whole numbers. Numeration. Practical applications of percent, dimensions and linear equations. Class meets three hours per week. 3 Credits (MATH 104)

STATISTICS**BUS 2084**

Prerequisite: MTH 6079 or equivalent—Introduces descriptive statistics, probability models, sampling distribution, hypothesis testing, chi-square test, regression and correlation. Class meets three hours per week. 3 Credits (MATH 110)

ACCOUNTING CAREER PROGRAM

A dual-purpose accounting curriculum is offered by JCCC which will meet the needs of students who are interested in entering the job market at a paraprofessional level after two years of post-high school study as well as providing initial preparation for those who wish to obtain a bachelor's degree. The following essential courses should be included in the sequence indicated:

| | |
|--------------------------|----------|
| Accounting I | BAC 4092 |
| Algebra | MTH 6079 |
| Introduction to Business | BUS 4282 |
| Business Data Processing | BDP 7135 |
| Communications I | COM 6524 |

| | |
|---------------------------|----------|
| Accounting II | BAC 5096 |
| Programming Fundamentals | BDP 4623 |
| Principles of Economics I | BUS 2253 |
| Personnel Management | BUS 2341 |

| | |
|----------------------------|----------|
| Cost Accounting | BAC 2436 |
| Business Law I | BUS 1121 |
| Federal Income Taxes | BAC 2360 |
| Principles of Economics II | BUS 3093 |

| | |
|-------------------------|----------|
| Intermediate Accounting | BAC 6299 |
| Managerial Accounting | BAC 4063 |
| Business Law II | BUS 5134 |

FEDERAL INCOME TAXES **BAC 2360**

Procedures for reporting federal income taxes with emphasis on income and deductions for individuals. Practice is given in preparing Federal Income Tax Returns. Class meets three hours per week. 3 Credits (BUS 216)

SMALL BUSINESS ACCOUNTING **BAC 2171**

Introduction to various aspects of starting and operating a small business with emphasis on the basic accounting procedures needed to maintain daily records for the small firm. Designed to meet the needs of the individual operating a firm with occasional help of an outside accountant. Does not prepare the student for Accounting II (BAC 5096). Class meets three hours per week. 3 Credits (BUS 100)

ACCOUNTING I**BAC 4092**

Introduction to accounting fundamentals. Emphasis on the recording and analysis of transactions; use of journals, ledgers and financial statements. A practice set is required of students. Class meets three hours per week. 3 Credits (BUS 101)

Prerequisites shown with courses on this page may be found as listed below:

BUS 2253 - pg. 21 MTH 6079 - pg. 43 SS 2253 - pg. 53

ACCOUNTING II**BAC 5096**

Prerequisites: BAC 4092 or by permission—Continuation of BUS 4092 (Accounting I) with increased emphasis on interpretation and use of accounting data by management. Accounting theory application for partnerships and corporations including preparation and use of financial statements. Class meets three hours per week. 3 Credits (BUS 102)

COST ACCOUNTING**BAC 2436**

Prerequisite: BAC 5096—The allocation of production costs and the utilization of this data by management with emphasis on job order process and standard cost systems. An introduction to direct cost and joint- and by-product costing procedures. Class meets three hours per week. 3 Credits (BUS 210)

INTERMEDIATE ACCOUNTING**BAC 6299**

Prerequisite: BAC 5096—Application of accounting theory to the valuation of balance sheet accounts and to fund flow analysis. Emphasis on cash and receivables, inventories, fixed assets and liabilities. Class meets three hours per week. 3 Credits (BUS 211)

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 per week. 3 Credits (BUS 215)

**DATA PROCESSING
CAREER PROGRAM**

The Data Processing program provides a degree option for those seeking job entry skills as well as specialized course work which may be taken by professionals in upgrading and maintaining their data processing knowledge.

Students pursuing the full course of studies should plan their program with a counselor to include supportive courses and the following essential courses in the sequence indicated:

| | |
|---------------------------------------|-----------|
| Algebra | MTH 6079 |
| Accounting I | BAC 4092 |
| Programming Fundamentals | BDP 4623 |
| Statistics | BUS 2084 |
| COBOL I | BDP 5391 |
| Basic Computer Components | *EET 4065 |
| Assembler Language | BDP 3073 |
| Introduction to Systems | |
| Design & Analysis | *BDP 4551 |
| COBOL II | BDP 6401 |
| Teleprocessing | *BDP 7224 |
| Application Programming: Applications | BDP 6514 |
| Application Programming: | |
| Job Control Language | BDP 7300 |

Computing Systems
Data File Management
Systems Project
PL/1
FORTRAN

BDP 6451
BDP 1036
*BDP 1530
*BDP 2077
BDP 3397

*Two of the five courses indicated must be taken.

BUSINESS DATA PROCESSING**BDP 7135**

Primarily a non-technical course. Consideration of social and economic implications of computers in government and business. Students operate the keypunch and time-sharing terminal in learning to write and run simple computer programs. Class meets three hours per week. 3 Credits (BUS 132)

PROGRAMMING FUNDAMENTALS**BDP 4623**

Prepares an individual for enrollment in any one of the programming language courses. Primarily a technical course. Keypunch and terminal usage are covered at an advanced level. Exposure to selected pieces of unit record equipment. Flowcharting and writing BASIC computer programming are stressed. Digital computer equipment is used to run the programs; data coding and numbering systems are covered. Class meets three hours per week. 3 Credits (BUS 131)

COBOL I**BDP 5391**

Prerequisite: BDP 4623—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 per week. Spring. 3 Credits (BUS 133)

COBOL II**BDP 6401**

Prerequisite: BDP 5391 and BDP 3073 (BDP 3073 may be concurrent)—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 per week. Fall 3 Credits (BUS 246)

Prerequisites shown with courses on this page may be found as listed below.

| | | |
|-------------------|-------------------|-------------------|
| BAC 4092 - pg. 21 | BDP 3073 - pg. 23 | BDP 5391 - pg. 22 |
| BAC 5096 - pg. 22 | BDP 4623 - pg. 22 | |

FORTRAN**BDP 3397**

Prerequisites: BDP 4623; MTH 6079 or MTH 3427; BUS 2084 (BUS 2084 may be concurrent)—Use of FORTRAN programming language in solving typical problems. Emphasis on the vocabulary and grammar of ANSI FORTRAN. Computer used in compiling and executing the programs. Class meets three hours per week. Spring 3 Credits (BUS 144)

ASSEMBLER LANGUAGE**BDP 3073**

Prerequisite: BDP 4623—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 per week. Fall 3 Credits (BUS 243)

PL/1**BDP 2077**

Prerequisites: BDP 5391 or BDP 3397—Use of PL/1 language in solving typical problems. Emphasis on function and use of the various statements and procedures of PL/1. Computer used in compiling and executing the programs. Class meets three hours per week. Spring 3 Credits (BUS 242)

APPLICATION PROGRAMMING:**Applications****BDP 7300**

Prerequisite: By permission
Corequisites: BDP 5391, BDP 3397 or BDP 3073—Computer operations or directly related work experience. A minimum of 15 hours supervised on-the-job training per week. Hours by arrangement. Fall 3 Credits (BUS 241)

APPLICATION PROGRAMMING:**Job Control Language****BDP 6514**

Prerequisite: By permission
Corequisites: BDP 5391, BDP 3397 or BDP 3073—Programming or directly related work experience. A minimum of 15 hours supervised on-the-job training per week. Hours by arrangement. Spring 3 Credits (BUS 245)

BASIC COMPUTER COMPONENTS**BDP 4065**

Basic digital components and computer organization. Designed for the non-technical student as well as those in Data Processing and Electronics. Class meets three hours per week. 3 Credits (ENGR 149)

TELEPROCESSING**BDP 7224**

Prerequisite: BDP 4623—A form of information handling in which a data processing system utilizes communication equipment. Concerned with that part of the system which is external to the central computer. Class meets three hours per week. Fall 3 Credits (BUS 249)

DATA FILE MANAGEMENT**BDP 1036**

Prerequisite: BDP 3073—Comprehensive coverage of the various file organizations and access methods available. Concepts are integrated into the development of an inquiry data base file system. Techniques and potential use of system in industry and business also included. Class meets three hours per week. Spring 3 Credits (BUS 249)

INTRODUCTION TO SYSTEMS DESIGN AND ANALYSIS**BDP 4551**

Prerequisites: BDP 5391, BDP 3397 or BDP 3073 or by permission—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 per week. Fall 3 Credits (BUS 234)

COMPUTING SYSTEMS**BDP 6451**

Prerequisites: BDP 3073 or concurrent enrollment—Basic concepts and principles of a digital computing system. Interrelationships between hardware and software and how they are controlled are developed and illustrated through study of a typical digital computing system. Class meets three hours per week. Spring 3 Credits (BUS 247)

SYSTEMS PROJECTS**BDP 1530**

Prerequisites: BDP 3073, BDP 6451 (BDP 6451 may be concurrent)—Design and development of software for either compilers (syntax directed and table driving techniques) or operating system software. Class meets three hours per week. Spring 3 Credits (BUS 250)

Prerequisites shown with courses on this page may be found as listed below.

| | | |
|-------------------|-------------------|-------------------|
| BDP 3073 - pg. 23 | BDP 5391 - pg. 22 | MTH 3427 - pg. 43 |
| BDP 3397 - pg. 23 | BDP 6451 - pg. 23 | MTH 6079 - pg. 43 |
| BDP 4623 - pg. 22 | BUS 2084 - pg. 21 | |

**FASHION MERCHANDISING
CAREER PROGRAM**

Courses in the sequence indicated below are deemed essential to employment in the field of fashion merchandising. When coupled with selected supportive courses, a program can be designed to culminate in an associate of arts degree. For details, contact your counselor.

| | |
|---|----------|
| Fashion Seminar: Human Relations | BFM 2017 |
| Salesmanship | BMM 5026 |
| Fashion Fundamentals | BFM 7013 |
| | |
| Fashion Seminar: Fashion Promotion | BFM 5321 |
| Retailing | BMM 1206 |
| Retail Advertising & Display | BMM 1303 |
| Textiles | BFM 1195 |
| | |
| Fashion Seminar: Supervisory Development | BFM 2204 |
| | |
| Fashion Seminar: Career Options | BFM 7552 |
| Marketing | BUS 7007 |
| Fashion in Society | BFM 3046 |
| Fashion Promotion | BFM 4655 |
| | |
| Fashion Seminar: Market Research | BFM 1665 |
| Survey of Economics | BUS 5123 |
| Fashion Fundamentals II | BFM 1019 |
| Merchandise Evaluation | BFM 3503 |

FASHION FUNDAMENTALS I BFM 7013

Total concept of fashion and its application to business. Importance of color, line and design in fashion. Identification and influences of American and European designers. Manufacturing and merchandising trends in apparel and accessory markets. Class meets three hours per week. Fall 3 Credits (BUS 178)

FASHION FUNDAMENTALS II BFM 1019

Prerequisite: BFM 7013 or by permission—Technical aspects of merchandising; personnel policies; principles of management; role of the buyer; buying principles and merchandising mathematics. Class meets three hours per week. Fall 3 Credits (BUS 179)

TEXTILES BFM 1195

Natural and man-made textile fibers, weaves, finishes and their comparative characteristics. Emphasis on selling techniques, care and use of textiles. Class meets three hours per week. Spring 3 Credits (BUS 181)

HISTORY OF DRESS BFM 2568

Historical development of fashion from its beginning to the present. Identification of current modes of dress in relation to their historical developments. Original designs using historic costumes as a basis. Class meets three hours per week. Fall 3 Credits (BUS 186)

FASHION ILLUSTRATION BFM 5294

Application of basic sketching techniques to the human figure and clothing designs for the development of brochures, pamphlets, newspaper and magazine advertisement. Class meets four hours per week. Spring 3 Credits (BUS 187)

FASHION PROMOTIONS BFM 4655

Composition of articles for fashion columns; preparation of fashion commentary; selection and coordination of merchandise for fashion shows; training and directing models and presentation of a fashion show. Class meets three hours per week. Fall 3 Credits (BUS 277)

FASHION IN SOCIETY BFM 3046

Economic psychology, social needs and satisfaction in the selection of clothing. Influence of fashion and clothing upon society shown through study of interrelationships of consumer, distributor and producer. Class meets three hours per week. Spring 3 Credits (BUS 279)

MERCHANDISE EVALUATION BFM 3503

Evaluation of non-textile products ranging from crystal, china and jewelry to handbags, millinery and shoes; preparation of product information manual and conduction of simulated departmental meetings for training staff to sell specific merchandise. Class meets three hours per week. Spring 3 Credits (BUS 278)

FASHION SEMINAR: Human Relations BFM 2017

Prerequisite: Admission to the Fashion Merchandising Program—Work experience in an approved training situation under instructional supervision. Emphasizes job orientation and sales effectiveness, job applications and interviews, sources of job and product information and techniques for handling customer, employer and employee relations. Class meets two hours per week. Fall 3 Credits (BUS 182)

**FASHION SEMINAR:
Fashion Promotion BFM 5321**

Prerequisite: Admission to the Fashion Merchandising Program—Work experience in an approved training situation under instructional supervision. Emphasis on fashion publicity and promotional media. Students write publicity releases and fashion editorials, develop radio and TV commercials and plan and produce fashion shows and other promotional events. Class meets two hours per week. Spring 3 Credits (BUS 183)

Prerequisites shown with courses on this page may be found as listed below:

BFM 7013 - pg. 24

FASHION SEMINAR:**Supervisory Development****BFM 2204**

Prerequisite: Admission to the Fashion Merchandising Program—Work experience in an approved training situation under instructional supervision. Emphasis on increasing sales effectiveness through application of basic design principles to the customer. Optional credit may be earned during this session for travel tours of fashion centers. Class meets two hours per week. Summer 3 Credits (BUS 184)

FASHION SEMINAR: Career Options**BFM 7552**

Prerequisite: Admission to the Fashion Merchandising Program—Work experience in an approved training situation under instructional supervision. Emphasis on management decision making and supervisory development. Class meets two hours per week. Fall 3 Credits (BUS 281)

FASHION SEMINAR: Market Research**BFM 1665**

Prerequisite: Admission to the Fashion Merchandising Program—Work experience in an approved training situation under instructional supervision. Emphasis on marketing research and problem solving techniques. Simple statistical measurements, their uses and application to specific business problems. Class meets two hours per week. Spring 3 Credits (BUS 282)

**HOSPITALITY MANAGEMENT
CAREER PROGRAM**

This one year program prepares students for entry at the mid-management level. Students should plan their program with a counselor to include the following essential courses in the sequence indicated:

| | |
|-------------------------------------|----------|
| Small Business Accounting | BAC 2171 |
| Basic Food Preparation | BHM 7028 |
| Hospitality Management Fundamentals | BHM 6037 |
| Salesmanship | BMM 5026 |
| Hotel-Motel Operations | BHM 4203 |
| Food Management | BHM 3006 |
| Hospitality Management Seminar: | |
| Accounting | BHM 1287 |
| Business Law | BUS 1121 |
| Marketing | BUS 7007 |
| Supervisory Management | BHM 4489 |
| Hospitality Management Seminar: | |
| Sales Promotion | BHM 5008 |
| Personnel Management | BUS 2341 |
| Hospitality Management Internship | BHM 2460 |

BASIC FOOD PREPARATION**BHM 7028**

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 per week. 3 Credits (BUS 120)

**HOSPITALITY MANAGEMENT
FUNDAMENTALS****BHM 6037**

General overview of organization and departmental functions of food service and public lodging industries; position of the industries in the American economic system; functions and limitations of the types of establishments for different locations. Class meets three hours per week. 3 Credits (BUS 121)

HOTEL-MOTEL OPERATIONS**BHM 4203**

Coordinated management, administration and controls specific to public lodging establishments with emphasis on executive or top 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 per week. 3 Credits (BUS 122)

FOOD MANAGEMENT**BHM 3006**

Principles of buying fresh and processed foods, alcoholic beverages, meat and non-food maintenance items; meal and service planning for all phases of food service - snack bar, cafeteria, coffee shop, restaurant and banquet; and specific legal requirements for food and beverage preparation and sales are analyzed. Class meets three hours per week. 3 Credits (BUS 123)

SUPERVISORY MANAGEMENT**BHM 4489**

Supervision and activation of employees with emphasis on human relations, delegation, training, evaluation and communication. Class meets three hours per week. 3 Credits (BUS 124)

SEMINAR IN HOSPITALITY MANAGEMENT:**Accounting****BHM 1287**

Prerequisite: Admission to the Hospitality Management Program—Supervised work experience within an approved area in the hospitality field. Accounting practices with particular emphasis on problems, procedures, techniques, machines and record use in decision making unique to the food service and public lodging industries. Class meets two hours per week. 3 Credits (BUS 126)

The number shown in parentheses at the end of most course descriptions refers to the course's previous number. If no number appears in parentheses, the course is new.

SEMINAR IN HOSPITALITY MANAGEMENT:**Sales Promotion BHM 5008**

Prerequisite: Admission to the Hospitality Management Program—Supervised work experience within an approved area in the hospitality field. Principles and techniques of effective publicity, promotion and advertising for food service and lodging accommodations. Class meets two hours per week. 3 Credits (BUS 127)

SEMINAR IN HOSPITALITY MANAGEMENT:**Internship BHM 2460**

Prerequisite: Admission to the Hospitality Management Program—Supervised work experience within an approved area in the hospitality field. Class meets by arrangement. Summer 3 Credits (BUS 125)

MARKETING AND MANAGEMENT CAREER PROGRAM

The program at JCCC introduces students to such areas as merchandising, promotion, advertising, personnel, stock control, credit and collections. Daily problems of the business world are experienced through field study in an approved marketing position in the community. Students wishing to complete an Associate of Arts degree in Marketing and Management should plan their program with a counselor to include the following essential courses in the sequence indicated:

Seminar:

| | |
|-----------------------------|----------|
| Organization and Operations | BMM 1060 |
| Small Business Accounting | BAC 2171 |
| Salesmanship | BMM 5026 |

| | |
|--------------------------------|----------|
| Seminar: Sales Promotion | BMM 2155 |
| Business Data Processing | BDP 7135 |
| Retailing | BMM 1206 |
| Retail Advertising and Display | BMM 1303 |

| | |
|------------------------------------|----------|
| Internship: Supervisory Management | BMM 7076 |
|------------------------------------|----------|

Seminar:

| | |
|----------------------------|----------|
| Management Decision Making | BMM 1283 |
| Survey of Economics | BUS 5123 |
| Business Law I | BUS 1121 |
| Marketing | BUS 7007 |

| | |
|-----------------------------|----------|
| Seminar: Marketing Research | BMM 6072 |
| Personnel Management | BUS 2341 |

RETAILING BMM 1206

Retail store organization and operation. Location and layout; retail buying techniques; human relations; employee supervision; pricing and merchandising. Class meets three hours per week. 3 Credits (BUS 176)

RETAIL ADVERTISING AND DISPLAY BMM 1303

Modern techniques of advertising and display. Emphasis on media selection and use, copy writing, ad layout and illustration, showcard writing, display techniques, sales promotion, budgeting and scheduling. Class meets three hours per week. 3 Credits (BUS 180)

SALESMANSHIP BMM 5026

Preparation of simulated presentations in specialty, wholesale and retail areas of selling. Personality development and training materials as evidenced through projects and development of a sales training manual. Class meets three hours per week. 3 Credits (BUS 177)

MARKETING AND MANAGEMENT SEMINAR:**Organization and Operations BMM 1060**

Prerequisite: Admission to the Marketing and Management Program—Supervised work experience at an approved business establishment in the community. Preparation of a series of training reports based on employer's operation policies and internal organization and structure. Class meets two hours per week. Fall 3 Credits (BUS 171)

MARKETING AND MANAGEMENT SEMINAR:**Sales Promotion BMM 2155**

Prerequisite: Admission to the Marketing and Management Program—Supervised work experience at an approved business establishment in the community. Application of selling methods to the preparation of an advertising promotional campaign relating to the student's ultimate career objective. Class meets two hours per week. Spring 3 Credits (BUS 172)

MARKETING AND MANAGEMENT SEMINAR:**Management Decision-Making BMM 1283**

Prerequisite: Admission to the Marketing and Management Program—Supervised work experience at an approved business establishment in the community. Management decision-making in areas of supervisory human relations and merchandising problems. Sales and related training meetings in areas of marketing and management. Class meets two hours per week. Fall 3 Credits (BUS 273)

MARKETING AND MANAGEMENT SEMINAR:**Marketing Research BMM 6072**

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 per week. Spring 3 Credits (BUS 274)

The number shown in parentheses at the end of most course descriptions refers to the course's previous number. If no number appears in parentheses, the course is new.

**MARKETING AND MANAGEMENT INTERNSHIP:
Supervisory Management BMM 7076**

Prerequisite: Admission to the Marketing and Management Program—Supervised work experience at an approved business establishment in the community. Examination and resolution of supervisory problems confronting management in areas of motivation; training; discipline; delegation; handling grievances, complaints and related areas. Class meets two hours per week. Summer 3 Credits (BUS 272)

**MEDICAL RECORD TECHNOLOGY
Metropolitan Cooperative Career Program**

Medical Record Technology is an affiliate program with Baptist Memorial Hospital, Kansas City, Missouri, which provides concurrent education and training preparatory to writing the national examination to become an Accredited Record Technician. A student must be admitted to the College and secure written acceptance to the program through the Coordinator, Medical Record Technician Education at the Hospital. The following essential courses should be taken in the sequence indicated:

| | |
|-----------------------------|----------|
| Communications I | COM 6524 |
| Finite Mathematics | MTH 2642 |
| Life Science (or elective) | NLS 1031 |
| Medical Terminology | NS 5381 |
| Medical Record Science I | BMR 1043 |
| | |
| Communications II | COM 1467 |
| Independent Studies | BUS 6254 |
| Anatomy & Physiology | NLS 6186 |
| Medical Record Science II | BMR 6102 |
| Medical Terminology for MRT | BMR 4311 |
| | |
| Directed Practice I | BMR 7111 |
| | |
| Sociology | SS 3404 |
| Speech | CSP 2501 |
| Business Data Processing | BDP 7135 |
| Medical Record Science III | BMR 3245 |
| Directed Practice II | BMR 1325 |
| | |
| Psychology | SS 1068 |
| Personnel Management | BUS 2341 |
| Medical Record Science IV | BMR 4108 |
| Departmental Seminar | BMR 2345 |
| Directed Practice III | BMR 3117 |

MEDICAL RECORD SCIENCE I BMR 1043

Prerequisite: Admission to the Medical Records Technology Program—Orientation to hospital and medical record department with attention to history, hospital organization and functions of medical and paramedical personnel. Content, use and preservation of medical records. Class meets five hours per week. 4 Credits

MEDICAL RECORD SCIENCE II BMR 6102

Prerequisite: BMR 1043—Numbering and filing systems, discharge analysis of medical records, medical and vital statistics, medical correspondence and medical transcription. Class meets three hours per week. 3 Credits

MEDICAL RECORD SCIENCE III BMR 3245

Prerequisite: BMR 6102—Nomenclature and classification systems. Use of computer in indexing of diseases and operations. Medical record as a legal document and medical legal aspects of working in the medical record department; training in courtroom procedures. Class meets four hours per week. 3 Credits

MEDICAL RECORD SCIENCE IV BMR 4108

Prerequisite: BMR 3245—Medical records in skilled nursing facilities. Medicare and licensing regulations, medical staff organization, accrediting agencies, supervision, record control and systems development. Class meets two hours per week. 2 Credits

DIRECTED PRACTICE I BMR 7111

Prerequisite: BMR 6102—Admission and discharge analysis procedures and compilation of statistical reports in the Medical Record Department of Baptist Memorial Hospital. Hours by arrangement: eight hours per day for three weeks during the summer. 2 Credits

DIRECTED PRACTICE II BMR 1325

Prerequisite: BMR 7111—A variety of medical record procedures applied to classroom acquired knowledge. Directed practice at Baptist Memorial Hospital and two affiliate hospitals in the area and at least one other type of health facility. Hours by arrangement. 3 Credits

DIRECTED PRACTICE III BMR 3117

Prerequisite: BMR 1325—Continuation of supervised practice of all procedures, primarily at Baptist Memorial Hospital. Hours by arrangement. 4 Credits

MEDICAL TERMINOLOGY FOR MRT BMR 4311

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 two hours per week. 2 Credits

Prerequisites shown with courses on this page may be found as listed below:

BMR 1043 - pg. 27 BMR 3245 - pg. 27 BMR 7111 - pg. 27
BMR 1325 - pg. 27 BMR 6102 - pg. 27

DEPARTMENTAL SEMINAR**BMR 2345**

Individual and group participation in special projects applied to medical record procedures, current problems and studies. An overview of the program in Medical Record Technology. Class meets two hours per week. 2 Credits

SECRETARIAL CAREER PROGRAM

Students seeking an Associate of Arts degree should plan their program with a counselor to include the following essential courses:

| | |
|--------------------------------------|----------|
| Introduction to Business | BUS 4282 |
| Business Data Processing | BDP 7135 |
| Shorthand I | BSC 1519 |
| Beginning Typing | BSC 1263 |
| Secretarial Field Study: | |
| Human Relations | BSC 3214 |
| Accounting I | |
| (or Small Business Accounting) | BAC 4092 |
| Shorthand II | BSC 4590 |
| Intermediate Typing | BSC 2376 |
| Records Management | BSC 1342 |
| Secretarial Field Study: | |
| Business Law | BSC 1075 |
| Secretarial Field Study: | |
| Management | BSC 4492 |
| Dictation and Transcription | BSC 3630 |
| Production Typing | BSC 7633 |
| Secretarial Procedures I | BSC 1272 |
| Secretarial Field Study: | |
| Business Math | BSC 2190 |
| Personnel Management | BUS 2341 |
| Economics I (or Survey of Economics) | BUS 2253 |
| Business Law I | BUS 1121 |
| Secretarial Procedures II | BSC 2317 |
| Secretarial Field Study: | |
| Office Procedures | BSC 5538 |

ONE-YEAR SECRETARIAL CAREER PROGRAM

Students interested in the one-year program should follow the sequence indicated below in planning the schedule with a counselor:

| | |
|-------------------------------|----------|
| Shorthand II | BSC 4590 |
| Intermediate Typing | BSC 2376 |
| Small Business Accounting | BAC 2171 |
| Secretarial Procedures I | BSC 1272 |
| Communications I | CSP 6524 |
| * Secretarial Field Study | |
| Dictation and Transcription | BSC 3630 |
| Production Typing | BSC 7633 |
| Records Management | BSC 1342 |
| Secretarial Procedures II | BSC 2317 |
| Speech (or Communications II) | CSP 2501 |
| * Secretarial Field Study | |

*Your counselor will help you determine which course to take.

BEGINNING TYPING BSC 1263

Mastery of the keyboard and machine techniques. Instruction in personal and business letters, outlines, manuscripts, tabulation and centering. Individualized instruction and scheduled use of Secretarial Laboratory. Class meets five hours per week. 3 Credits (BUS 155)

INTERMEDIATE TYPING BSC 2376

Prerequisite: BSC 1263 or by permission—Emphasis on speed and accuracy in typing business letters, manuscripts, memoranda, tabulated reports and financial reports. Periodic production and performance tests. Individualized instruction and scheduled use of Secretarial Laboratory. Class meets five hours per week. 3 Credits (BUS 156)

PRODUCTION TYPING BSC 7633

Prerequisite: BSC 2376—Development of high degree of proficiency in production typing. Includes instruction on automatic typewriters and transcription equipment. Individualized instruction and scheduled use of Secretarial Laboratory. Hours by arrangement. 3 Credits (BUS 157)

SHORTHAND I BSC 1519

Prerequisite: BSC 1263 or concurrent enrollment or by permission—Beginning course designed to give the student a thorough knowledge of Gregg Shorthand Theory and the ability to write simple unpreviewed material in Gregg Shorthand at a speed of 50 to 60 words a minute. Individual progress method allows student to advance at own rate through use of tapes and programmed materials. Class meets five hours per week. 3 Credits (BUS 151)

Prerequisites shown with courses on this page may be found as listed below.

BSC 1263 - pg. 28

BSC 2376 - pg. 28

SHORTHAND II**BSC 4590**

Prerequisites: BSC 1519 or by permission—Designed for students with prior limited experience with shorthand. Review of shorthand theory, transcription techniques, spelling, punctuation and grammar through use of tapes and programmed materials. Class meets five hours per week. 3 Credits

DICTIONATION AND TRANSCRIPTION BSC 3630

Prerequisites: BSC 1519 and BSC 1263 or by permission—Emphasis on increased speed and accuracy in writing shorthand from dictated material and transcribing notes. Class is instructor directed but includes individualized programmed materials. Student works at own ability level. Course includes scheduled use of Secretarial Laboratory. Class meets five hours per week. 3 Credits (BUS 152)

LEGAL DICTATION AND TRANSCRIPTION**BSC 1334**

Prerequisites: BSC 3630 or BSC 7633—Legal terminology and forms including dictation practice at speeds up to 140 words a minute. Shortcut outlines, spelling, meaning and accurate transcription of legal terms stressed. Some legal projects on the automatic typewriter. Course includes scheduled use of Secretarial Laboratory. Class meets five hours per week. 3 Credits (BUS 252)

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 per week. 3 Credits (BUS 161)

SECRETARIAL PROCEDURES I**BSC 1272**

Prerequisites: BSC 1519 and BSC 2376 or concurrent enrollment or by permission
Corequisite: COM 6133—Individual projects. Office layout including furnishings and equipment; telephone services; letter writing, mailing and shipping; financial activities and records; filing; reproduction equipment and services; organization of time; establishing priorities and improvement of secretarial skills. Course includes scheduled use of Secretarial Laboratory. Class meets three hours per week. 3 Credits (BUS 262)

SECRETARIAL PROCEDURES II**BSC 2317**

Prerequisite: BSC 1272—Individual projects. Meetings and conferences; travel arrangements; letter writing; supervision of others; seeking and terminating employment and improvement of secretarial skills. Course includes scheduled use of Secretarial Laboratory. Class meets three hours per week. 3 Credits (BUS 262)

SECRETARIAL FIELD STUDY:**Human Relations****BSC 3214**

Supervised student work experience in an approved office situation. Emphasis on legal aspects of secretarial work. Weekly class discussion will focus on relating business law content to work experience. Class meets two hours per week. 3 Credits (BUS 164)

SECRETARIAL FIELD STUDY:**Business Law****BSC 1075**

Supervised work experience in an approved office situation. Emphasis on management and supervision affecting the operations of a business organization as it applies to the secretary. Weekly class discussion. Class meets two hours per week. 3 Credits (BUS 165)

SECRETARIAL FIELD STUDY:**Management****BSC 4492**

Supervised work experience in an approved office situation. Emphasis on mathematical aspects of secretarial work. Weekly class discussions focus on relating business math content to on-the-job training. Class meets two hours per week. 3 Credits (BUS 166)

SECRETARIAL FIELD STUDY:**Business Math****BSC 2190**

Supervised work experience in an approved office situation. Emphasis on human relations, communications and decision making. Weekly class discussions focus on relating human relations content to current employment. Class meets two hours per week. 3 Credits (BUS 264)

SECRETARIAL FIELD STUDY:**Office Procedures****BSC 5538**

Supervised work experience in an approved office situation. Emphasis on office management, communications media, outside services such as business libraries and travel agencies. Weekly class discussions focus on relating office procedures to work experience. Class meets two hours per week. 3 Credits (BUS 265)

LEGAL SECRETARY I**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 per week. 2 Credits (BUS 158)

Prerequisites shown with courses on this page may be found as listed below:

| | | |
|-------------------|-------------------|-------------------|
| BSC 1263 - pg. 28 | BSC 1519 - pg. 28 | BSC 7633 - pg. 28 |
| BSC 1272 - pg. 29 | BSC 3630 - pg. 29 | COM 6133 - pg. 31 |

LEGAL SECRETARY II**BSC 3312**

Prerequisite: BSC 2267 or one year's experience as legal secretary—Continuation of BSC 2267 (Legal Secretary I). Emphasis on wills and probate, real estate transactions and law library management as they apply to the legal secretary. Class meets two hours per week. 2 Credits (BUS 159)

INDEPENDENT STUDIES IN BUSINESS/MANAGEMENT**BUS 6254**

Prerequisite: By permission—Opportunity for the student to pursue special interests in business and management through guided independent study. Class meets by arrangement. 1-3 Credits (BUS 299)

COLLEGE LEARNING CENTER

The College Learning Center offers a variety of learning services to Johnson County Community College students and individuals within the community. Designed to aid all students, the College Learning Center offers diagnostic testing in order to develop an appropriate program of individualized instruction in areas of need and interest.

Through a format of programmed materials, use of multimedia and instructor assistance, students may pursue studies in mathematics, science, social science, communications and foreign language.

In order to integrate learning experiences in the College Learning Center with overall educational objectives, students should contact one of the Johnson County Community College counselors for assistance. The counselor and College Learning Center staff will work closely with the student in developing an individualized program to meet his needs.

Students of Johnson County Community College may enroll in programs of the College Learning Center on either a credit or non-credit basis.

INDIVIDUALIZED STUDIES

Individualized instruction in areas of special need and interest prescribed on the basis of diagnostic evaluation. Programs of study are tailored to abilities, learning style, interests, and degree of self-discipline. Students proceed at own pace and level, and on materials and projects that are self-motivating. Areas of study include reading rate and comprehension, study skills, memory improvement, communications, mathematics, spelling, vocabulary, natural science, social science, and foreign language review. 1 - 3 Credits.

LC 4466

1 Credit (CLC 101)

LC 5549

2 Credits (CLC 102)

LC 7606

3 Credits (CLC 103)

COMMUNICATIONS

In the College curriculum, communications includes oral and written communication. Students interested in speech, theater, debate, foreign languages, literature, poetry and creative writing will find courses in this area to suit their individual needs.

The Journalism Career Program is designed for the student who wishes to seek a baccalaureate degree as well as for those who plan to enter the job market after two years. Students who are interested in teaching, law, drama or writing will find that JCCC offers the courses necessary to complete the freshman and sophomore requirements at most four-year colleges and universities.

FUNDAMENTALS OF WRITING**COM 5035**

Basic written communications. Emphasis on grammar, sentence structure, organization, idiomatic usage, spelling, and vocabulary, leading to clear written composition. Class meets three hours per week. 3 Credits (COM 100.1)

COMMUNICATIONS I**COM 6524**

A study of the various units of written expression, beginning with the sentence, moving to the paragraph, and concluding with the multi-paragraph paper. Student may select a class with an emphasis on expository, business, or technical writing. Class meets three hours per week. 3 Credits (COM 101)

COMMUNICATIONS II**COM 1467**

Prerequisite: COM 6524—Emphasis on written subjective responses to personal experiences, literature, and special topics. Assignments include narrative, descriptive, and expository writing. Class meets three hours per week. 3 Credits (COM 102)

CREATIVE WRITING**COM 2618**

Prerequisite: COM 1467—Principles and practice in writing the short story, the essay, the play, and the poem. Emphasis on planning, plotting, choice of material and styles. Examination of recommended models. Frequent writing assignments in chosen areas. Manuscripts are submitted to professional editors. Class meets three hours per week. 3 Credits (COM 212)

Prerequisites shown with courses on this page may be found as listed below:

COM 1467 - pg. 30

COM 6524 - pg. 30

BUSINESS WRITING**COM 1142**

Introduction to business communication, emphasizing the business letter, letter of inquiry, resume, letter of complaint, letter of application, and office memorandum. Class meets three hours per week for five weeks. 1 Credit (COM 101.4)

TECHNICAL WRITING**COM 4302**

Introduction to various types of technical writing, emphasizing the progress report, proposal, physical research report, process analysis, and graphic illustration. Class meets three hours per week for five weeks. 1 Credit (COM 101.5)

POETRY AND DRAMA**COM 4444**

Prerequisite: COM 1467—Introduction to poetry and drama for insight and appreciation. Selected plays and a broad selection of poetry of all types and styles are read. Class meets three hours per week. 3 Credits (COM 211)

SHORT STORY AND THE NOVEL**COM 4584**

Prerequisite: COM 1467—Introduction to the short story and the novel, emphasizing contemporary fiction; related writing assignments. Class meets three hours per week. 3 Credits (COM 210)

AMERICAN WRITERS**COM 5271**

Prerequisite: COM 1467—Readings of complete works of selected American writers, with related writing projects. Course focuses on important works of the various writers, emphasizing the relationship between their life and time to their art. Class meets three hours per week. 3 Credits (COM 102)

MASTERPIECES OF THE CINEMA**COM 1051**

Prerequisite: COM 1467—Selected motion pictures, with emphasis on themes, genres and styles. Reading and writing assignments related to the films viewed. Class meets three hours per week. 3 Credits (COM 102)

BASIC ENGLISH**FOR HEARING IMPAIRED I****COM 6133**

Basic skills in written communications, including sentence structure, the system of language, its characteristics and functions. Emphasis on vocabulary and the effect of words. Class meets five hours per week. 3 Credits (COM 100.1)

BASIC ENGLISH FOR**HEARING IMPAIRED II****COM 7488**

Prerequisite: COM 6133—Continuation of COM 6133 (Basic English I.) Emphasis on grammar, organization, idiomatic usage, spelling and vocabulary, leading to clear written composition. Class meets five hours per week. 3 Credits (COM 100.2)

BASIC ENGLISH FOR HEARING IMPAIRED III**COM 5030**

Prerequisites: COM 7488—Practice in expression through written compositions. Emphasis on organization, clarity of expression and style. Class meets five hours per week. 3 Credits (COM 100.3)

BASIC MANUAL COMMUNICATIONS**COM 7029**

Basic American sign language utilized to communicate with deaf adults. Subject material related to language, psychological and social aspects of the deaf person. Class meets three hours per week. 3 Credits (COM 105)

ADVANCED MANUAL COMMUNICATIONS**COM 6053**

Prerequisite: COM 7029—Advanced study in American Sign Language and a continuation of COM 7029. Emphasis on body language and expression. Class meets three hours per week. 3 Credits

ENGLISH AS A SECOND LANGUAGE**COM 7032**

Basic written communications for those whose native language is not English. Emphasis on grammar, sentence structure, organization, idiomatic usage, spelling and vocabulary, leading to clear written composition. Class meets three hours per week. 3 Credits (COM 100.1)

SPEECH**CSP 2501**

Basic speech course dealing with the oral communication process through the study of interpersonal relationships. Practical principles of effective speech-communication in one-to-one and small-group relationships are studied and applied in a variety of learning games and situations. Individualized talks are given but everyday communication is stressed. Class meets three hours per week. 3 Credits (COM 114)

PUBLIC SPEAKING**CSP 4130**

Emphasis on speech organization, development of ideas, and delivery. Progress is self-paced, with individualized instructor guidance and opportunity for interaction with others. Speeches to be designed and delivered include impromptu, extemporaneous, and manuscript. Class meets three hours per week. 3 Credits

ELEMENTARY DEBATE**CSP 5545**

Introduction to theories of argumentation and debate, leading to participation in intercollegiate debate. Class meets three hours per week. 2 Credits (COM 123.1)

Prerequisites shown with courses on this page may be found as listed below:

COM 1467 - pg. 30
COM 6133 - pg. 31

COM 7029 - pg. 31
COM 7488 - pg. 31

INTERMEDIATE DEBATE I**CSP 2162**

Prerequisites: CSP 5545—Continuation of argumentation and debate theories. Participation in intercollegiate debate required. Class meets three hours per week. 2 Credits (COM 123.2)

INTERMEDIATE DEBATE II**CSP 1001**

Prerequisites: CSP 2162—Comprehensive review of theories of argumentation and debate. Increased emphasis on intercollegiate debate. Class meets three hours per week. 2 Credits (COM 123.3)

ADVANCED DEBATE**CSP 6651**

Prerequisites: CSP 1001—Emphasis on participation in senior level intercollegiate debate. Class meets three hours per week. 2 Credits (COM 123.4)

TECHNIQUES OF ACTING I**CDR 3311**

Fundamentals of acting; character analysis; relation of the role to the play as a whole; techniques and practice in posture, movement, voice and projection. Class meets three hours per week. 3 Credits (COM 119)

TECHNIQUES OF ACTING II**CDR 5316**

Prerequisite: CDR 3311—Continuation of CDR 3311 (Techniques of Acting I); Emphasis on character analysis and development with corresponding greater responsibility of the actor for his own creativity. Class meets three hours per week. 3 Credits (COM 120)

CHILDREN'S THEATER**CDR 5554**

Emphasis on literature and performance methods as related to presentations for children and/or by children. Workshop situations provide students an opportunity to work in the medium. Class meets three hours per week. Fall 3 Credits (COM 213)

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. Class meets three hours per week. Spring 3 Credits (COM 117)

TECHNICAL THEATER I**CDR 6215**

Introduction to use of the tools of the stage technician; technique of scene building; hard props; makeup and costuming. Students serve as technical support for productions presented by acting classes. Class meets three hours per week. 3 Credits (COM 215)

TECHNICAL THEATER II**CDR 6241**

Prerequisites: CDR 6215—Advanced technical operation of stage productions. Students serve as stage managers for productions of acting classes and assist in design of these productions. Class meets three hours per week. 3 Credits (COM 216)

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 per week. 5 Credits (COM 130)

ELEMENTARY SPANISH II**CFL 1239**

Prerequisites: CFL 3285 or one year of high school Spanish—Continuation of CFL 1239 (Elementary Spanish I.) Graded reading selections added as basis for conversation and composition in the discussion periods. Class meets five hours per week. 5 Credits (COM 131)

CONVERSATIONAL SPANISH**CFL 6462**

Prerequisites: CFL 1239 or two years of high school Spanish—Conversational course designed to increase vocabulary and speaking fluency. Grammar review with emphasis on idiomatic usage and practical vocabulary. Class meets two hours per week. 2 Credits (COM 234)

INTERMEDIATE SPANISH**CFL 7221**

Prerequisites: 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 per week. 3 Credits (COM 232)

ADVANCED SPANISH**CFL 6626**

Prerequisites: CFL 7221 or three years of high school Spanish—Continuation of CFL 7221 (Intermediate Spanish) with extensive study of Hispanic literature. Advanced reading. Composition and conversation in Spanish. Grammar review continues. Class meets three hours per week. 3 Credits (COM 233)

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 per week. 5 Credits (COM 121)

ELEMENTARY FRENCH II**CFL 2293**

Prerequisites: CFL 4570 or one year of high school French—Continuation of CFL 4570 (Elementary French I.) with graded reading selections to be used as basis for conversation. Class meets five hours per week. 5 Credits (COM 122)

Prerequisites shown with courses on this page may be found as listed below:

| | | |
|-------------------|-------------------|-------------------|
| CDR 3311 - pg. 32 | CFL 3285 - pg. 32 | CSP 1001 - pg. 32 |
| CDR 6215 - pg. 32 | CFL 4570 - pg. 32 | CSP 2162 - pg. 32 |
| CFL 1239 - pg. 32 | CFL 7221 - pg. 32 | CSP 5545 - pg. 31 |

CONVERSATIONAL FRENCH CFL 2447

Prerequisites: 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 per week. 2 Credits (COM 225)

INTERMEDIATE FRENCH CFL 1442

Prerequisites: CFL 2293 or two years of high school French—Intermediate reading course to build vocabulary and comprehension. The reading of novels from prominent contemporary writers is integrated with a grammar review. Conversation and composition in French. Class meets three hours per week. 3 Credits (COM 223)

ADVANCED FRENCH CFL 5574

Prerequisites: CFL 1442 or three years of high school French—Continuation of CFL 1442 (Intermediate French.) Advanced reading, with study of contemporary novels and literature. Complete grammar review. Conversation and composition in French. Class meets three hours per week. 3 Credits (COM 224)

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 course. Class meets five hours per week. 5 Credits (COM 140)

ELEMENTARY GERMAN II CFL 6207

Prerequisites: CFL 3196 or one year of high school German—Continuation of CFL 3196 (Elementary German I,) with further practice and development of listening comprehension, speaking, reading and writing skills. Class meets five hours per week. 5 Credits (COM 141)

CONVERSATIONAL GERMAN CFL 6484

Prerequisites: CFL 6207 or two years of high school German—Emphasis on developing listening comprehension and speaking skills. Magazine-type materials, situation problems, and media presentations are used to stimulate conversation. Class meets two hours per week. 2 Credits (COM 244)

INTERMEDIATE GERMAN CFL 3401

Prerequisites: CFL 6207 or two years of high school German—Vocabulary building and grammar review primarily through extensive reading of German literature, with additional practice in listening, speaking and writing. Class meets three hours per week. 3 Credits (COM 242)

ADVANCED GERMAN CFL 5199

Prerequisites: CFL 3401 or three years of high school German—Continuation of CFL 3401 (Intermediate German,) emphasizing more advanced reading material. Class meets three hours per week. 3 Credits (COM 243)

JOURNALISM CAREER PROGRAM

The Journalism Career Program is a dual tract curriculum providing skills for immediate placement in local news media or a transfer base upon which to build towards a baccalaureate degree. To provide practical experience, a section of the Johnson County Herald is devoted to student articles. Students should arrange their schedules with the aid of a counselor to include the following essential courses:

| | |
|---------------------------------|----------|
| Principles of Journalism | CJO 6648 |
| News Gathering and News Writing | CJO 1343 |
| Journalism Field Study I | CJO 7464 |
| Journalism Field Study II | CJO 3251 |
| Journalism Field Study III | CJO 5453 |
| Fundamentals of Advertising | CJO 2136 |
| Advertising Copywriting | CJO 7139 |

PRINCIPLES OF JOURNALISM CJO 6648

Prerequisite: Beginning typing or equivalent or concurrent BSC 1263—A study of journalism, its role in our society and the social responsibilities of the press. Emphasis is placed on the various types of news and feature stories and the elements of style. Class meets three hours per week. 3 Credits (BUS 103)

NEWS GATHERING AND NEWS WRITING CJO 1343

Prerequisite: Beginning typing or equivalent or concurrent BSC 1263—An evaluation of news and how news is gathered, written and published. Practical experience includes the development of interview techniques and in-depth writing. Class meets three hours per week. 3 Credits (BUS 104)

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 per week. 3 Credits (BUS 105)

| | | |
|---|-------------------|-------------------|
| Prerequisites shown with courses on this page may be found as listed below: | | |
| BSC 1263 - pg. 28 | CFL 2293 - pg. 32 | CFL 3401 - pg. 33 |
| CFL 1442 - pg. 33 | CFL 3196 - pg. 33 | CFL 6207 - pg. 33 |

ADVERTISING COPY WRITING CJO 7139

Prerequisite: CJO 2136 or by permission—Principles of advertising copy writing with practice in developing copy for a variety of products, both tangible and intangible. Each class member conducts an advertising campaign. Class meets three hours per week. 3 Credits (BUS 106)

JOURNALISM FIELD STUDY I CJO 7464

Prerequisite: By permission—Work experience at an approved training center under staff supervision. Emphasis is placed on the application of writing techniques needed to produce news and/or advertising copy. Class meets for two hours with a minimum of 15 hours of on-the-job training per week by arrangement. 3 Credits (BUS 106)

JOURNALISM FIELD STUDY II CJO 3251

Prerequisite: By permission—Work experience at an approved training center under staff supervision. The student is expected to develop copy for news and/or advertising and have it published on a paid basis. Class meets for two hours with a minimum of 15 hours of on-the-job training per week by arrangement. 3 Credits (BUS 208)

JOURNALISM FIELD STUDY III CJO 5453

Prerequisite: By permission—Work experience at an approved training center under staff supervision. Emphasis on producing a portfolio of published materials sufficient for the student to utilize in pursuing his career. Class meets for two hours with a minimum of 15 hours of on-the-job training per week by arrangement. 3 Credits (BUS 209)

INDEPENDENT STUDIES IN COMMUNICATIONS COM 6359

Prerequisite: By permission—Opportunity for the student to pursue special interests in Communications through guided independent study. Class meets by arrangement. 1-3 Credits (COM 299)

ENGINEERING & TECHNOLOGY

Students who are interested in a career in engineering or its related technologies will find many options at JCCC. Individuals who plan to pursue a baccalaureate degree may complete the first two years of their program at JCCC in engineering areas including civil, aerospace, electrical-electronic, industrial, chemical and mechanical.

The JCCC programs offer a balance of theoretical education with practical experience. Engineering technicians need a practical knowledge of the construction and operation of engineering systems and machinery and may also need to learn related manual crafts and instrumental, mathematical or graphic skills. The technology programs prepare an individual for employment in such areas as drafting, surveying, electronics, technical sales, technical writing, teaching or training.

ENGINEERING GRAPHICS I EGR 1243

Principles of graphics and design processes. Practical problems relating to interpretation of drawings, interrelation of points, lines and planes; intersections and developments; graphical solutions by charts and graphs; orthographic projection. Use of instruments and lettering. Emphasis on visualization. Class meets six hours per week. 3 Credits (ENGR 105)

ENGINEERING GRAPHICS II EGR 2276

Prerequisite: By permission—Advanced study and application of detail and assembly drawings, dimensioning, auxiliary views, sectioning and developments. Additional emphasis on creative design processes and visualization. Class meets six hours per week. 3 Credits (ENGR 106)

TECHNICAL WRITING EGR 4302

Introduction to various types of technical writing, emphasizing the progress report, proposal, physical research report, process analysis and graphic illustration. Class meets three hours per week for five weeks. 1 Credit (COM 101.5)

INDUSTRIAL SCIENCE I EGR 5269

Prerequisite: MTH 4354 or concurrent enrollment in MTH 4354 or one year of high school algebra—Introduction to principles of mechanics, work, power and energy. Class meets three hours per week. 3 Credits (ENGR 128)

INDUSTRIAL SCIENCE II EGR 3315

Prerequisite: EGR 5269—Continuation of EGR 5269 (Industrial Science I) with emphasis on applications. Class meets three hours per week. 3 Credits (ENGR 129)

STATICS EGR 6082

Prerequisite: MTH 3268 or concurrent enrollment—Vectors, force systems, friction, centroids and moments of inertia. Class meets three hours per week. 3 Credits (ENGR 210)

DYNAMICS EGR 5517

Prerequisite: EGR 6082—Unbalanced force systems and the resulting motion, work and energy, impulse and momentum, and impact. Class meets three hours per week. 3 Credits (ENGR 211)

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 per week. 3 Credits (ENGR 220)

Prerequisites shown with courses on this page may be found as listed below:

CJO 2136 - pg. 33 EGR 5269 - pg. 34 MTH 4354 - pg. 43
EGR 6082 - pg. 34 MTH 3268 - pg. 43

MECHANISMS**EGR 6198**

Prerequisite: EGR 1243—Study of the motion of machine parts and of methods of transmission of motion by links, cam, gears and belts. Class meets six hours per week. 3 Credits (ENGR 225)

PROCESSES AND MATERIALS OF MANUFACTURING**EGR 4661**

Basic principles and theory of production processes for metal and plastics. Class meets three hours per week. 3 Credits (ENGR 121)

BUILDING MATERIALS AND CONSTRUCTION**EGR 7118**

Study of the principal materials in building. Emphasis on properties and applications in building construction. Class meets three hours per week. 3 Credits (ENGR 123)

DRAFTING TECHNOLOGY CAREER PROGRAM

The courses below are based on standards established by the industry. Taken in the sequence indicated, the student is expected to develop a portfolio reflecting skills in application of design, photo-drafting, technical illustration and reproduction techniques. The student is encouraged to discuss with a counselor a full curriculum to include supportive courses which will fulfill requirements for an associate degree.

| | |
|-------------------------|----------|
| Drafting I | EDT 7569 |
| Technical Mathematics I | MTH 4354 |

| | |
|--------------------------|----------|
| Drafting II | EDT 3586 |
| Technical Mathematics II | MTH 5387 |

| | |
|----------------------|----------|
| Drafting III | EDT 5596 |
| Industrial Science I | EGR 5269 |

| | |
|-----------------------|----------|
| Drafting IV | EDT 1581 |
| Industrial Science II | EGR 3315 |

GRAPHIC COMMUNICATIONS EDT 7674

Activities available for individual student interests whether experienced or inexperienced in drafting. Students may use this course for exploration or to determine aptitudes in the field of drafting with credits earned applicable to the drafting technology program. Three hours of laboratory per week per credit hour. 1-7 Credits (ENGR 103)

DRAFTING I**EDT 7569**

Industrially structured to provide activities and experiences typical to those encountered by drafting technicians. Descriptive and applied geometry, orthographic projection sketching, lettering, U.S. and Metric measurement, basic conventions and reproduction techniques. Production drawings: detail section, auxiliary and assembly. Two hours of class and 15 hours of laboratory per week. 7 Credits (ENGR 101)

DRAFTING II**EDT 3586**

Prerequisite: EDT 7569—Continuation of EDT 7569 (Drafting I) with emphasis on developments, dimensioning, tolerancing, specifications, manufacturing process and with an introduction to photodrafting and microfilming. Two hours of class and 15 hours of laboratory per week. 7 Credits (ENGR 102)

DRAFTING III**EDT 5596**

Prerequisite: EDT 3586—Theory and practical applications typical of industry in axonometrics, obliques and perspective drawings, conventions and symbols. Introductions to electronics, piping and hydraulic drafting. Extended coverage of photo-drafting. Two hours of class and 15 hours of laboratory per week. 7 Credits (ENGR 201)

DRAFTING IV**EDT 1581**

Prerequisite: EDT 5596—Advanced topics and problems to suit individual student needs with flexibility in planning. Team activities provided. Two hours of class and 15 hours of laboratory per week. 7 Credits (ENGR 202)

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 pencil and ink on various drawing media. Training in the use of technical illustration equipment and aids. Class meets six hours per week. 3 Credits (ENGR 107)

TOOL DESIGN**EDT 7407**

Prerequisite: EGR 1243—Problems in the design, construction, and operation of dies, jigs and fixtures. Six hours of laboratory per week. 3 Credits (ENGR 230)

Prerequisites shown with courses on this page may be found as listed below:

| | |
|-------------------|-------------------|
| EDT 3586 - pg. 35 | EDT 7569 - pg. 35 |
| EDT 5596 - pg. 35 | EGR 1243 - pg. 34 |

**ELECTRICAL-ELECTRONICS ENGINEERING
TECHNOLOGY CAREER PROGRAM**

The sequence of courses listed below is designed to provide comprehensive, theoretical and practical knowledge in electronic technology. Instruments utilized are of the type and quality common to industry. A full associate degree program incorporating selected supportive courses may be planned with a counselor.

| | |
|---------------------------------|----------|
| Technical Mathematics I | MTH 4354 |
| Resistive Circuits | EET 2322 |
| Introductory Electronics | EET 5290 |
| Industrial Science I | EGR 5269 |
| Technical Mathematics II | MTH 5387 |
| Capacitive & Inductive Circuits | EET 5056 |
| Resistive Electronics | EET 4289 |
| Linear Electronics | EET 7604 |
| Network Analysis | EET 1255 |
| Nonlinear Electronics | EET 7490 |
| Systems Maintenance | EET 3557 |
| Systems Analysis | EET 7535 |

**ELECTRICAL-ELECTRONICS SERVICE
TECHNOLOGY CAREER PROGRAM**

This program is designed to prepare students for initial employment, up-grading, or re-training in the areas of assembling, testing, maintaining, servicing or repairing of electrical or electronics equipment. Either a certificate or an Associate of Arts degree may be earned by students who plan their program with a counselor to include the following essential courses.

(Communications Option)

| | |
|-----------------------------------|----------|
| Introductory Electronics | EET 5290 |
| Basic Electronic Communications | EET 7039 |
| Systems Maintenance | EET 3557 |
| Alignment Techniques | EET 2100 |
| Electronic Communications Systems | EET 2468 |

(Control Option)

| | |
|----------------------------------|----------|
| Introductory Electronics | EET 5290 |
| Basic Control Systems | EET 6034 |
| Digital Electronics | EET 7643 |
| Measurements and Instrumentation | EET 2367 |

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 per week. 3 Credits (ENGR 140)

RESISTIVE CIRCUITS EET 2322

Prerequisites: EET 5290 or concurrent enrollment, EET 5290 and MTH 4354 or equivalent—Fundamental AC and DC circuit concepts such as Kirchoff's Laws, OHM's Law, Thevenin's Theorem, etc., as they apply to resistive circuits. Two hours of class and three hours of laboratory per week. 3 Credits (ENGR 150)

CAPACITIVE & INDUCTIVE CIRCUITS EET 5056

Prerequisites: EET 2322 and MTH 5387 or concurrent enrollment in MTH 5387, or equivalent—Capacitors and inductors are introduced as circuit elements. Construction of magnetic devices and AC analysis using complex algebra. Two hours of class and three hours of laboratory per week. Spring 3 Credits (ENGR 151)

NETWORK ANALYSIS EET 1255

Prerequisites: EET 5056 and MTH 5387 or equivalent—Application of mathematical techniques to the analysis of complex electrical circuits or networks. Class meets three hours per week. Fall 3 Credits (ENGR 250)

RESISTIVE ELECTRONICS EET 4289

Prerequisites: EET 5290, MTH 4354 and EET 2322 or equivalent—Resistive circuits in which electronic devices are employed. Introduction of Volt-Ampere characteristics and physics of diodes, transistors and practical circuits using these devices. Two hours of class and three hours of laboratory per week. Spring 3 Credits (ENGR 141)

LINEAR ELECTRONICS EET 7604

Prerequisites: EET 4289 and EET 5056—Electronic circuits operating under linear or small signal conditions. Covers wideband amplifiers, power amplifiers, operational amplifiers. Two hours of class and three hours of laboratory per week. Fall 3 Credits (ENGR 241)

NONLINEAR ELECTRONICS EET 7490

Prerequisites: EET 4289 and EET 5056—Nonlinear electronic circuits such as clippers, clampers, sweep circuits, pulse formers, logic circuits, etc. Two hours of class and three hours of laboratory per week. Fall 3 Credits (ENGR 240)

Prerequisites shown with courses on this page may be found as listed below:

| | | |
|-------------------|-------------------|-------------------|
| EET 2322 - pg. 36 | EET 5056 - pg. 36 | MTH 4354 - pg. 43 |
| EET 4289 - pg. 36 | EET 5290 - pg. 36 | MTH 5387 - pg. 43 |

SYSTEMS ANALYSIS**EET 7535**

Prerequisites: EET 7604 and EET 1255—Electronic systems including communications, telemetry, controls, etc. Two hours of class and three hours of laboratory per week. Spring 3 Credits (ENGR 242)

BASIC ELECTRONIC COMMUNICATIONS**EET 7039**

Prerequisite: EET 5290—Theory of operation of the building blocks of a communications system. Includes devices, such as the transistor; circuits, such as oscillators and amplifiers; and terms such as AM, FM, etc. Two hours of class and three hours of laboratory per week. Spring 3 Credits (ENGR 143)

ELECTRONIC COMMUNICATION SYSTEMS**EET 2468**

Prerequisites: EET 7039 or concurrent enrollment in EET 7490—Theory and service of electronic communications systems, including black and white television; color television; AM and FM radio receivers; and transmitters. Three hours of class per week. Fall 3 Credits (ENGR 147)

ADVANCED COMMUNICATION SYSTEMS**EET 1179**

Prerequisite: EET 7604—Principles and problems involved in communications. Includes antennas, transmission lines, receiver design and transmitter principles. Two hours of class and three hours of laboratory per week. Spring 3 Credits (ENGR 244)

ALIGNMENT TECHNIQUES**EET 2100**

Prerequisites: EET 7039 and concurrent enrollment in EET 2468—Service and alignment of radio frequency equipment, black and white television, color television, AM and FM radios, and transmitters. One hour of class and six hours of laboratory per week. Fall 3 Credits (ENGR 145)

MEASUREMENTS AND INSTRUMENTATION**EET 2367**

Prerequisite: EET 5290—Techniques and equipment used in industrial control and precision measuring situations. Two hours of class and three hours of laboratory per week. Fall 3 Credits (ENGR 245)

SYSTEMS MAINTENANCE**EET 3557**

Prerequisites: EET 2468, EET 2367 or EET 7604—Principles of fault location and correction. Techniques applied to communications equipment. Two hours of class and three hours of laboratory per week. Spring 3 Credits (ENGR 144)

DIGITAL ELECTRONICS**EET 7643**

Prerequisites: EET 5290 or by permission—Analysis and synthesis of digital circuitry used in digital computers, numeric machine control, telephone systems, calculators, etc. Two hours of class and three hours of laboratory per week. Spring 3 Credits (ENGR 148)

BASIC CONTROL SYSTEMS**EET 6034**

Prerequisites: EET 5290—Theory and application of electromagnetic, electromechanical and other transducers and associated circuitry in basic control systems. Two hours of class and three hours of laboratory per week. Spring 3 Credits (ENGR 142)

BASIC COMPUTER COMPONENTS**EET 4065**

Basic digital components and computer organization. Designed for the non-technical student as well as those in Data Processing and Electronics. Class meets three hours per week. 3 Credits (ENGR 149)

AVIONICS**EET 7194**

Introduction to aircraft electrical systems and airborne avionics equipment. Class meets three hours per week. 3 Credits (AV 115)

BASIC PHOTOGRAPHY**EPH 2042**

Theory and practice of photography. Basic knowledge and skill in use of photographic equipment and materials while photographing a variety of technical, studio and natural subjects. Class meets six hours per week. 3 Credits (ENGR 110)

PROJECT LABORATORY**EGR 4580**

Prerequisites: EET 5290 & by permission—Construction or design and construction of equipment agreed upon by instructor and student. Laboratory and shop by arrangement. 1-4 Credits (ENGR 260)

INDEPENDENT STUDIES IN ENGINEERING/TECHNOLOGY**EGR 5143**

Prerequisite: By permission—Opportunity for the student to pursue special interests through guided independent study in his chosen area. Class meets by arrangement. 1-3 Credits (ENGR 299)

Prerequisites shown with courses on this page may be found as listed below:

| | | |
|-------------------|-------------------|-------------------|
| EET 1255 - pg. 36 | EET 2468 - pg. 37 | EET 7490 - pg. 36 |
| EET 2367 - pg. 37 | EET 5290 - pg. 36 | EET 7604 - pg. 36 |

HUMANITIES

The area of the College curriculum devoted to humanities includes art, music, religion, philosophy, logic and ethics. A student who is interested in a career in which a broad acquaintance with cultural values is desirable will find the humanities courses both useful and interesting.

Individual and group study in the area of music and art is provided at the College through a wide range of instruction. Opportunities are available for student performance and exhibition within the College and in the community.

INTRODUCTION TO THE HUMANITIES HUM 6120

Examination of the components and concepts of aesthetics as expressed in literature, painting, sculpture, and music; further examination of identity, alienation, love, and war as expressed in specific mediums of the arts, including drama, poetry and romantic music. Class meets three hours per week. 3 Credits (HUM 101)

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 are investigated. Class meets three hours per week. 3 Credits (HUM 102)

INTRODUCTION TO PHILOSOPHY HUM 7520

Study of the basic question of philosophical inquiry, such as the nature of being, the ways we gain knowledge, and man's moral, social, religious and political values. Emphasis on the application of the study of traditional problems of philosophy to the study of contemporary society. Class meets three hours per week. 3 Credits (HUM 151)

LOGIC HUM 6392

Emphasis on improved ability to reason, clear thinking for effective expression, deductive and inductive arguments and non-formal fallacies. Class meets three hours per week. 3 Credits (HUM 152)

ETHICS HUM 3080

Study of the great problems of ethics, including free will and determination, relativism and absolutism, the relationship between individuals and between man and society. Explanation of traditional positions enabling the student to better understand contemporary social and moral issues. Class meets three hours per week. 3 Credits (HUM 253)

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 analyzed through relevant philosophical articles and news media. Class meets three hours per week. 3 Credits (HUM 250)

PHILOSOPHY OF RELIGION HUM 2541

Study of the components and concepts of religion as expressed primarily by the Judaic-Christian tradition. Emphasis on the nature of God, arguments regarding God's existence, religious language, human destiny, faith, evil and effects of science on religion. Class meets three hours per week. 3 Credits (HUM 210)

ART FUNDAMENTALS HAR 1608

An intensive exploration of the visual arts. Designed to acquaint students with art forms and applications. Class meets six hours per week. 3 Credits (HUM 144)

DESIGN, COLOR HAR 7209

A study of the nature of color including its physical properties and effective qualities. Problems relating to color as light and as pigment will be explored. Class meets six hours per week. 3 Credits (HUM 132)

DESIGN, 2-D HAR 4197

An introductory study of the basic principles of two-dimensional composition and the visual elements of line, shape and texture. Class meets four hours per week. 2 Credits (HUM 131)

DESIGN, 3-D 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 per week. 4 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 per week. 3 Credits (HUM 137)

The number shown in parentheses at the end of most course descriptions refers to the course's previous number. If no number appears in parentheses, the course is new.

DRAWING II**HAR 6125**

Prerequisite: By permission—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 per week. 3 Credits (HUM 138)

PAINTING I**HAR 5004**

Emphasis on developing visual perception. Still life, landscape and human form will be studied through a variety of media. Concentration on awareness of creative responsibility and expression. Class meets six hours per week. 3 Credits (HUM 135)

PAINTING II**HAR 6011**

Prerequisite: By permission—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 per week. 3 Credits (HUM 136)

PRINTMAKING I**HAR 5601**

Introduction to traditional and contemporary techniques of relief and stencil printmaking including linoleum and woodcutting, multiple-color printing, and a variety of mixed media techniques. Class meets six hours per week. 3 Credits (HUM 141)

PRINTMAKING II**HAR 4236**

Prerequisite: HAR 5601—An exploration of a variety of silk screen, intaglio and mixed media techniques. Class meets six hours per week. 3 Credits (HUM 142)

LETTERING**HAR 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 per week. 3 Credits (HUM 148)

FASHION ILLUSTRATION**HAR 5294**

Application of basic sketching techniques to the human figure and clothing designs for the development of brochures, pamphlets, newspaper and magazine advertisement. Class meets four hours per week. Spring 3 Credits (BUS 187)

ELEMENTARY ART METHODS**HAR 4099**

Exploration of art activities appropriate for children from pre-school 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 per week. 3 Credits (HUM 130)

CERAMICS I**HAR 6193**

Basic course in hand-building and wheel-throwing techniques. Glazing and other methods of surface enrichment, stacking and firing procedures. Class meets for two three-hour sessions per week. 3 Credits (HUM 139)

CERAMICS II**HAR 2211**

Prerequisite: By permission—Continuation of Ceramics I. (HAR 6193) Advanced methods and techniques. Specific problems explored in greater depth. Class meets for six hours per week. 3 Credits (HUM 140)

SILVERSMITHING I**HAR 1620**

Course in basic metalsmithing techniques of casting and construction of silver with the utilization of buffing, sawing, filing and soldering processes. Class meets six hours per week. 3 Credits (HUM 143)

SILVERSMITHING II**HAR 4638**

Prerequisites: HAR 1620—Basic metalsmithing techniques of casting, constructing, etching, enameling and chasing, utilizing copper, brass, bronze, silver and other metals. Class meets six hours per week. 3 Credits (HUM 145)

SCULPTURE I**HAR 2089**

Course designed to study and explore natural and man-made sculptural forms and to help the student create a unique, personal body of work through the use of a variety of either traditional or contemporary media and technique. Class meets six hours per week. 3 Credits (HUM 133)

SCULPTURE II**HAR 3094**

Prerequisite: By permission—Continuation of Sculpture I. (HAR 2089). Focus on advanced methods and techniques. Emphasis on sculptural materials and forms. Class meets six hours per week. 3 Credits (HUM 134)

WEAVING I**HAR 1192**

Introductory weaving course. Techniques ranging from macrame through more complex procedures involving the use of large floor looms and the creation of three-dimensional woven forms. Class meets six hours per week. 3 Credits (HUM 146)

Prerequisites shown with courses on this page may be found as listed below:

HAR 1620 - pg. 39

WEAVING II**HAR 4020**

Prerequisite: HAR 1192 or by permission—Advanced problems in structural weaving. Multi-harness. Draft analysis, comprehensive research and a notebook required. Class meets six hours per week. 3 Credits

LEATHER WORKING**HAR 7233**

Contemporary leather working techniques. Emphasis on creativity in a variety of class projects ranging from leather sculptural forms to leather clothing. Class meets two hours per week. Spring 1 Credit (HUM 147)

**INTRODUCTION TO
MUSIC FUNDAMENTALS****HMU 7669**

Basic study of notation of melody, rhythm and meter as well as musical terminology. For the elementary class room teacher or music student without sufficient background for theory. Class meets two hours per week. 2 Credits (HUM 118)

**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 per week. Fall 2 Credits (HUM 111)

**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 per week. Spring 2 Credits (HUM 112)

**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 per week. Fall 2 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 per week. Spring 2 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 per week. Fall 2 Credits (HUM 123)

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 per week. Spring 2 Credits (HUM 124)

MUSIC THEORY: HARMONY III**HMU 6014**

Prerequisite: HMU 3559—Continuation of work with modulation, non-harmonic 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 per week. Fall 2 Credits (HUM 125)

MUSIC THEORY: HARMONY IV**HMU 2270**

Prerequisite: HMU 6014—Continuation of work with original compositions. Introduction to augmented triads. Neapolitan, French and German sixth chords, chords at the ninth, eleventh, thirteenth, advanced modulation and basic counterpoint. Class meets two hours per week. Spring 2 Credits (HUM 126)

CHORUS I**HMU 3515**

Open to all students. Rehearsal and performance of vocal music. Occasional joint performances with chamber choir. Emphasis on vocal training. Class meets three hours per week. 1 Credit (HUM 121.1)

CHORUS II**HMU 4113**

Prerequisite: HMU 3515—Continuation of Chorus I (HMU 3515). Class meets three hours per week. 1 Credit (HUM 121.2)

CHORUS III**HMU 4249**

Prerequisite: HMU 4113—Continuation of Chorus II (HMU 4113). Class meets three hours per week. 1 Credit (HUM 121.3)

CHORUS IV**HMU 2399**

Prerequisite: HMU 4249—Continuation of Chorus III (HMU 4249). Class meets three hours per week. 1 Credit (HUM 121.4)

Prerequisites shown with courses on this page may be found as listed below:

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| HAR 1192 - pg. 39 | HMU 3628 - pg. 40 | HMU 5107 - pg. 40 |
| HMU 3515 - pg. 40 | HMU 4113 - pg. 40 | HMU 6014 - pg. 40 |
| HMU 3559 - pg. 40 | HMU 4249 - pg. 40 | HMU 7656 - pg. 40 |
| | HMU 5010 - pg. 40 | |

CHAMBER CHOIR I **HMU 6529**

Prerequisite: By permission—Rehearsal and performance of vocal music. Choir performs at various student and community activities. Class meets three hours per week. 1 Credit (HUM 117.1)

CHAMBER CHOIR II **HMU 2305**

Prerequisite: HMU 6529 or by permission —Continuation of Chamber Choir I (HMU 6529). Class meets three hours per week. 1 Credit (HUM 117.2)

CHAMBER CHOIR III **HMU 7542**

Prerequisite: HMU 2305—Continuation of Chamber Choir II (HMU 2305). Class meets three hours per week. 1 Credit (HUM 117.3)

CHAMBER CHOIR IV **HMU 1208**

Prerequisite: HMU 7542—Continuation of Chamber Choir III (HMU 7542). Class meets three hours per week. 1 Credit (HUM 117.4)

JCCC JAZZ LAB BAND I **HMU 4005**

Prerequisite: By audition—Performance of jazz and popular music at public concerts and college functions. Class meets three times per week, 2 hours each meeting. 1-2 Credits (HUM 113.1)

JCCC JAZZ LAB BAND II **HMU 2220**

Prerequisite: By audition—Continued performance of jazz and popular music at public concerts and college functions. Class meets three times per week, two hours each meeting. 1-2 Credits (HUM 113.2)

JCCC JAZZ LAB BAND III **HMU 1672**

Prerequisite: By audition—Continued performance of jazz and popular music at public concerts and college functions. Class meets three times per week, two hours each meeting. 1-2 Credits (HUM 113.3)

JCCC JAZZ LAB BAND IV **HMU 2533**

By audition—Continued performance of jazz and popular music at public concerts and college functions. Class meets three times per week, two hours each meeting. 1-2 Credits (HUM 113.4)

JAZZ IMPROVISATION I **HMU 2267**

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 per week. Fall 2 Credits (HUM 116.1)

JAZZ IMPROVISATION II **HMU 1245**

Prerequisite: HMU 2267 or by permission —Continuation of Jazz Improvisation I (HMU 2267). Creative improvisation and basic procedures in analyzing chord structures as an outline for organized spontaneous playing. Class meets two hours per week. Spring 2 Credits (HUM 116.2)

CONCERT BAND I **HMU 6018**

Prerequisite: High-school playing experience—This organization draws its literature from the concert band repertoire with emphasis on early works and original contemporary selections. Class meets 3 hours per week. 1 Credit (HUM 114.1)

CONCERT BAND II **HMU 7022**

Prerequisite: HMU 6018 or by permission —Continuation of Concert Band I (HMU 6018). Class meets 3 hours per week. 1 Credit (HUM 114.2)

CONCERT BAND III **HMU 6676**

Prerequisite: HMU 7022 or by permission —Continuation of Concert Band II (HMU 7022). Class meets 3 hours per week. 1 Credit (HUM 114.3)

CONCERT BAND IV **HMU 5009**

Prerequisite: HMU 6676 or by permission —Continuation of Concert Band III (HMU 6676). Class meets 3 hours per week. 1 Credit (HUM 114.4)

ORCHESTRA I **HMU 3671**

Prerequisite: By audition—Rehearse and perform with the Overland Park Civic Orchestra. Class meets one evening per week for two hours. 1 Credit (HUM 122.1)

ORCHESTRA II **HMU 1374**

Prerequisites: HMU 3671 or by audition—Rehearse and perform with the Overland Park Civic Orchestra. Class meets one evening per week for two hours. 1 Credit (HUM 122.2)

ORCHESTRA III **HMU 1049**

Prerequisites: HMU 1374 or by audition—Rehearse and perform with the Overland Park Civic Orchestra. Class meets one evening per week for two hours. 1 Credit (HUM 122.3)

ORCHESTRA IV **HMU 2534**

Prerequisites: HMU 1049 or by audition—Rehearse and perform with the Overland Park Civic Orchestra. Class meets one evening per week for two hours. 1 Credit (HUM 122.4)

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|---|-------------------|-------------------|
| Prerequisites shown with courses on this page may be found as listed below: | | |
| HMU 1049 - pg. 41 | HMU 2305 - pg. 41 | HMU 6676 - pg. 41 |
| HMU 1374 - pg. 41 | HMU 3671 - pg. 41 | HMU 7022 - pg. 41 |
| HMU 2267 - pg. 41 | HMU 6018 - pg. 41 | HMU 7542 - pg. 41 |
| | HMU 6529 - pg. 41 | |

CHAMBER ENSEMBLE I **HMU 3146**

Prerequisite: High-school playing experience—The study and performance of standard literature for ensembles: brass, woodwind and percussion. Class meets two hours per week. 1 Credit (HUM 115.1)

CHAMBER ENSEMBLE II **HMU 4166**

Prerequisites: HMU 3146 or by permission—Continued study and performance of standard literature for ensembles: brass, woodwind and percussion. Class meets two hours per week. 1 Credit (HUM 115.2)

CHAMBER ENSEMBLE III **HMU 5202**

Prerequisite: HMU 4166 or by permission—Continued study and performance of standard literature for ensembles: brass, woodwind and percussion. Class meets two hours per week. 1 Credit (HUM 115.3)

CHAMBER ENSEMBLE IV **HMU 6213**

Prerequisites: HMU 5202 or by permission—Continued study and performance of standard literature for ensembles: brass, woodwind and percussion. Class meets two hours per week. 1 Credit (HUM 115.4)

APPLIED MUSIC (CLASS) I **HMU 4169**

Class instruction in beginning guitar, piano, wind instruments (flute, trumpet, etc.) and voice. Emphasis on learning to play an instrument or to sing correctly from the beginning stages. Instruments may be rented through the College. Class meets one hour per week. 1 Credit (HUM 129)

APPLIED MUSIC (CLASS) II **HMU 6513**

Prerequisite: HMU 4169—Continuation of class instruction in guitar, piano, wind instruments (flute, trumpet, etc.) and voice. Instruments may be rented through the College. Class meets one hour per week. 1 Credit

APPLIED MUSIC (CLASS) III **HMU 7619**

Prerequisite: HMU 6513—Continuation of class instruction in guitar, piano, wind instruments (flute, trumpet, etc.) and voice. Instruments may be rented through the College. Class meets one hour per week. 1 Credit

APPLIED MUSIC (CLASS) IV **HMU 5383**

Prerequisite: HMU 7619—Continuation of class instruction in guitar, piano, wind instruments (flute, trumpet, etc.) and voice. Instruments may be rented through the College. Class meets one hour per week. 1 Credit

APPLIED MUSIC (PRIVATE) I **HMU 3510**

Private lessons in vocal and instrumental music. Lesson time is by arrangement, one-half hour per week. 1 Credit (HUM 128.1)

APPLIED MUSIC (PRIVATE) II **HMU 4610**

Prerequisite: HMU 3510 or by permission—Continuation of private lessons in vocal and instrumental music. Lesson time is by arrangement, one-half hour per week. 1 Credit (HUM 128.2)

APPLIED MUSIC (PRIVATE) III **HMU 1069**

Prerequisite: HMU 4610 or by permission—Continuation of private lessons in vocal and instrumental music. Lesson time is by arrangement, one-half hour per week. 1 Credit (HUM 128.3)

APPLIED MUSIC (PRIVATE) IV **HMU 2450**

Prerequisite: HMU 1069 or by permission—Continuation of private lessons in vocal and instrumental music. Lesson time is by arrangement, one-half hour per week. 1 Credit (HUM 128.4)

**INDEPENDENT STUDIES
IN HUMANITIES** **HUM 7502**

Prerequisite: By permission—Opportunity for the student to pursue special interests through guided independent study. Class meets by arrangement. 1-3 Credits (HUM 299)

MATHEMATICS

The mathematics curriculum at the College is designed to meet the needs of students who desire basic mathematical background courses as well as those who are interested in intensive mathematical training. A knowledge of mathematics is essential for an individual to function in today's society and the field of mathematics is supportive to careers such as teaching, engineering, construction, accounting or as an actuary or statistician.

Students seeking a baccalaureate degree in mathematics will find that JCCC offers the courses necessary to complete the freshman and sophomore requirements at most four-year colleges and universities. Those who are interested in the field of education may enroll in finite mathematics in order to meet their education math requirements.

Individuals may wish to explore a course in practical, fundamental mathematics which relate to everyday life. For those who need extra assistance in mathematics, the College Learning Center offers supportive services.

Prerequisites shown with courses on this page may be found as listed below:

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| HMU 1069 - pg. 42 | HMU 4166 - pg. 42 | HMU 5202 - pg. 42 |
| HMU 3146 - pg. 42 | HMU 4169 - pg. 42 | HMU 6513 - pg. 42 |
| HMU 3510 - pg. 42 | HMU 4610 - pg. 42 | HMU 7619 - pg. 42 |

FUNDAMENTALS OF MATHEMATICS MTH 2122

Review of fractions, decimals and whole numbers. Numeration. Practical applications of percent, dimensions and linear equations. Class meets three hours per week. 3 Credits (MATH 104)

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 hour per week. 1 Credit (EGR 301)

FINITE MATHEMATICS MTH 2642

Mathematics for the elementary education or liberal arts student. Includes basic concepts of sets, logic, numeration, field properties, probability and statistics. Class meets three hours per week. 3 Credits (MATH 103)

TECHNICAL MATHEMATICS I MTH 4354

Simplification of algebraic expressions; graphing of linear equations, solving of linear equations, factoring of quadratic expressions, solving quadratic equations, evaluating determinants, and calculating areas and volumes of geometrical figures. Class meets five hours per week. 5 Credits (MATH 101)

TECHNICAL MATHEMATICS II MTH 5387

Prerequisite: MTH 4354—Application of trigonometric laws to solve right and oblique triangles, perform arithmetic on complex numbers and evaluate logarithms. Finding derivatives of functions, utilizing derivatives to find maximum and minimums, integrals of functions and integration to find areas. Class meets five hours per week. 5 Credits (MATH 102)

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 per week. 3 Credits (MATH 100)

ALGEBRA MTH 6079

Prerequisite: Two years of high school math including one year of algebra—Fundamental laws, exponents, radicals, linear and quadratic equations, inequalities, systems of relations, graphing, polynomials and polynomial functions, logarithms and series. Class meets five hours per week. 5 Credits (MATH 106)

ALGEBRA—TRIGONOMETRY MTH 7091

Prerequisite: MTH 6079 or two years of high school algebra—Course presents topics in mathematics that are necessary for the study of calculus. Linear and quadratic equations, progressions, binomial theorem, inequalities, permutations and combinations, theory of equations, exponents, logarithms, trigonometric ratios, identities and exponential functions. Class meets five hours per week. 5 Credits (MATH 115)

COLLEGE ALGEBRA MTH 3427

Prerequisite: MTH 6079 or two years of high school algebra—An intensive study of important topics in algebra. Functions, polynomials, logarithms, matrices and determinants, sequences and series, binomial theorem, induction, permutations and combinations. Class meets three hours per week. 3 Credits (MATH 116)

TRIGONOMETRY MTH 2594

Prerequisite: MTH 6079 or equivalent. 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 per week. 3 Credits (MATH 117)

ANALYTIC GEOMETRY-CALCULUS I MTH 3268

Prerequisite: MTH 7091 or equivalent—The first course of a three semester sequence in analytic geometry and calculus. Elements of plane analytic geometry, differentiation of algebraic functions, integration of polynomial functions with applications of each. Class meets five hours per week. 5 Credits (MATH 121)

ANALYTIC GEOMETRY-CALCULUS II MTH 4313

Prerequisite: MTH 3268 or equivalent—The second course of a three semester sequence in analytic geometry and calculus. Trigonometric and exponential functions, parametric equations, polar coordinates, vectors in a plane, techniques of integration and applications. Class meets five hours per week. 5 Credits (MATH 122)

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 linear algebra. Class meets five hours per week. 5 Credits (MATH 223)

CALCULUS I MTH 6463

Prerequisites: MTH 3427 or equivalent—The first course of a two semester sequence in Calculus. Differentiation and integration of algebraic functions in the solving of problems applicable to business, biology, statistics and the social sciences. Class meets three hours per week. 3 Credits (MATH 300)

Prerequisites shown with courses on this page may be found as listed below.

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| MTH 3268 - pg. 43 | MTH 4313 - pg. 43 | MTH 6079 - pg. 43 |
| MTH 3427 - pg. 43 | MTH 4354 - pg. 43 | MTH 7091 - pg. 43 |

CALCULUS II**MTH 5329**

Prerequisite: MTH 6463—The second course of a two semester sequence in calculus. Students find limits, differentiate and integrate exponential and logarithmic functions, perform partial differentiation and multiple integration, express functions as infinite series and solve problems applicable to business, biology, statistics, and the social sciences. Class meets three hours per week. 3 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 per week. Spring 3 Credits (MATH 224)

STATISTICS**MTH 2084**

Prerequisite: MTH 6079 or equivalent—Introduces descriptive statistics, probability models, sampling distribution, hypothesis testing, chi-square test, regression and correlation. Class meets three hours per week. 3 Credits (MATH 110)

FUNDAMENTALS OF MATRICES AND LINEAR PROGRAMMING**MTH 5564**

Prerequisites: MTH 3427 or equivalent—An introduction to the fundamental concepts of linear algebra with emphasis on computational methods and problem solving. Application of the concepts and methods to linear programming. Class meets three hours per week. 3 Credits (MATH 111)

NATURAL SCIENCES

The curriculum within the division of natural sciences is designed to meet the needs of individuals who are interested in a casual exposure to science as well as those who want intensive science career preparation. Among the science based career possibilities are nursing, dental hygiene, dental assisting and respiration therapy.

The life and physical science course offerings provide the student with an increased awareness of the biosphere and the physical universe. The courses share an emphasis upon laboratory centered inquiry. Students enrolled in these courses receive formal instruction, do laboratory research and use the Audio-Visual Tutorial (AVT) units which have been specifically designed for the science area.

Students interested in earning a baccalaureate degree in liberal arts, the health professions, physical or earth sciences may begin their degree work at JCCC.

LIFE SCIENCE**NLS 6540**

Fundamental laws, theories and principles of biology. Course meets laboratory science requirements for the non-science major. Living organisms and their interrelation with the non-living world. Two hours of class and approximately six hours of Natural Science AVT laboratory per week. 4 Credits (NS 101)

BIOLOGY OF PLANTS**NLS 4624**

Introduction to plant structure and function. Plant division with emphasis on life cycles and evolutionary relationships from the simplest to the most complex of plants. Class meets seven hours per week. 5 Credits (NS 111)

BIOLOGY OF ANIMALS**NLS 5641**

A survey of animal taxa: systematics and ecology of animal populations. Identification of representative members of the animal phyla using their structural characteristics. Interpretation of anatomical and physiological features in terms of adaptation. Class meets seven hours per week. 5 Credits (NS 110)

MICROBIOLOGY**NLS 5593**

Prerequisite: NPS 6634 or one year of high school chemistry—The study of microorganisms: their cell structure, physiology, antimicrobial agents, immunology and host-parasite relationships. Class meets three hours per week. 3 Credits (NS 115)

MICROBIOLOGY LABORATORY**NLS 6057**

Corequisite: NLS 5593—Students transfer and grow microorganisms using sterile technique, 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 per week. 2 Credits

HUMAN ANATOMY-PHYSIOLOGY**NLS 6186**

Analysis of the relation of structure to function in the organ system of man. Emphasis on location of anatomical features and interpretation of their functional morphology. Class meets seven hours per week. 5 Credits (NS 116)

HUMAN ANATOMY**NLS 1128**

Gross and microscopic aspects of cells, tissues and organ systems of the human body. Concentration is on detailed analysis of the structure of each body system. Class meets six hours per week. Fall 4 Credits (NS 117)

Prerequisites shown with courses on this page may be found as listed below:

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| MTH 3427 - pg. 43 | MTH 6357 - pg. 43 | NLS 5593 - pg. 44 |
| MTH 6079 - pg. 43 | MTH 6463 - pg. 43 | NPS 6634 - pg. 45 |

HUMAN PHYSIOLOGY NLS 1144

Prerequisite: NPS 6634—Emphasis upon the activities of human cells, tissues, organs and systems in terms of the physical and chemical processes. A variety of living organisms and physiological tools are used to demonstrate the principles of general physiology. Class meets six hours per week. Spring 4 Credits (NS 118)

GENERAL PHARMACOLOGY NLS 1264

Prerequisite: NLS 1144—Identification and classification of therapeutic agents according to mechanisms of action, toxic and untoward effects, and relation of physiological actions to clinical and experimental practices. Class meets three hours per week. 3 Credits. (NS 265)

GENERAL NUTRITION NLS 6152

Corequisite: NLS 1144—Principles of nutrition. Sources and utilization of essential nutrients and evaluation of various diets. Recommended diet alterations for the prevention of various pathologies. Class meets three hours per week. 3 Credits (NS 149)

GENERAL GENETICS NLS 4248

Fundamental principles of heredity and variation. Concepts of Mendelian and non-Mendelian genetics. Plant, animal and human variations are included. Class meets three hours per week. 3 Credits (NS 215)

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 class and six hours of Natural Science AVT laboratory per week. 4 Credits (NS 102)

ASTRONOMY NPS 6070

Study of the night sky, the moon, the planets, the stars and their evolution, our galaxy, quasars, black holes, the origin of the universe, and life possibilities in other places. Class meets four hours per week plus five nighttime telescope viewing sessions scheduled through the semester as weather permits. 4 Credits (NS 108)

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 seven hours per week. 5 Credits (NS 125)

GENERAL CHEMISTRY I NPS 2244

Prerequisite: MTH 6079 or concurrent enrollment—Basic introduction to inorganic chemistry with emphasis upon atomic structure, the periodic table, bonding, solutions and chemical calculations. Class meets seven hours per week. 5 Credits (NS 120)

GENERAL CHEMISTRY II NPS 3278

Prerequisite: NPS 2244—Oxidation-reduction systems, chemical thermodynamics, organic chemistry and kinetics, with particular emphasis upon solution equilibria. Laboratory consists of supportive experiments with the latter portion devoted to an introduction to qualitative analysis. Class meets seven hours per week. 5 Credits (NS 121)

ORGANIC CHEMISTRY I NPS 2637

Prerequisite: NPS 3278—The nomenclature, principles and theories of organic chemistry with emphasis on electronic theories and reaction mechanisms. Laboratory is supportive in nature with emphasis on developing laboratory techniques and preparation of representative compounds. Class meets nine hours per week. Fall 5 Credits (NS 220)

ORGANIC CHEMISTRY II NPS 3657

Prerequisite: NPS 2637—Continuation of Organic Chemistry I (NPS 2637). Includes an introduction to organic qualitative analysis. Class meets nine hours per week. Spring 5 Credits (NS 221)

PRINCIPLES OF ORGANIC CHEMISTRY NPS 2650

Prerequisites: NPS 3278 or NPS 6634—Introduction to aliphatic and aromatic compounds with emphasis on application to biochemistry and related fields. Nomenclature, principles and basic theories of organic chemistry. Class meets seven hours per week. 5 Credits (NS 225)

INTRODUCTION TO QUANTITATIVE ANALYSIS NPS 5337

Prerequisite: NPS 3278—An introduction to concepts of acid-base, chromatography, coulometry, equilibrium, oxidation-reduction, and spectrophotometry and their application to quantitative chemical analysis. Laboratory consists of supportive experiments designed to introduce the student to modern quantitative experimental techniques. Class meets nine hours per week. 5 Credits (NS 227)

Prerequisites shown with courses on this page may be found as listed below:

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| MTH 6079 - pg. 43 | NPS 2244 - pg. 45 | NPS 3278 - pg. 45 |
| NLS 1144 - pg. 45 | NPS 2637 - pg. 45 | NPS 6634 - pg. 45 |

GENERAL PHYSICS I NPS 3308

Prerequisites: MTH 6079 or equivalent—Introductory survey of selected topics in physics including motion, energy, matter, heat and electricity and magnetism. Class meets six hours per week. Fall 4 Credits (NS 150)

GENERAL PHYSICS II NPS 4356

Prerequisite: NPS 3308—Continuation of General Physics I (NPS 3308). Subjects include wave motion and light relativity, quantum physics and fundamental particles of nature. Class meets six hours per week. Spring 4 Credits (NS 151)

ENGINEERING PHYSICS I NPS 5212

Prerequisites: MTH 4313—Introduction to physics for science and engineering students. Emphasis is placed on mathematical approaches to the study of mechanics, wave motion and thermodynamics. Class meets seven hours per week. Fall 5 Credits (NS 250)

ENGINEERING PHYSICS II NPS 5238

Prerequisite: NPS 5212—Continuation of Engineering Physics I (NPS 5212), with emphasis on electricity and magnetism, light and topics in modern physics. Class meets seven hours per week. Spring 5 Credits (NS 251)

**DENTAL ASSISTING
Metropolitan Cooperative Career Program**

This cooperative program with Penn Valley Community College enables the student to meet requirements for an A.A. degree and sit for examination to become a Certified Dental Assistant. You must be accepted into the program at Penn Valley prior to enrolling at JCCC and should plan your schedule with a counselor to include the following essential courses:

Fundamentals of Dentistry I NDA 2041
Medical Terminology NS 5381
Principles of Chemistry NPS 6634
Communications I COM 6524

Fundamentals of Dentistry II NDA 1044
Psychology SS 1068
Human Anatomy/Physiology NLS 6186

Pre-Clinical Practice NDA 1052

Fundamentals of Dentistry III NDA 3045
Clinical Practice I NDA 1047
Sociology SS 3404
Microbiology NLS 5593
Small Business Accounting BAC 2171

Fundamentals of Dentistry IV NDA 5048
Clinical Practice II NDA 6050
General Nutrition NLS 6152

FUNDAMENTALS OF DENTISTRY I NDA 2041

Introduction to dental assisting, objectives, responsibilities, opportunities and scope of service. Emphasis on patient education, dental anatomy, terminology, advanced first-aid, manipulation of laboratory materials and laboratory procedures. Class meets seven hours per week. 5 Credits

FUNDAMENTALS OF DENTISTRY II NDA 1044

Prerequisite: NDA 2041—Preview of oral hygiene and principles of Roentgenographic physics. Exposing oral Roentgenographs, their processing, mounting and safety. Manipulation of laboratory and dental materials, crown and bridge prosthodontics. Class meets six hours per week. 4 Credits

FUNDAMENTALS OF DENTISTRY III NDA 3045

Prerequisite: NDA 1044 & NDA 1052—Identification and orientation of the restorative and clinical areas of service, including operative dentistry, pedodontics, periodontics, endodontics, orthodontics, prosthodontics, oral surgery, sterilization and anesthesia. Class meets six hours per week. 4 Credits

FUNDAMENTALS OF DENTISTRY IV NDA 5048

Prerequisite: NDA 3045—Reaction of tissue to injury, dental anomalies, caries, common drugs and medicament used in the dental office with continuation of four-handed dentistry. Class meets three hours per week. 3 Credits

PRE-CLINICAL PRACTICE NDA 1052

Prerequisite: NDA 1044—Identification of various operative procedures, including chairside assisting, instrumentation, maintenance of equipment and expanded duties governed by the Missouri Dental Practice Act. Class meets four hours per week. 3 Credits

CLINICAL PRACTICE I NDA 1047

Prerequisites: NDA 1044 & NDA 1052—Advanced experience in selected dental offices, UMKC-School of Dentistry, and dental clinics, involving orientation and evaluation in all office and clinical procedures. Class meets ten hours per week by arrangement. 3 Credits

CLINICAL PRACTICE II NDA 6050

Prerequisite: NDA 1047—Dental specialties and hospital operating room techniques. Fifteen hours per week by arrangement. 5 Credits

Prerequisites shown with courses on this page may be found as listed below:

MTH 4313 - pg. 43 NDA 1047 - pg. 46 NDA 3045 - Pg. 46
MTH 6079 - pg. 43 NDA 1052 - pg. 46 NPS 3308 - pg. 46
NDA 1044 - pg. 46 NDA 2041 - pg. 46 NPS 5212 - pg. 46

DENTAL HYGIENE CAREER PROGRAM

The sequence of courses below has been approved by the Council on Dental Education to prepare students for licensure as a Dental Hygienist. Completed application must be on file by December 31 preceding the fall when the student wishes to enter the program.

| | |
|-------------------------------|----------|
| Clinical Dental Hygiene I | NDH 4103 |
| Principles of Chemistry | NPS 6634 |
| Head and Neck Anatomy | NDH 2339 |
| Oral Histology | NDH 6518 |
| Dental Morphology & Occlusion | NDH 1323 |
| Communications I | COM 6524 |
| Clinical Dental Hygiene II | NDH 6112 |
| Human Physiology | NLS 1144 |
| Microbiology | NLS 5593 |
| Dental Radiology | NDH 6266 |
| Nutrition | NLH 6152 |
| Psychology | SS 1068 |
| Clinical Dental Hygiene III | NDH 7338 |
| Pathology & Periodontology I | NDH 2583 |
| Clinical Dental Hygiene IV | NDH 5109 |
| Pathology & Periodontology II | NDH 6027 |
| Community Dental Health | NDH 4473 |
| Pharmacology | NLS 1264 |
| Dental Materials | NDH 5250 |
| Clinical Dental Hygiene V | NDH 3101 |
| Sociology | SS 3404 |
| Basic Speech | CSP 2501 |

CLINICAL DENTAL HYGIENE I NDH 4103

Prerequisite: Admission to the Dental Hygiene Program—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 13 hours per week. Fall 3 Credits (NS 143)

CLINICAL DENTAL HYGIENE II NDH 6112

Prerequisite: NDH 4103—Clinical application of dental hygiene techniques and instrumentation, plaque control programs, diet analysis and counseling. Emergency procedures for medical and dental emergencies which may be encountered in the dental office. Class meets seven hours per week. Spring 3 Credits (NS 144)

CLINICAL DENTAL HYGIENE III NDH 7338

Prerequisite: NDH 6112—Continued development of proficiency in clinical techniques with emphasis on complete patient evaluation, primary preventive treatment and emergency treatment when indicated. Dental specialties and principles and techniques of four-handed dental hygiene and destistry are included. Class meets fourteen hours per week. Summer 3 Credits (NS 241)

CLINICAL DENTAL HYGIENE IV NDH 5109

Prerequisite: NDH 7338

Corequisite: NDH 6027—Continued development of proficiency in clinical techniques including preparation and application of dental hygiene treatment plans and expanded functions. Class meets thirteen hours per week. Fall 5 Credits (NS 242)

CLINICAL DENTAL HYGIENE V NDH 3101

Prerequisite: NDH 5109—Continued development of proficiency in clinical techniques and current procedural practices of the dental hygienist with emphasis on self evaluation. Principles of dental hygiene ethics and jurisprudence, and methods of efficient dental office management. Class meets fifteen hours per week. Spring 7 Credits (NS 243)

HEAD & NECK ANATOMY NDH 2339

Corequisite: NDH 4103—Basic concepts of gross anatomy with detailed emphasis on the head and neck. Embryology of head and neck is included. Class meets five hours per week. Fall 3 Credits (NS 147)

ORAL HISTOLOGY NDH 6518

Prerequisite: Admission to the Dental Hygiene Program—Study of tissues of the oral cavity. Class meets two hours per week. Fall 2 Credits

DENTAL MORPHOLOGY AND OCCLUSION NDH 1323

Prerequisite: Admission to the Dental Hygiene Program—Identification and description of the deciduous and permanent dentitions. Utilization of dental nomenclature in identification and classification of occlusion. Explanation of protective functions and forms of teeth and supporting structures and description of dental anomalies. Class meets one and one half hours per week with additional AVT as required. Fall 2 Credits (NS 141)

Prerequisites shown with courses on this page may be found as listed below:

| | | |
|-------------------|-------------------|-------------------|
| NDH 4103 - pg. 47 | NDH 6027 - pg. 48 | NDH 7338 - pg. 47 |
| NDH 5109 - pg. 47 | NDH 6112 - pg. 47 | |

DENTAL RADIOLOGY**NDH 6266**

Prerequisite: NDH 4103—Theory of exposing, processing and mounting oral radiographs. Bisecting angle and paralleling techniques. Emphasis on radiation safety for patient and operator. Class meets four hours per week. Spring 2 Credits (NS 145)

PATHOLOGY & PERIODONTOLOGY I NDH 2583

Prerequisite: NDH 7338—Anatomy, histology and specific function of periodontal structures. Recognition and recording of various periodontal diseases and identification of etiological factors. Class meets two hours per week. Summer 1 Credit (NS 247)

PATHOLOGY & PERIODONTOLOGY II NDH 6027

Prerequisite: NDH 2583—Description of periodontal treatment and therapy with emphasis on soft tissue curettage. Basic pathological processes and identification of common oral conditions, their etiology and treatment. Class meets three hours per week. Fall 3 Credits (NS 248)

COMMUNITY DENTAL HEALTH NDH 4473

Prerequisite: NDH 7338—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 three hours per week. Fall 3 Credits (NS 249)

DENTAL MATERIALS NDH 5250

Prerequisite: NDH 6266 and NDH 7338—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 per week. Fall 2 Credits (NS 245)

EMERGENCY MEDICAL TECHNICIAN CAREER PROGRAM

Ambulance and rescue personnel, policemen and firemen are called upon to give special assistance to accident and trauma victims. Learning to provide successful care and treatment of the sick and injured is the major purpose of this short-term program which requires 120 hours to complete. Upon successful completion, students are eligible to take the National and State Registry Examination for Emergency Medical Technicians. NET 6441 is the only required course.

BASIC EMERGENCY MEDICAL CARE NET 6441

Basic emergency medical skills applied to supervised clinical practice. Conforms to Department of Transportation guidelines in providing necessary training for registry as a Type I Emergency Medical Technician. Hours by arrangement. 5 Credits (NS 107)

NURSING (R.N.) CAREER PROGRAM

JCCC's Associate Degree Nursing Program is fully accredited by the Kansas Board of Nursing and the National League for Nursing. Students successfully completing the sequence of essential courses listed below, including electives, will be eligible to write licensure examinations to become a registered nurse. The elective courses in the fields of communications, humanities, natural science and social science must be chosen in cooperation with your counselor. Completed applications must be on file by December 31 preceding the fall when the student wishes to enter the program.

| | |
|----------------------------|----------|
| Concepts of Health | NRN 2474 |
| Human Anatomy | NLS 1128 |
| Psychology | SS 1063 |
| Communication Elective | |
| Adaptation to Change | NRN 3131 |
| Physiology | NLS 1144 |
| Child Development | SS 3546 |
| Short-Term Health Problems | NRN 1550 |
| Natural Science Elective | |
| Social Science Elective | |
| Long-Term Health Problems | NRN 4448 |
| Humanities Elective | |

NURSING CARE OF THE INDIVIDUAL:**CONCEPTS OF HEALTH NRN 2474**

Prerequisite: Admission to the Nursing Program
Corequisite: NLS 1128—Introduction to nursing with emphasis on the maintenance and promotion of physical and mental health in the individual of any age group. Role of the nurse as a member of the health team. Effects of interpersonal relationships and utilization of communicative skills. Three hours of class and nine hours of laboratory per week. Fall 6 Credits (NS 131)

NURSING CARE OF THE INDIVIDUAL:**ADAPTATION TO CHANGE NRN 3131**

Prerequisite: NRN 2474
Corequisite: NLS 1144—Maintenance and promotion of health with special emphasis on family, community and society. Concept of stress resulting from change in health status or life style. Four hours of class and twelve hours of clinical laboratory per week. Spring 8 Credits (NS 132)

Prerequisites shown with courses on this page may be found as listed below:

| | | |
|-------------------|-------------------|-------------------|
| NDH 2583 - pg. 48 | NDH 6266 - pg. 48 | NLS 1144 - pg. 45 |
| NDH 4103 - pg. 47 | NDH 7338 - pg. 47 | NRN 2474 - pg. 48 |
| | NLS 1128 - pg. 44 | |

**NURSING CARE OF THE INDIVIDUAL:
SHORT-TERM HEALTH PROBLEMS NRN 1550**

Prerequisite: NRN 3131—Care of individuals and their needs during illness. Pathophysiology and the application of basic scientific principles in the problem solving process. Special emphasis on assessment of needs, preparation of care plans and evaluation of the effectiveness of the care given. Five hours of class and fifteen hours of clinical laboratory per week. Fall 10 Credits (NS 231)

**NURSING CARE OF THE INDIVIDUAL:
LONG-TERM HEALTH PROBLEMS NRN 4448**

Prerequisite: NRN 1550—Study of illness with emphasis on adjustment of the individual to long term care and rehabilitation. Utilization of patient care plans. Adjustment to the role of the graduate seeking employment in the community. Five hours of class and fifteen hours of clinical laboratory per week. Spring 10 Credits (NS 232)

**RESPIRATORY THERAPY
(Metropolitan Cooperative Career Program)**

Students accepted in this cooperative program between JCCC and Baptist Memorial Hospital should plan their schedule with a counselor to include the sequence of essential courses listed below:

| | |
|---------------------------------------|----------|
| Physical Science | NPS 6540 |
| Chemistry | NPS 6634 |
| Algebra | MTH 6079 |
| Human Anatomy | NLS 1128 |
| Human Physiology | NLS 1144 |
| Microbiology | NLS 5593 |
| Medical Terminology | NS 5381 |
| Pharmacology | NLS 1264 |
| Technical Respiratory Therapy | NRT 6273 |
| Intro. Respiratory Therapy Procedures | NRT 3277 |
| Clinical Care Technique | NRT 5319 |
| Respiratory Therapy Procedures | NRT 2260 |
| Respiratory Therapy Medicine | NRT 4231 |
| Medical Ethics | NRT 1023 |
| Department Management | NRT 5275 |
| Respiratory Therapy Seminar | NRT 6318 |
| Advanced Procedures and Techniques | NRT 7358 |

Prerequisites shown with courses on this page may be found as listed below.

NRN 1550 - pg. 49
NRN 3131 - pg. 48

TECHNICAL RESPIRATORY THERAPY NRT 6273

Prerequisite: Admission to the Respiratory Therapy Program—Orientation to hospital, patient care and management, medical ethics and respiratory therapy as a profession. Design and function of basic respiratory therapy equipment, the designs and principles of various modes of gas supply, procedures and techniques of equipment maintenance and applications of equipment of various types of gas supply. Hours by arrangement. Summer 5 Credits (NS 051)

**INTRODUCTORY RESPIRATORY
THERAPY PROCEDURES NRT 3277**

Prerequisite: Admission to the Respiratory Therapy Program—Bio-mechanics of pulmonary physiology. Distribution of inspired gases, various elastic and non-elastic resistances to breathing, etiology of adult and neonatal respiratory failure. Advanced and acute respiratory therapy protocols. Clinical rotation through respiratory therapy departments of hospital affiliates. Hours by arrangement. Fall 5 Credits (NS 052)

CLINICAL CARE TECHNIQUE NRT 5319

Prerequisite: Admission to the Respiratory Therapy Program—Clinical application. Closely supervised outlined work experience in Respiratory Care techniques and procedures. Hours by arrangement. Fall 5 Credits (NS 053)

**RESPIRATORY THERAPY
PROCEDURES NRT 2260**

Prerequisite: Admission to the Respiratory Therapy Program—Supervised and outlined work experience in Respiratory Care techniques and procedures. Hours by arrangement. Spring 5 Credits (NS 054)

RESPIRATORY THERAPY MEDICINE NRT 4231

Prerequisite: Admission to the Respiratory Therapy Program—Advanced Respiratory Physiology. Respiratory diseases and therapeutic practice of respiratory care of the critical patient. Hours by arrangement. Spring 5 Credits (NS 055)

**MEDICAL ETHICS FOR
RESPIRATORY THERAPY NRT 1023**

Prerequisite: Admission to the Respiratory Therapy Program—The application of the general ethical principles to particular individual and social rights and obligations. Emphasis upon physician-nurse-therapist-patient interaction. Hours by arrangement. Spring 3 Credits

DEPARTMENT MANAGEMENT NRT 5275

Prerequisite: Admission to the Respiratory Therapy Program—Organization of the hospital. Management of personnel and motivation and organization of the Respiratory Therapy Department. Physical management practices. Hours by arrangement. Summer 1 Credit

RESPIRATORY THERAPY SEMINAR NRT 6318

Prerequisite: Admission to the Respiratory Therapy Program—Docent program of thirteen visiting physician lecturers covering general topics germane to their specialties. Hours by arrangement. Summer 2 Credits

ADVANCED PROCEDURES AND TECHNIQUES IN RESPIRATORY THERAPY NRT 7358

Prerequisite: Admission to the Respiratory Therapy Program—Topics comprehensive in nature, that expand areas previously discovered. Topics will be flexible, according to needs and desires of the student. Hours by arrangement. 2 Credits

MEDICAL TERMINOLOGY I NS 5381

Self-instructional approach to learning medical terminology. A handbook and tapes are designed to give the student a start on building a medical vocabulary, stressing definition, spelling and pronunciation of terms. Student selects systems to be studied from tapes available: respiratory, circulatory, digestive, musculo-skeletal, genito-urinary and nervous systems. Class meets by arrangement. 2 Credits (NS 106)

MEDICAL TERMINOLOGY II NS 6476

Prerequisites: NS 5381—Continuation of NS 5381. Student may choose any two areas not previously studied. Class meets by arrangement. 1 Credit

MEDICAL TERMINOLOGY III NS 4165

Prerequisites: NS 6476—Continuation of NS 6476. Student may choose any two areas not previously studied. Class meets by arrangement. 1 Credit

INDEPENDENT STUDIES IN NATURAL SCIENCES NS 1667

Prerequisite: By permission—Opportunity for the student to pursue special interests through guided independent study. Class meets by arrangement. 1 - 3 Credits (NS 299)

PHYSICAL DEVELOPMENT

The area of physical development in the College curriculum is specifically designed to meet the needs of students who are interested in participation, theory, background, observation and/or officiating in a wide variety of athletic activities. Individuals can enhance their own physical abilities, learn to participate in leisure time activities or prepare for a career such as teaching, coaching, community recreation leadership, first aid supervision and recreation therapy.

Facilities for handball, tennis, weightlifting, archery and other physical activities are available for recreational use by JCCC students and community residents.

JCCC offers life-time sports such as golf, tennis, swimming and archery which may be useful and interesting to students who are enrolled in any area of study at the College. Additionally, students with a strong interest in the area of physical development will find that they can complete the first two years of a baccalaureate degree program at JCCC.

INDIVIDUAL LIFE-TIME SPORTS PD 4291

Group instruction and practical experience in archery, badminton and tennis. Emphasis on planning and organization of these life-time sports in a recreation setting. Class meets three hours per week. Coed 2 Credits (PD 131)

INTRODUCTION TO PHYSICAL EDUCATION PD 6340

Principles of health and physical education; history, philosophy, theory and practice. Class meets three hours per week. Coed 3 Credits (PD 130)

PERSONAL HEALTH AND COMMUNITY HYGIENE PD 4368

Problems of maintaining good health. Topics include exercise, personal appearance, narcotics, tobacco, alcohol, recreation, sleep and minor health disturbances. Also involves social, emotional, economic, physical aspects and community life. Class meets three hours per week. Coed 3 Credits (PD 120)

FIRST AID PD 3572

Standard first aid with certification by the American Red Cross. Cause, prevention and first aid care of common emergencies. Class meets three hours per week. Coed 2 Credits (PD 201)

FUNDAMENTALS OF ATHLETICS PD 4146

Theory of coaching and a study of coaching methods. Emphasis on sports currently in season and popular within local high school and college athletic programs. Class meets three hours per week. Coed 2 Credits (PD 140)

FUNDAMENTALS OF BASKETBALL PD 1153

Fundamentals of offensive and defensive basketball; individual and team play; strategy and rules. Class meets three hours per week. Coed 2 Credits (PD 141)

Prerequisites shown with courses on this page may be found as listed below

NS 5381 - pg. 50
NS 6476 - pg. 50

RULES AND OFFICIATING I PD 7168

Knowledge and interpretation of the rules governing football and basketball. Knowledge and interpretive ability helpful to spectators as well as officials. Class meets three hours per week. Coed Fall 2 Credits (PD 110)

RULES AND OFFICIATING II PD 6061

Knowledge and interpretation of the rules governing basketball, baseball and track. Knowledge and interpretive ability helpful to spectators as well as officials. Class meets three hours per week. Coed Spring 2 Credits (PD 111)

PHYSICAL DEVELOPMENT I PD 1472

Activities such as basketball, volleyball, badminton and tennis, racquetball, softball, body conditioning, weight training and gymnasium games depending on weather conditions. Dress suited to the activity. Standard uniform is not required. Class meets two hours per week. Coed 1 Credit

PHYSICAL DEVELOPMENT II PD 7111

Continuation of activities of PD 1472. Dress suited to the activity. Standard uniform is not required. Class meets two hours per week. Coed 1 Credit (PD 102)

PHYSICAL FITNESS AND WEIGHT TRAINING I PD 1078

Individualized instruction on various aspects of physical fitness. Emphasis on progressive weight training, peripheral heart action training and cardiovascular efficiency. Practice area scheduled by arrangement. Coed 1 Credit (PD 121.1)

PHYSICAL FITNESS AND WEIGHT TRAINING II PD 3443

Continuation of PD 1078. Practice area scheduled by arrangement. Coed. 1 Credit (PD 121.2)

FOLK, SQUARE AND SOCIAL DANCING PD 3469

Introduces methods and materials of folk, square and social dancing. Attention is given to terminology, skills, selection and presentation of dances. Emphasis on knowledge and understanding rather than mastery of performance skill. Class meets three hours per week. Coed 2 Credits (PD 153)

TENNIS AND BADMINTON I PD 4309

Individualized instruction on rules, fundamentals and history of the sport. Class meets two hours per week. Coed 1 Credit (PD 103.1)

TENNIS AND BADMINTON II PD 6452

Continuation of PD 4309. Class meets two hours per week. Coed 1 Credit (PD 103.2)

HANDBALL AND RACQUETBALL I PD 3458

Individualized instruction on rules, fundamentals and history of the sport. Practice area scheduled by arrangement. Coed 1 Credit (PD 104.1)

HANDBALL AND RACQUETBALL II PD 2398

Continuation of PD 3458. Practice area scheduled by arrangement. Coed 1 Credit (PD 104.2)

GOLF I PD 3235

Individualized instruction on rules, fundamentals and history of the sport. Practice area scheduled by arrangement. Coed 1 Credit (PD 159.1)

GOLF II PD 3668

Continuation of PD 3235. Practice area scheduled by arrangement. Coed 1 Credit (PD 159.2)

BOWLING I PD 4366

Introduction and practice in fundamentals of bowling. Brief history of the sport plus selection, care and proper use of bowling equipment. Practice area scheduled by arrangement. Coed 1 Credit (PD 161.1)

BOWLING II PD 2658

Continuation of PD 4366. Practice area scheduled by arrangement. Coed 1 Credit (PD 161.2)

FENCING PD 6499

Individualized instruction on rules, fundamentals and history of the sport. Practice area scheduled by arrangement. Coed 1 Credit (PD 160)

ARCHERY I PD 7129

Individualized instruction on rules, fundamentals and history of the sport. Practice area scheduled by arrangement. Coed 1 Credit (PD 108.1)

ARCHERY II PD 5636

Continuation of PD 7129. Practice area scheduled by arrangement. Coed 1 Credit (PD 108.2)

HORSEMANSHIP I PD 7438

General care of horse and equipment. Mounted session includes riding on the flat and over fences. Class meets two hours per week. Coed 1 Credit (PD 157.1)

HORSEMANSHIP II PD 3229

Continuation of PD 7438. Class meets two hours per week. Coed 1 Credit (PD 157.2)

The number shown in parentheses at the end of most course descriptions refers to the course's previous number. If no number appears in parentheses, the course is new.

GYMNASTICS AND TUMBLING I PD 4536

Individualized instruct in tumbling, side horse, even and uneven parallel bars, balance beam, trampoline, vaulting and rings. For the inexperienced or limited experience student. Class meets two hours per week. Coed 1 Credit (PD 105.1)

GYMNASTICS AND TUMBLING II PD 3355

Continuation of PD 4536. Class meets two hours per week. Coed 1 Credit (PD 105.2)

WRESTLING I PD 4257

Individualized instruction on rules, fundamentals and history of the sport. Practice area scheduled by arrangement. 1 Credit (PD 106.1)

WRESTLING II PD 4589

Continuation of PD 4257. Practice area scheduled by arrangement. 1 Credit (PD 106.2)

SOCCER I PD 1012

Individualized instruction on rules, fundamentals and history of the sport. Practice area scheduled by arrangement. Coed 1 Credit (PD 107.1)

SOCCER II PD 1176

Continuation of PD 1012. Practice area scheduled by arrangement. Coed. 1 Credit (PD 107.2)

SWIMMING/LIFE SAVING PD 3446

Advanced work in all swimming strokes. Prepares student for American National Red Cross Senior Life Saving certification. Class meets two hours per week. Coed 1 Credit (PD 170)

SWIMMING/WATER SAFETY PD 4417

Prerequisite: American Red Cross Senior Life Saving certification—Advanced work in all swimming strokes. Review of Senior Life Saving. Prepares student for certification as a Red Cross Water Safety Instructor. Class meets two hours per week. Coed 1 Credit (PD 172)

SYNCHRONIZED SWIMMING PD 5548

Beginning and advanced water ballet and gymnastics. Water show performance and/or competition. Class meets two hours per week. Coed Spring 1 Credit (PD 171)

CHEERLEADING AND YELL-LEADING I PD 2560

Basic instruction in the fundamentals of cheerleading and yell-leading. Includes work with a partner. Cheerleaders and yell-leaders represent the College in community activities. Hours by arrangement. Coed 1 Credit (PD 156.1)

CHEERLEADING AND YELL-LEADING II PD 1314

Continuation of PD 2560. Hours by arrangement. Coed 1 Credit (PD 156.2)

GIRLS' DRILL TEAM I PD 6370

Prerequisite: By audition—Precision drill team techniques. The Drill Team represents the College in community activities. Hours by arrangement. 1 Credit (PD 154.1)

GIRLS' DRILL TEAM II PD 7445

Prerequisite: By audition—Continuation of PD 6370. Hours by arrangement. 1 Credit (PD 154.2)

GIRLS' DRILL TEAM III PD 5150

Prerequisite: By audition—Continuation of PD 7445. Hours by arrangement. 1 Credit

GIRLS' DRILL TEAM IV PD 1522

Prerequisite: By audition—Continuation of PD 5150. Hours by arrangement. 1 Credit

RECREATION LEADERSHIP CAREER PROGRAM

While the courses listed constitute those considered essential for job entry in the field of Recreation Leadership, it is equally important to select supportive courses in physical development and/or art in satisfying degree requirements. To plan a comprehensive curriculum, it is suggested that you work through a counselor.

Introduction to Physical Education PD 6340
Introduction to Recreation Services PRL 5298
First Aid PD 3572

Outdoor Recreation PRL 7164
Social Recreation PRL 2459

Recreation Field Study PPL 1379

INTRODUCTION TO RECREATION SERVICES PRL 5298

Historical and philosophical foundations of leisure and recreation activities. Emphasis on socioeconomic movements, economic importance of recreation and social institutions which provide recreation services. Class meets three hours per week. 3 Credits (PD 135)

The number shown in parentheses at the end of most course descriptions refers to the course's previous number. If no number appears in parentheses, the course is new.

SOCIAL RECREATION**PRL 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 per week. Spring 2 Credits (PD 137)

OUTDOOR RECREATION**PRL 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 per week. Spring 3 Credits (PD 136)

RECREATION FIELD STUDY**PPL 1379**

Supervised work experience in an approved area agency, hospital or institution. Application of theory to recreation and therapeutic situations in the community. Class meets two hours per week. Spring 3 Credits (PD 138)

INDEPENDENT STUDIES**IN PHYSICAL DEVELOPMENT****PD 4003**

Prerequisite: By permission—Opportunity for the student to pursue special interests through guided independent study. Class meets by arrangement. Coed 1 - 3 Credits (PD 299)

SOCIAL SCIENCES

The social science area of the College curriculum includes general education courses in the social sciences, sociology, anthropology, political science, psychology, economics, government and law enforcement. Social science courses are designed to introduce basic concepts of individual and social behavior which are applicable to all aspects of life. Career possibilities include the areas of counseling and guidance, clinical psychology, testing and measurement, teaching, diplomacy, law and law enforcement.

Students seeking a baccalaureate degree will find that JCCC offers the courses necessary to complete the freshman and sophomore requirements at most four-year colleges and universities.

SOCIOLOGY**SS 3404**

An interdisciplinary course designed to introduce basic concepts from the social sciences as they are studied in sociology. Application of topics to both general and career interest. Class meets three hours per week. 3 Credits (SS 101)

ANTHROPOLOGY**SS 6562**

Study of the basic methods and concepts of physical and social/cultural anthropology, prehistory and archeology. Application to cross-cultural topics of general and career interest. Class meets three hours per week. 3 Credits (SS 301)

SOCIAL PROBLEMS**SS 3428**

Prerequisite: By permission—Provides a meaningful sociological framework for the analysis of social problems and a consideration of the application of varying methods to the study of social problems. Class meets three hours per week. 3 Credits (SS 230)

POLITICAL SCIENCE**SS 1456**

An interdisciplinary course designed to introduce the basic tools of analysis in the social sciences that are stressed in political science. Application of these tools and concepts to the analysis of political systems of selected countries. Class meets three hours per week. 3 Credits (SS 102)

SURVEY OF ECONOMICS**SS 5123**

Survey of the basic principles governing the economy and its economic units. Designed primarily for the student planning to take only a single course in economics. Topics include elements of supply and demand; national and income accounting; money banking and market structures. Class meets three hours per week. 3 Credits (BUS 191)

ECONOMICS I**SS 2253**

Prerequisite: By permission—Fundamental problems of economics and contemporary approaches to these problems. Topics covered include: basic elements of supply and demand; prices; national income determination; money and banking; monetary and fiscal policy; international trade and finance. Class meets three hours per week. 3 Credits (SS 201)

ECONOMICS II**SS 3093**

Prerequisite: SS 2253 or by permission—Continuation of SS 2253 (Economics I) with emphasis on supply and demand, theory of the firm, and market structures. Class meets three hours per week. 3 Credits (SS 202)

AMERICAN HISTORY I**SS 5173**

An investigation of American society from the early colonial era to the period of the Civil War. Emphasis on analysis and discussion of the different interpretations and debates about major issues in American history. Class meets three hours per week. 3 Credits (SS 220)

Prerequisites shown with courses on this page may be found as listed below:

SS 2253 - pg. 53

AMERICAN HISTORY II SS 6187

An investigation of American society from the period of Reconstruction to the present. Emphasis on analysis and discussion of the different interpretations and debates about major issues in American history. Class meets three hours per week. 3 Credits (SS 221)

AMERICAN NATIONAL GOVERNMENT SS 3138

Examination of major areas of political and administrative processes. General political theory, American civil liberties, citizen responsibilities, role of public opinion, the Presidency, Congress, the Courts and the nature of contemporary national government. Class meets three hours per week. 3 Credits (SS 222)

PSYCHOLOGY SS 1068

Introduces basic concepts and methods of general psychology and their relationship to other behavioral sciences. Application of psychological principles to the understanding of behavior is stressed. Class meets three hours per week. 3 Credits (SS 103)

CHILD DEVELOPMENT SS 3546

Prerequisite: SS 1068 or by permission—Growth and development of the child from conception to puberty. Emphasis on factors important to an understanding of development: internal growth, self and external adjustment processes. Practicum in an educational setting may be required. Class meets three hours per week. 3 Credits (SS 210)

EDUCATIONAL PSYCHOLOGY SS 3148

Prerequisite: SS 1068 or by permission—Application of principles of psychology to problems in learning-teaching situations. Study of behavior, attitudes, skills, retention and transfer. Ability and achievement measurement techniques. Practicum in an educational setting may be required. Class meets three hours per week. 3 Credits (SS 211)

HUMAN POTENTIAL SEMINAR SS 2002

A structured, positive group experience designed to increase self-affirmation, self-motivation, self-determination and empathetic regard for others. Includes recall of peak and mini-peak experiences, acknowledgement and analysis of achieving satisfaction and success, clarification of personal values, acknowledgement of personal strengths and long-range goal setting. Class meets three hours per week. 3 Credits

CAREER/LIFE PLANNING SS 7227

A systematic approach to career/life planning, focusing on a process enabling individuals to make occupational decisions at any point in their lives. Class meets three hours per week. 3 Credits

LAW ENFORCEMENT CAREER PROGRAM

The sequence of courses listed indicates those considered essential to initial entry into the field of law enforcement. Current State statutes require additional training beyond this sequence in order to qualify as a police officer, but many other options are available. To plan a full associate degree or transfer program, you should make an appointment with your counselor to determine supportive courses necessary.

| | |
|---|----------|
| Introduction to Law Enforcement | SLE 6261 |
| Study of the Criminal Justice System | SLE 7108 |
| Traffic Safety and Accident Investigation | SLE 6653 |
| Criminal Law | SLE 4588 |
| Motor Vehicle Law | SLE 2461 |
| Juvenile Code and Procedure | SLE 1160 |
| Patrol Procedures | SLE 4033 |
| Fundamentals of Criminal Investigation | SLE 5137 |
| Defensive Tactics | SLE 7288 |
| Introduction to Criminalistics | SLE 7292 |
| Constitutional Case Law | SLE 4418 |

POLICE AND THE PUBLIC SLE 6432

Identification and analysis of conflicts arising between police and the community they serve. Function of the police as a social institution within a free society. Class meets three hours per week. 3 Credits (SS 159)

CRIMINOLOGY SLE 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 per week. 3 Credits (SS 254)

BASIC POLICE TRAINING COURSE SLE 3045

Prerequisite: Must be currently employed full-time by a participating law enforcement agency—Basic patrol procedures: Traffic investigation and control, arrests, search and seizures. Fulfills and exceeds requirement of the Kansas Minimum Standards Training Act. May be applied as elective credit to satisfy requirements of the associate degree program in Law Enforcement. A minimum of 400 clock hours. Class meets five days per week, eight hours a day for ten weeks. 1-15 Credits (SS 150)

Prerequisites shown with courses on this page may be found as listed below:
SS 1068 - pg. 54

**INTRODUCTION TO
LAW ENFORCEMENT**

SLE 6261

Corequisite: SLE 7108 or by permission—Participation in field and classroom experiences designed to explore career opportunities within the Criminal Justice system. Examination of Law Enforcement processes, minimum entry level requirements for local, state and federal police. Class meets three hours per week. 3 Credits (SS 151)

JUVENILE CODE AND PROCEDURES SLE 1160

Prerequisites: SLE 6261 and SLE 7108—Analysis of detention procedures, disposition, custody and treatment of juvenile offenders in Kansas. Origin and development of juvenile agencies, organization functions and jurisdiction of Juvenile Courts. Class meets three hours per week. 3 Credits (SS 153)

CRIMINAL LAW

SLE 4588

Prerequisites: SLE 6261 and SLE 7108—Kansas Criminal Code with emphasis on elements of crimes and criminal procedure. Class meets three hours per week. 3 Credits (SS 155)

**STUDY OF THE CRIMINAL
JUSTICE SYSTEM**

SLE 7108

Corequisite: SLE 6261 or by permission—Analysis and identification of the subsystems of the Criminal Justice System. Class meets three hours per week. 3 Credits (SS 154)

**FUNDAMENTALS OF
CRIMINAL INVESTIGATION**

SLE 5137

Prerequisites: SLE 4588 or by permission—Investigative techniques of crime scene search; collection and preservation of evidence, interviewing and logical reconstruction of crime. Class meets three hours per week. 3 Credits (SS 156)

**SUPERVISORY TECHNIQUES
FOR POLICEMEN**

SLE 7161

Prerequisite: SLE 7108—Current theory and practice of the supervisor's role in the police service. Class meets three hours per week. 3 Credits (SS 244)

MOTOR VEHICLE LAW

SLE 2461

Prerequisites: SLE 6261 and SLE 7108—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 per week. 3 Credits (SS 250)

INTRODUCTION TO CRIMINALISTICS SLE 7292

Prerequisites: SLE 5137 or by permission—Skill training in techniques and methods to establish the identity and individualization of persons and things in a criminalistic laboratory. Class meets three hours per week. 3 Credits (SS 251)

**POLICE ORGANIZATION
AND MANAGEMENT**

SLE 7454

Prerequisite: SLE 7161—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 per week. 3 Credits (SS 253)

**TRAFFIC SAFETY AND
ACCIDENT INVESTIGATION**

SLE 6653

Prerequisites: SLE 6261 and SLE 7108—Identification and analysis of the accident and investigative function of police through the pre-crash and post-crash syndrome. Preparation of scale diagrams of accident situations. Class meets three hours per week. 3 Credits (SS 255)

CONSTITUTIONAL CASE LAW

SLE 4418

Prerequisite: By permission—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 per week. 3 Credits (SS 256)

PATROL PROCEDURES

SLE 4033

Prerequisites: SLE 1160, SLE 6261, SLE 2461—Analysis of basic techniques of the police patrol function. Emphasis on report writing, traffic law enforcement, arrest, search and seizure, patrol and peace keeping. Class meets three hours per week. 3 Credits (SS 257)

DEFENSIVE TACTIC FOR POLICE

SLE 7288

Prerequisites: SLE 1160, SLE 4588, SLE 2461—Proficiency in the use of the baton and service revolver as offensive and defensive weapons. Constitutional limitations on the use of force. Class meets three hours per week. 3 Credits (SS 258)

READINGS IN POLICE SCIENCE

SLE 1174

Prerequisite: 15 hours credit in Law Enforcement—Selected readings in Police Science; e.g., Police Administration, Criminal Investigation, Criminology, Corrections, Juvenile Problems, Evidence. Hours by arrangement. 1-3 Credits (SS 259)

**INDEPENDENT STUDIES
IN SOCIAL SCIENCES**

SS 5040

Prerequisite: By permission—Opportunity for the student to pursue special interests through guided independent study. Class meets by arrangement. 1-3 Credits (SS 299)

Prerequisites shown with courses on this page may be found as listed below:

| | | |
|-------------------|-------------------|-------------------|
| SLE 1160 - pg. 55 | SLE 4588 - pg. 55 | SLE 7108 - pg. 55 |
| SLE 2461 - pg.55 | SLE 5137 - pg. 55 | SLE 7161 - pg. 55 |
| | SLE 6261 - pg. 55 | |

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Harold L. Finch

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Instructional Branch

Dean of Instruction

William Lozano

Assistant Dean, Career College Programs

Richard Burns

Assistant Dean, University College Programs

W. Dane Lonborg

Assistant Dean, Continuing Education

Michael Toler

Director of Business and Management Division

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Director of Physical Development Division

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Director of Social Science & Humanities Division

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College Services Branch

Dean of College Services

William Lozano

Director of Admissions & Registrar

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Director of Guidance & Counseling

Don Dougherty

Director of Educational Media Center

William Hoffman

Director of Intercollegiate Athletics

Orville Gregory

Director of Facilities Division

Gene Haun

Coordinator of Student Activities

Patsie Staake

Bookstore Manager

Joe Hentzen

- ALVERS, Jean**
Instructor, Social Sciences
B.S., Eastern Michigan University
M.A., University of Michigan
- ARNOLD, Cynthia**
Instructor, Nursing
B.S., University of Missouri, Columbia
- ASCANIO, Darlene J.**
Instructor, Data Processing
B.S., Kansas State College of Pittsburg
- AXON, David E.**
Instructor, Speech
B.A., Park College
M.Ed., Pennsylvania State University
- BAGGERLY, Larry C.**
Instructor, Foreign Languages
B.S., University of Missouri, Kansas City
M.A., University of Missouri, Kansas City
- BALLARD, Judith A.**
Instructor, Reading Specialist
B.A., William Jewell College
M.A., University of Missouri, Kansas City
- BARNETT, Thomas M.**
Director of Natural Science Division
B.S., Eastern New Mexico University
M.S., Eastern New Mexico University
Ed.D., North Texas State University
- BAUMAN, Anne W.**
Instructor, Communications
B.A., Fontbonne College
M.A., Loyola University
- BAUMAN, Mark**
Instructor, German/Communications
A.B., Benedictine College
M.A., University of Kansas
S.T.L., University of Munich, Germany
- BEHBEHANI, Zohreh S.**
Instructor, Business Law
LL.B., University of Tehran
LL.M., University of Missouri, Kansas City
- BELINGLOPH, Lucille**
Data Processing Programmer
B.S., Lincoln University
- BISHOP, Charles C.**
Instructional Development Specialist
B.A., Midland College
M.A., University of Kansas
- BROKER, Michael J.**
Personnel Director
B.S., Central Missouri State University
M.A., Central Missouri State University
- BROOKS, Ronald W.**
Coordinator/Counselor, C.L.C.
B.A., University of Missouri, Kansas City
M.A., University of Missouri, Kansas City
- BROWN, Anita J.**
Instructor, Dental Hygiene
B.S., University of Missouri, Kansas City
- BROWNING, James R.**
Instructor, Law Enforcement
B.S., Central Missouri State University
M.A., University of Missouri, Kansas City
- BUCKNER, Virginia**
Instructor, Life Sciences
B.A., Vassar
- BUESCHER, Kay**
Instructor, Nursing
B.S.N., University of Kansas
- BURNGEN, Judith A.**
Instructor, Dental Hygiene
B.S., Ohio State University
M.S., University of Missouri, Kansas City
- BURNS, Mary Jane**
Instructor, Communications
B.A., Benedictine College
M.A., University of Missouri, Kansas City
- BURNS, Richard A.**
Assistant Dean of Instruction
B.A., William Jewell College
M.S.T., University of Missouri
- BUTLER, Eugene**
Instructor, Vocal Music
B.MED., University of Oklahoma
S.M.M., Union Theological Seminary
D.M.A., University of Missouri, Kansas City
- BYRUM, Paul**
Instructor, Mathematics
B.S., U.S. Naval Academy
M.A.T., Duke University
- CAFFREY, Margaret M.**
Librarian
B.A., St. Mary College
B.S./LS., Catholic University of America
- CAMPBELL, Matthias**
Instructor, Communications
B.A., Park College
M.A., Tulsa University
- Castillo, Victor**
Instructor, Community Activities
B.S.Ed., Kansas State Teachers College
- CAVAGNOL, Richard M.**
Instructor, Life Sciences
A.B., Rochester University
M.S., University of Kansas
- CLARK, John**
Instructor, Aviation
B.A., Southwest Baptist College
- CLASPILL, Deanna F.**
Job Analyst
- COFFEY, Kenneth**
Instructor, Secretarial Careers
B.A., Colorado State College
M.A., Colorado State College
- COFFMAN, Bob L.**
Supervisor, Word Production Section
B.A., Bethany College
- COLE, Norma L.**
Acting Coordinator, Nursing
B.A., University of Missouri, Kansas City
M.A., University of Missouri, Kansas City
- COULTER, Daniel**
Television Producer/Director
B.A., University of Missouri, Columbia
- CRAWFORD, Samuel J.**
Instructor, Physical Sciences
B.S., Kansas State Teachers College
M.S., Kansas State Teachers College
- CUNNINGHAM, Alan**
Instructor, Humanities
B.A., Chico State College
- CUNNINGHAM, Melvin C.**
Librarian
B.S., University of Nebraska at Omaha
M.L., Kansas State Teachers College
- DALSING, Max V.**
Instructor, Life Sciences
B.S., Kansas State Teachers College
M.S., Kansas State Teachers College
- DAYTON, Linda L.**
Director of Admissions and Registrar
B.S., Kansas State Teachers College
M.S., Kansas State Teachers College
- DEVANE, Larry**
Coordinator, Special Projects
B.S., Kansas State Teachers College
M.S., Kansas State Teachers College
Ph.D., Kansas State University
- DIETRICH, Irma**
Librarian
B.Mus., Bethany College
M.A., University of Denver
- DOUGHERTY, Donald**
Director of Guidance and Counseling
B.S., Kansas State Teachers College
M.S., Kansas State Teachers College
- EDGEMON, Joan**
Instructor, Nursing
B.S.N., Washington University
- EFFINGHAM, Marie**
Instructor, Nursing
B.S., University of Chicago
M.A., University of Missouri, Kansas City
- ELLIOTT, Tom A.**
Director of Data Processing
B.S., Kansas State College of Pittsburg
M.S., Kansas State College of Pittsburg
- EVANS, David J.**
Instructor, Business
B.S.C., University of Iowa
M.Ed., University of Nebraska
- EVANS, James D.**
Instructor, Business
B.S., Kansas State University
M.S., Kansas State Teachers College
- EVESLAGE, Roberta**
Instructor, Social Sciences
B.F.A., Texas Christian University
M.A., University of Kansas
Ph.D., University of Kansas
- FINCH, Harold L.**
Interim Chief Administrative Officer
B.S., University of Kansas
M.S., Ohio State University
Ed.D., University of Kansas

FONG, Li Ren

Instructor, Mathematics
B.A., National Cheng Chi University
M.S., Fort Hays State College

FRANKLIN, David

Controller
B.S., Southern Illinois University
A/BPS, American Institute of Banking
CPA, Missouri and Kansas

GEORGE, Dennis J.

Instructor, Life Sciences
B.S., Rockhurst College
M.A., University of Missouri, Kansas City

GILBERT, Oliver T.

Instructor, Mathematics
B.S., University of Kansas
M.S.Ed., University of Utah

GILFORD, Charles B.

Instructor, Communications
B.S., Rockhurst College
M.A., Catholic University
Ph.D., University of Denver

GREGORY, Orville

Director of Physical Development
B.S., Northeast Missouri State College
M.A., University of Missouri

GRIFFITHS, Steve

Photographer
A.A., Penn Valley Community College

HALL, John S.

Supervisor of Security

HAMANN, Arthur A.

Instructor, Social Sciences
B.A., Cornell College
S.T.B., Boston University School of Theology
M.A., Boston University

HAMMACK, Roy

Instructor, Physical Sciences
B.S., Kansas State College of Pittsburg
M.S., Kansas State College of Pittsburg
Ed.S., Kansas State College of Pittsburg

HARP, Harold

Instructor, Communications
B.S., Central Missouri State
M.A., Central Missouri State

HAUN, Gene

Director of Facilities
B.S., Kansas State Teachers College

HENNINGTON, Jack L.

Instructor, Mathematics
B.S., Kansas State Teachers College
M.S., University of Kansas

HENTZEN, Joseph M.

Manager, Bookstore

HICKS, Ronald D.

Instructor, Art
B.S., Kansas State College of Pittsburg
M.S., Kansas State College of Pittsburg

HILL, David E.

Instructor, Drafting Technology
B.S., Kansas State Teachers College
M.S., Kansas State Teachers College

HOWARD, Jean M.

Instructor, Art
B.F.A., University of Kansas
M.F.A., University of Kansas

HUNTER, Robert

Instructor, Business
B.S., University of Tulsa
M.B.A., University of Tulsa

IMBEAU, Harvey B.

Instructor, Humanities
B.M.E., Oklahoma State University
M.M.E., North Texas State University

JACK, Bonnie

Instructor, Business
B.S., Kansas State College of Pittsburg
M.S., University of Kansas

JACK, H. Eugene

Instructor, Physical Sciences
B.S., Kansas State College of Pittsburg
M.S., Kansas State College of Pittsburg

JACKSON, James W.

Director of Social Sciences and Humanities
B.A., Arkansas Polytechnic College
M.Ed., University of Arkansas

JACKSON, Marilyn A.

Instructor, Social Sciences
A.B., Indiana University
M.A., Indiana University
M.S., Indiana University

JAMESON, Beverly

Instructor, Data Processing
B.S., University of Kansas

JORGENSEN, Mark

Data Processing Programmer
B.S.Ed., University of Kansas

KADEL, Carolyn

Instructor, Social Science
A.B., Elmira College
M.A.T., Brown University

KALMAN, Nancy A.

Instructor, Life Sciences
B.A., University of Iowa
M.S., University of Iowa
Ph.D., University of Kansas

KARL, Norman H.

Instructor, Marketing and Management
B.A., Wartburg College
M.A., University of Northern Colorado

KARNAZE, William C., Jr.

Instructor, Physical Sciences
B.A., University of Kansas
M.A., University of Kansas

KELLEY, Diana L.

Research Evaluation Specialist
B.A., Wichita State University
M.A., University of Kansas
Ph.D., University of Kansas

KINDERMANN, Maurice E.

Instructor, Physical Sciences
B.A., University of Missouri, Kansas City
M.A., University of Missouri, Kansas City

KIRKMAN, Kay

Publications Editor
A.A., Johnson County Community College

KLARNER, Walter E., Jr.

Instructor, Communications
B.A., College of Emporia
M.S., Kansas State Teachers College

KREBS, Frederick A.

Instructor, Humanities
B.A., University of Kansas
M.A., University of Kansas

KREBS, Virginia W.

Coordinator, Community Services
B.S., University of Denver

KREHBIEL, Lyle

Instructor, Mathematics & Electronics
B.S., Kansas State University
M.S., University of Missouri, Columbia
M.A., University of Missouri, Columbia

KUEHN, William E.

Supervisor of Operations
B.S., Concordia Teachers College

KURKI, Allan

Instructor, Business
B.S., St. Louis University
M.B.A., University of Pittsburgh
M.S., University of Pittsburgh

LAWYER, Darwin

Financial Aids Counselor
A.A., Estherville Junior College
B.A., Northwest Missouri State
M.Ed., University of Missouri, Columbia

LINDSEY, Carl E.

Director of Engineering & Technology
B.S.M.E., University of Kansas
M.S.M.A.E., University of Missouri, Columbia

LLOYD, Solomon

Television Technician

LONBORG, W. Dane

Assistant Dean of Instruction
B.S., University of Kansas
M.A., University of Northern Colorado

LOSSING, Jim

Instructor, Data Processing
B.A., Western New Mexico University
M.A., University of Arizona
M.S., University of Arizona

LOZANO, William A.

Dean of Instruction
B.A., Wayne State University
M.A., Wayne State University
Ph.D., Michigan State University

MacDOWELL, Arden

Instructor, Hearing Impaired
B.S., Gallaudet College

MACKEY, Wayne

Instructor, Mathematics
B.A., University of Arkansas

MATTHEWS, Darrell E.

Instructor, Hearing Impaired/Interpreter
B.S., Concordia Teachers College
M.Ed., University of Tennessee

MAYNARD, R. T.

Instructor, Physical Development
B.A., Southwestern College
M.S., Oklahoma State University

McFIELD, LaVerne

Reading Specialist/ABE-GED
B.A., Texas College
M.A., University of Missouri, Kansas City

McMORRIS, Sylvia

Instructor, Nursing
B.S.N., University of Kansas
M.S., Kansas State Teachers College

METTENBURG, Alfred J.

Instructor, Law Enforcement
B.S., University of Missouri, Columbia

MEYER, Donald P.

Dean of College Services
B.S., Central Michigan University
M.A., University of Michigan
Ed.D., Michigan State University

MILLER, Margaret K.

Counselor
B.A., Central Methodist College
M.A., University of Missouri, Kansas City

MOORE, Dorothy Jane

Instructor, Physical Development
B.S., Oklahoma State
M.S., Oklahoma State

MORRISON, Carol

Instructor, Nursing
B.S., Kansas State University

NERNEY, Patricia K.

Instructor, Communications
B.A., Benedictine College
M.A., University of Missouri, Kansas City

OETTING, Ronald H.

Instructor, Mathematics
B.S., Central Missouri State University
M.A., Louisiana State University

PARKHURST, Harry

Counselor
B.S., Southwest Missouri State
M.Ed., University of Missouri, Columbia

PEARCE, John

Director of Community Cooperation
B.S., University of Kansas
M.S., University of Kansas

PENNISTON, Lloyd

Television Engineer

PERKINS, Diane

Instructor, Dental Hygiene
B.S., University of Missouri, Kansas City

PISCIOTTA, Jack

Media Technician

PITZ, Elizabeth

Coordinator, Dental Hygiene
B.S., Temple University
M.S., University of Missouri, Kansas City

PROFFER, Doug

Instructor, Mathematics
B.S., West Texas State University
M.S., West Texas State University

PURINTON, Dorothy

Supervisor, Graphics
B.A., Baker University

RAMSEY, Robert W.

Instructor, Mathematics
B.S., University of Missouri, Columbia
M.A., Central Missouri State University

RANDOLPH, Richard J.

Instructor, Business
B.S., University of Kansas
M.A., George Washington University

RECHTFERTIG, Lawrence

Instructor, Business
B.A., University of North Iowa
M.Ed., Colorado State University

REYNOLDS, Elizabeth

Instructor, Dental Hygiene
B.S., Indiana University of Pennsylvania
M.S., University of Missouri, Kansas City

RICHMOND, James

Assistant Director for Informational Services
B.A., University of Missouri, Kansas City

ROACH, Nick

Purchasing Officer
B.B.A., Washburn University

ROBINSON, Patricia

Instructor, Communications
B.A., University of Missouri, Kansas City
M.A., University of Missouri, Kansas City

ROSENSHIELD, Liliane N.

Instructor, Foreign Language
License "La Sorbonne" Paris, France
M.A., University of Paris

RYAN, Rebecca

Instructor, Social Science
B.A., University of New York
M.A., University of Iowa

SCHELOSKI, Peggy Y.

Instructor, Secretarial Careers
B.S., Kansas State College at Pittsburg

SCHRICK, Sharon

Instructor, Fashion Merchandising
B.S., Benedictine College
M.S., Kansas State Teachers College

SCONCE, Evelyn R.

Instructor, Business
B.A., George Mason University
M.A., University of Missouri, Kansas City

SHAFFER, Linda

Reading Specialist
B.S., University of Missouri, Kansas City
M.A., University of Missouri, Kansas City

SHANKEL, Carolyn M.

Instructor, Business
B.S., Kansas State College of Pittsburg
M.S., Kansas State College of Pittsburg

SIMONS, Jeffery C.

Instructor, Physical Development
B.S., Kansas State University
M.S., University of Kansas

SMITH, James E.

Instructor, Instrumental Music
B.M.E., Kansas State College of Pittsburg
M.S., Kansas State College of Pittsburg

SNEAD, Carl

Television Producer/Director
B.S., University of Kansas

SNYDER, Susan L.

Instructor, Communications
B.A., Belmont College
M.A., Stanford University

SPIZZIRRI, Barbara

Instructor, Humanities
B.A., University of Missouri, Kansas City
M.A., University of Missouri, Kansas City

STAAKE, Patsie

Coordinator, Student Activities
B.S., Oklahoma Baptist University
M.S., University of Missouri, Columbia

STEEN, Douglas Wayne

Counselor
B.S., University of Kansas
M.S., University of Kansas

STEWART, Sandra Kay

Counselor
B.S., Kansas State University
M.S., University of Kansas

STINE, Richard

Instructor, Debate/Speech
B.S., Kansas State Teachers College
M.S., Kansas State Teachers College

STITES, Glenna L.

Placement Counselor
B.S., Columbia University
M.A., University of Missouri

STUDYVIN, William G.

Instructor, Electronics
B.S.E.E., University of Missouri, Rolla
M.S.E.E., University of Missouri, Columbia

SUTTON, Hugh C.

Instructor, Mathematics
B.S., Texas A&M University
M.S., Louisiana Polytechnic Institute

SWANDER, Lynda

Instructor, Life Science Core
B.S., Wittenberg University
M.A.Ed., Western Michigan University

TATHAM, Elaine

Director of Institutional Research
B.A., Carleton College
M.A., University of Kansas
Ed.D., University of Kansas

TAYLOR, Mary Lou

Coordinator, Nursing Program
B.S., Drury College
M.A., University of Missouri, Kansas City

TEBBE, Paul L.

Instructor, Physical Sciences
A.B., Spring Hill College
M.A., Georgetown University

TEEL, Marion E.

Instructor, Life Sciences
A.B., Nebraska State College
M.S., Kansas State College, Emporia

TEWS, Donald

Counselor
B.A., University of Iowa
M.A., University of Iowa

TOLER, Michael G.

Assistant Dean of Instruction
B.S., University of Kansas
M.S., University of Kansas
Ed.D., University of Colorado

TRAVER, Roger

Instructor, Economics
B.A., Illinois Wesleyan University
M.B.A., Washington University

VANDEBURGH, Sally

Television Program Coordinator
B.S., Jacksonville University
M.A., University of Kansas

VAUGHAN, Arthur

Instructor, Electronics
B.S.E.E., University of Wisconsin
M.S.E.E., University of Wisconsin

VERSTRAETE, Cheryl

Instructor, Nursing
B.S.N., University of Kansas

VIAL, Mary Jo

Instructor, Life Sciences
B.S., University of Oregon
M.Ed., University of Oregon
M.S., University of New Mexico

VINCENT, Jerry

Coordinator, Hospitality Management
B.S., Oklahoma State University

VOMHOF, James P.

Director of Business & Management Div
B.S., University of Minnesota
M.A., University of Minnesota

WADSWORTH, Dorothy

Instructor, Art
B.F.A., Wichita State University
B.A.E., University of Kansas
M.F.A., Wichita State University

WEBER, Irene

Interpreter, Hearing Impaired

WEGMAN, Philip J.

Counselor
B.A., Benedictine College
M.S., Kansas State University

WEST, Sally B.

Instructor, Dental Hygiene
B.S., Armstrong State
M.S., Columbia University

WILLIAMS, Edwin

Data Specialist
B.S., University of Santa Clara
M.S., University of Southern California

WILLIAMS, James

Instructor, Communications
B.S., Kansas State Teachers College
M.A., Kansas State Teachers College

WILLIS, Margaret

Instructor, Nursing
B.S.N., University of Virginia
M.A., University of Missouri, Kansas Cit

WOODARD, Joel

Counselor
B.S., Bethany College
B.S., Kansas State University
M.S., Kansas State University

WRIGHT, Bill G.

Instructor, Journalism
B.A., Baker University

WRISLEY, Carole

Librarian
B.A., Western Michigan University
M.S.L.S., University of Wisconsin

XIDIS, Kathleen

Instructor, Social Science
B.A., St. Mary's College
M.A., Indiana University
Ph.D., Indiana University

XIDIS, Robert D.

Instructor, Communications
B.A., University of Kansas
M.A., Indiana University

YEARGAIN, Scott

Instructor, Humanities
B.A., University of Missouri, Columbia
M.A., University of Missouri, Columbia
Ph.D., University of Missouri, Columbia

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| Audio-Visual Tutorial (AVT) | 14 | JCCC Foundation | 3 |
| Audit of courses | 15 | Journalism Career Program | 33 |
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*Check with Admissions Office about current residency requirements

CALENDAR

SUMMER SESSION AND FIRST MINI SESSION, 1975

| | | | |
|-------------|------------|-------|---|
| MAY | Thur.-Fri. | 29-30 | Registration and payment of fees for eight week summer session, first mini session and Continuing Education summer program. |
| JUNE | Monday | 2 | Summer session and first mini session begins. |
| | Tuesday | 3 | Last day for registration or schedule changes without Division Director's permission. |
| | Thursday | 5 | Last day for withdrawal from a course or from the College and receive a refund for summer and first mini session. |
| | Friday | 27 | First mini session ends. |

SECOND MINI SESSION

| | | | |
|-------------|---------|----|---|
| JUNE | Friday | 27 | Registration and payment of fees for second mini session. |
| | Monday | 30 | Second mini session begins. |
| JULY | Tuesday | 1 | Last day for registration or schedule changes without Division Director's permission. |
| | Friday | 4 | Independence Day holiday. Classes not in session. College offices closed. |
| | Monday | 7 | Last day for withdrawal from a course or from the College and receive a refund for second mini session. |
| | Friday | 25 | Second mini session and eight week summer session ends. |

FALL SEMESTER, 1975

| | | | |
|------------------|-------------|-------|--|
| AUGUST | Friday | 8 | Fall registration for graduating sophomores. |
| | Monday | 11 | Regular fall registration begins. |
| | Monday | 25 | Fall Semester begins. |
| | Friday | 29 | Last day for registration or schedule changes without Division Director's permission. |
| SEPTEMBER | Monday | 1 | Labor Day Holiday. Classes not in session. College offices closed. |
| | Tuesday | 2 | Continuing Education registration begins. Last day for withdrawal from a course or from the College and receive a refund. |
| | Monday | 15 | Continuing Education classes begin. |
| OCTOBER | Tuesday | 14 | Staff Development Day. Classes not in session. College offices closed to the public. |
| NOVEMBER | Monday | 24 | Registration for winter mini session begins. |
| | Thurs.-Fri. | 27-28 | Thanksgiving Holiday. Classes not in session. College offices closed. |
| DECEMBER | Wednesday | 10 | Staff Development Day. Classes not in session. College offices closed to the public. |
| | Friday | 19 | Last day of Fall Semester. |
| | Wed.-Thurs | 24-25 | Christmas Holiday. College offices closed. |

WINTER MINI SESSION, 1976

| | | | |
|----------------|--------|----|-----------------------------|
| JANUARY | Monday | 5 | Winter mini session begins. |
| | Friday | 16 | Winter mini session ends. |

SPRING SEMESTER, 1976

| | | | |
|-----------------|-----------|----|---|
| DECEMBER | Wednesday | 31 | New Year's Holiday. College offices closed. |
| JANUARY | Thursday | 1 | |
| | Monday | 5 | Spring registration begins for graduating sophomores. |
| | Tuesday | 6 | Regular spring registration begins. |
| | Monday | 19 | Spring Semester begins. Continuing Education registration begins. |
| | Friday | 23 | Last day for registration or schedule changes without Division Director's permission. |
| | Monday | 26 | Last day for withdrawal from a course or from the College and receive a refund. Continuing Education classes begin. |
| FEBRUARY | Tuesday | 3 | Staff Development Day. Classes not in session. College offices closed to the public. |
| | Monday | 16 | Washington's Birthday Holiday. Classes not in session. College offices closed. |
| MARCH | Monday | 15 | Spring recess begins. Classes not in session. College offices open. |
| | Monday | 22 | Classes resume. |
| APRIL | Wednesday | 14 | Staff Development Day. Classes not in session. College offices closed to the public. |
| MAY | Tuesday | 18 | Last day of Spring Semester. |
| | Saturday | 22 | Commencement. |
| | Monday | 31 | Memorial Day Holiday. College offices closed. |

SUMMER SESSION AND FIRST MINI SESSION, 1976

| | | | |
|-------------|------------|-------|---|
| MAY | Thur.-Fri. | 27-28 | Registration and payment of fees for eight week summer session, first mini session and Continuing Education summer program. |
| | Monday | 31 | Memorial Day Holiday. College offices closed. |
| JUNE | Tuesday | 1 | Summer session and first mini session begins. |
| | Wednesday | 2 | Last day for registration or schedule changes without Division Director's permission. |
| | Monday | 7 | Last day for withdrawal from a course or from the College and receive a refund for summer or first mini session. |
| | Monday | 28 | First mini session ends. |

SECOND MINI SESSION, 1976

| | | | |
|-------------|-----------|----|---|
| JUNE | Monday | 28 | Registration and payment of fees for second mini session. |
| | Tuesday | 29 | Second mini session begins. |
| JULY | Monday | 5 | Independence Day Holiday. Classes not in session College offices closed. |
| | Tuesday | 6 | Last day for registration or schedule changes without Division Director's permission. |
| | Wednesday | 7 | Last day for withdrawal from a course or from the College and receive a refund for second mini session. |
| | Wednesday | 28 | Second mini session and eight week summer session ends. |

FALL SEMESTER, 1976

| | | | |
|------------------|-------------|-------|---|
| AUGUST | Friday | 6 | Fall registration for graduating sophomores. |
| | Monday | 9 | Regular fall registration begins. |
| | Monday | 23 | Fall Semester begins. |
| | Friday | 27 | Last day for registration or schedule changes without Division Director's permission. |
| | Monday | 30 | Continuing Education registration begins. Last day for withdrawal from a course or from the College and receive a refund |
| SEPTEMBER | Monday | 6 | Labor Day Holiday. Classes not in session. College offices closed. |
| | Monday | 13 | Continuing Education classes begin. |
| OCTOBER | Tuesday | 12 | Staff Development Day. Classes not in session. College offices closed to the public. |
| NOVEMBER | Monday | 22 | Registration for winter mini session begins. |
| | Thurs.-Fri. | 25-26 | Thanksgiving Holiday. Classes not in session. College offices closed. |
| DECEMBER | Wednesday | 8 | Staff Development Day. Classes not in session. College offices closed to the public. |
| | Friday | 17 | Last day of Fall Semester. |
| | Thurs.-Fri. | 23-24 | Christmas Holiday. College offices closed. |

WINTER MINI SESSION, 1977

| | | | |
|----------------|--------|----|-----------------------------|
| JANUARY | Monday | 3 | Winter mini session begins. |
| | Friday | 14 | Winter mini session ends. |

SPRING SEMESTER, 1977

| | | | |
|-----------------|-------------|-------|---|
| DECEMBER | Thurs.-Fri. | 30-31 | New Year's Holiday. College offices closed. |
| JANUARY | Monday | 3 | Spring registration begins for graduating sophomores. |
| | Tuesday | 4 | Regular spring registration begins. |
| | Monday | 17 | Spring Semester begins. Continuing Education registration begins. |
| | Friday | 21 | Last day for registration or schedule changes without Division Director's permission. |
| | Monday | 24 | Last day for withdrawal from a course or from the College and receive a refund. Continuing Education classes begin. |
| FEBRUARY | Tuesday | 1 | Staff Development Day. Classes not in session. College offices closed to the public. |
| | Monday | 21 | Washington's Birthday Holiday. Classes not in session. College offices closed. |
| MARCH | Monday | 21 | Spring recess begins. Classes not in session. College offices open. |
| | Monday | 28 | Classes resume. |
| APRIL | Wednesday | 13 | Staff Development Day. Classes not in session. College offices closed to the public. |
| MAY | Wednesday | 18 | Last day of Spring Semester. |
| | Saturday | 21 | Commencement. |
| | Monday | 30 | Memorial Day Holiday. College offices closed. |

SUMMER SESSION AND FIRST MINI SESSION, 1977

| | | | |
|-------------|------------|-----|---|
| JUNE | Thurs-Fri. | 2-3 | Registration and payment of fees for eight week summer session, first mini session and Continuing Education summer program. |
| | Monday | 6 | Summer session and first mini session begins. |
| | Tuesday | 7 | Last day for registration or schedule changes without Division Director's permission. |
| | Friday | 9 | Last day for withdrawal from a course or from the College and receive a refund for summer and first mini session. |
| JULY | Friday | 1 | First mini session ends. |

SECOND MINI SESSION, 1977

| | | | |
|-------------|-----------|----|---|
| JULY | Friday | 1 | Registration and payment of fees for second mini session. |
| | Monday | 4 | Independence Day Holiday. Classes not in session. College offices closed. |
| | Tuesday | 5 | Second mini session begins. |
| | Wednesday | 6 | Last day for registration or schedule changes without Division Director's permission. |
| | Friday | 8 | Last day for withdrawal from a course or from the College and receive a refund for second mini session. |
| | Friday | 29 | Second mini session and eight week summer session ends. |