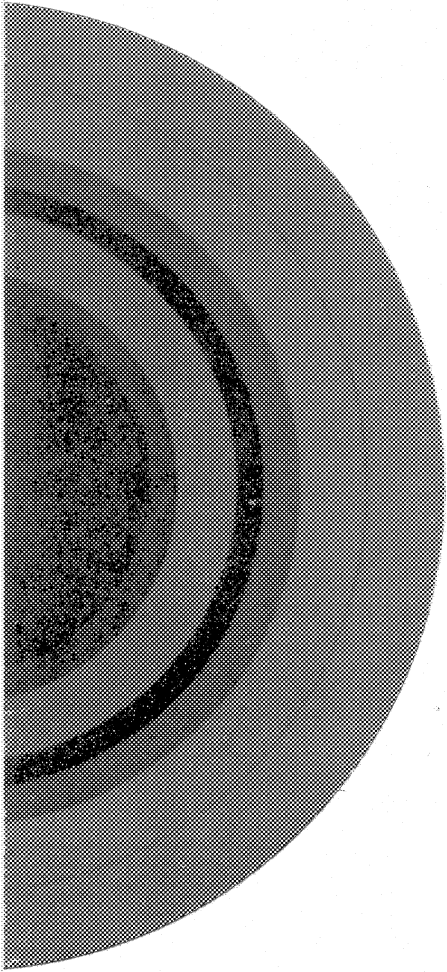


# CATALOG

course  
descriptions

7677



JOHNSON COUNTY COMMUNITY COLLEGE

CATALOG  
course  
descriptions  
7677

JOHNSON COUNTY COMMUNITY COLLEGE  
COLLEGE BOULEVARD at QUIVIRA ROAD  
OVERLAND PARK, KANSAS 66210



This catalog becomes effective July 1, 1976

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# MESSAGE FROM THE PRESIDENT



The challenge and promise of America can most readily be seen in the challenge and promise of its educational system.

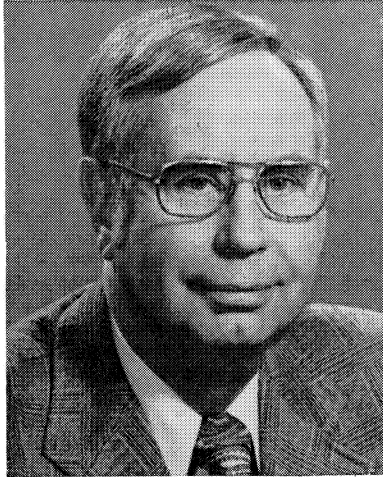
The challenge is to provide meaningful options for education to all members of society. To that end, Johnson County Community College is firmly committed. JCCC provides opportunities for men and women of all ages to pursue educational experiences which can lead to broader horizons, meaningful employment and enriched personal lives. With programs that encompass university transfer, career education, general studies, continuing education and community services, JCCC stands ready to meet the diverse demands of its sizable community. Life-long learning experiences are provided by the College in the realization that learning must be a continuing process in our democratic society. Each semester, over 4,800 individuals choose continuing education and community service activities planned by the College to meet their varied needs, while more than 5,500 students choose credit courses to fulfill their needs. JCCC recognizes the challenge to its imagination and responsiveness as it strives to meet these educational needs.

The promise of our American educational system is exemplified in Thomas Wolfe's quotation: "So then to every man his chance; to every man regardless of his birth, his shining, golden opportunity. To every man the right to love, to live, to work, to be himself and to become whatever thing his vision and his manhood combine to make him."

In this Bicentennial year, when all Americans are reaffirming their belief in the challenge and promise of America, Johnson County Community College pledges itself to the fulfillment of the postsecondary educational needs of this community.

A stylized, handwritten signature in black ink, appearing to read "John E. Cleek". The signature is written over a large, abstract scribble.

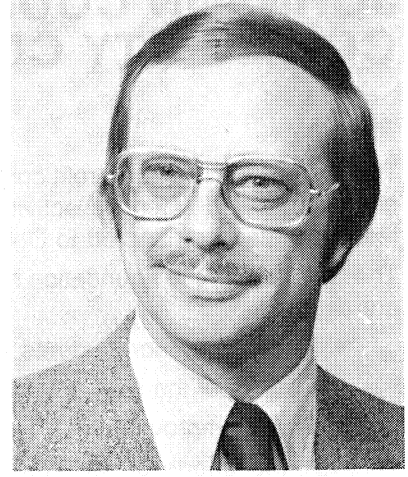
John E. Cleek  
President



JOHN F. CRAMER  
Term: 1975 - 79



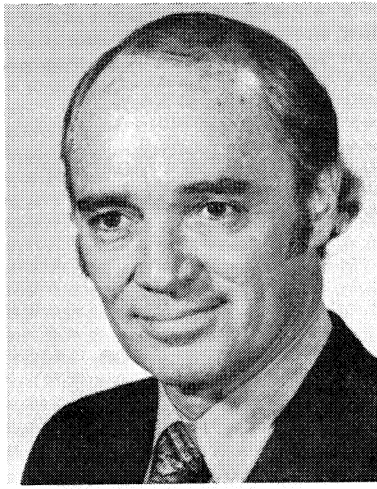
DR. JACK J. HOLDER, JR.  
Terms: 1969 - 77



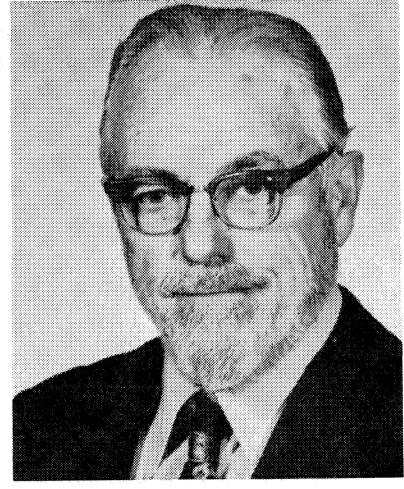
GEORGE H. LANGWORTHY  
Term: 1975 - 79



DR. JOYCE A. SMITH  
Term: 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

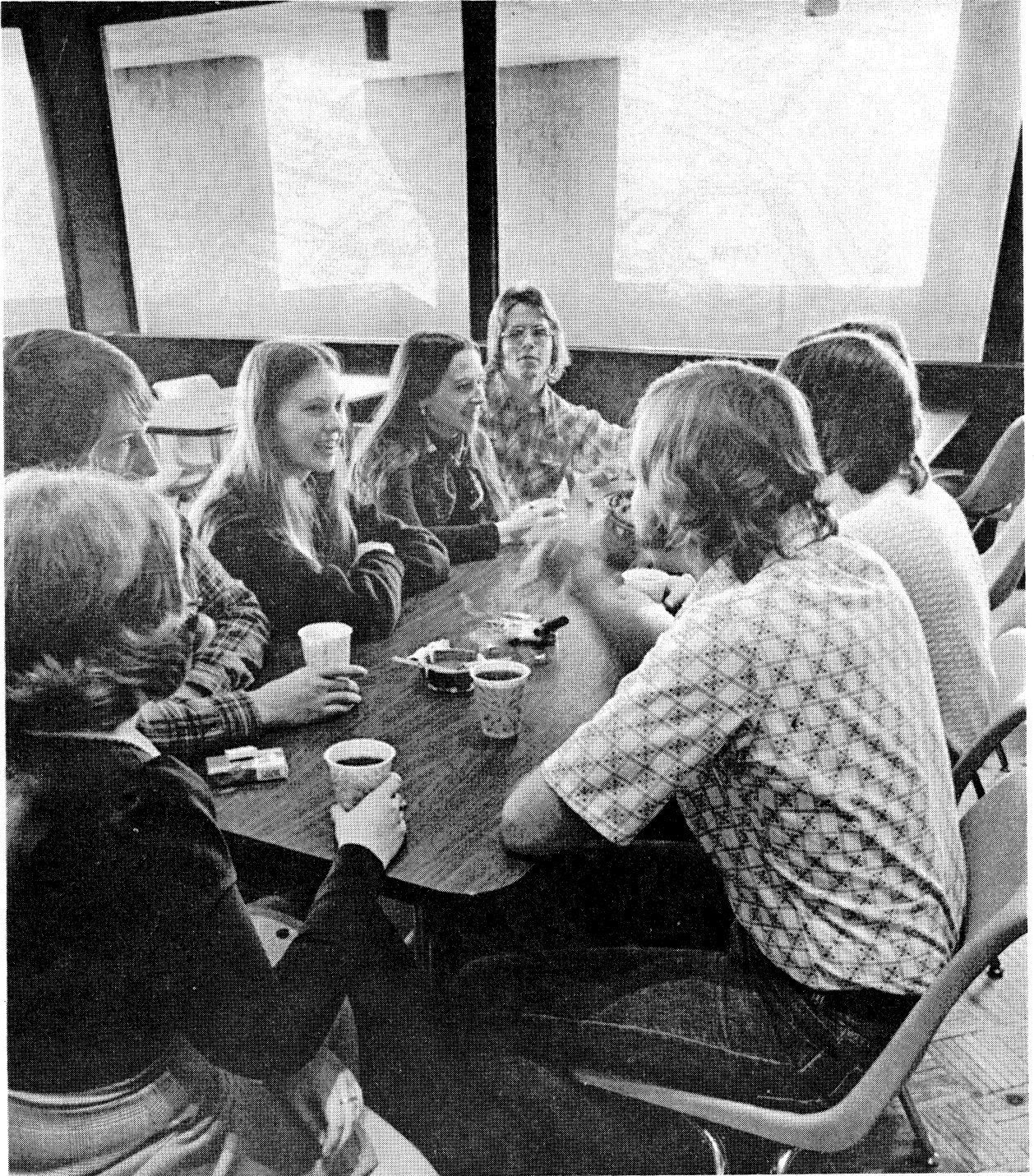
Through the efforts of the Foundation, many organizations and individuals have been encouraged to contribute financial aid to the College. Local needs and interests have been given priority as the Foundation seeks to be responsive to the community. JCCC students and staff members have benefited directly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

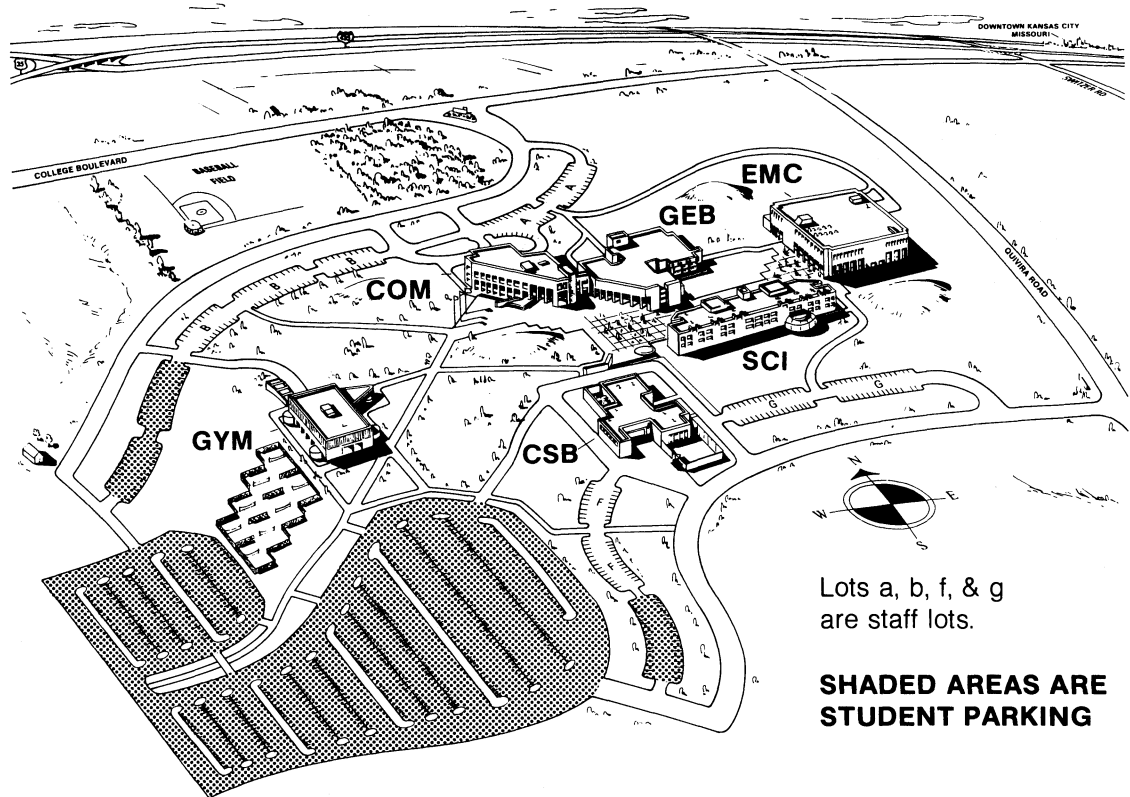
The Board of Directors of the Foundation is made up of a cross section of the community and includes the Board of Trustees and President of the College. Current directors are:

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



# GENERAL INFORMATION





**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 Services 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 Services Division.

**RECREATION:** 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 Community Services Division for information and scheduling assistance.

**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 during the week. 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 Bookstore, located on Level .5, sells all required textbooks and supplies. In addition, many books, magazines, paperbacks, novelties, game and clothing items are kept in stock.

**LIBRARY:** 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 32,000 books, 450 current periodicals, 110,000 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. A satellite library is maintained in the Science and Technology building.

**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, 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. 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 College Learning Center 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 education, general studies, continuing education and community services. Through a strong program of community services, 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 several associations, among them the American Association of Community and Junior Colleges, the Kansas Association of Community Colleges and 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 many 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. (See the Career Book for more information)

**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 personal 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 requires six months to establish as provided by Kansas law (KSA-71-406). Adults who enroll at JCCC who have not been residents of the state of Kansas for six months prior to enrollment for any term or session are considered non-residents and must pay the out-of-state or foreign student tuition. Minors (under 18 years of age) whose parents have not been residents of the state of Kansas for six months prior to enrollment are also considered non-residents. Questions about specific residency requirements can be answered by the Assistant Dean, Student Services.
- **Tests:** It is recommended but not required that each full-time student filing an application or 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. ACT scores are required of all applicants for the Nursing and Dental Hygiene Career Programs.
- **Foreign Students:** 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 are required to take the Test of English as a Foreign Language (TOEFL) or present evidence of proficiency in the English language.

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.

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

**REGISTRATION:** Registration for classes and payment of tuition and fees take place during the dates specified in the College Calendar, pages 57-59. 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.

**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 participating 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.)

**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 offer 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. Additional information concerning required scores, test preparation, etc. is available from the Admissions office.

**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:** Credit may be given for many JCCC courses to students who demonstrate a satisfactory level of achievement on comprehensive examination. Examinations may be written, oral or both, depending upon the subject. Not all courses are available under this program. A list of current examinations is kept in the Admissions Office. A fee of \$15 is charged for each examination. Students wishing to receive credit by examination must submit a written request to the Admissions Office 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

**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 Admissions Office. There is no charge for the evaluation.

**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.



**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.

**Experience 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 Admissions Office.

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

**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 Counseling office 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.

## COSTS

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

Tuition for out-of-state or foreign students is \$27 per semester credit hour and a 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. Any change in tuition or fees will be published prior to implementation of change.

**Refund:** Students who withdraw from a class or from the College are entitled to a pro rata refund. Complete information about this policy can be found in the class schedules published prior to registration.

**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 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.

## SERVICES FOR STUDENTS

**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 to appropriate county or state agencies.

Following admission, full-time students have 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 Career Planning and Placement Center. 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 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 Office.

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 Office.

**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 Office.

**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.

**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.

**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.

**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 Office.

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

**College Work Study (CWS):** The College provides part-time jobs on campus for students from low income families with the greatest financial need. Numerous jobs are available on campus (clerical, secretarial, lab assistant, library assistant, etc.) at the current minimum wage.

**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.

**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 Office 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.

**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 Office and from most law enforcement agencies.

**CAREER PLANNING AND PLACEMENT CENTER:** Current information about a wide variety of careers is available at the Center. The staff welcomes the opportunity to assist any student with individual career planning or job hunting.

The Center usually has several hundred job listings available for students who are seeking employment. Services include assistance in planning for successful interviews, and help with writing resumes and letters of application.

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

Students interested in career planning or employment opportunities are invited to visit the Career Planning and Placement Center, GEB 252A, or to telephone ahead for an appointment.

**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 Director. 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 Title IX of the Education Amendments of 1972 (P.L. 92-318) 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. Instructors will notify the Director of Counseling in writing at the end of each month those students whose attendance in class has indicated they may have difficulty in satisfactorily meeting the objectives of the course. Counselors will contact the student in an effort to assist in helping to re-evaluate the student's progress in 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.

**FIELD STUDY:** An interesting aspect of many college programs is the availability of Field Study. Field Study is an on-the-job work program which allows the student to gain 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 anytime during the semester. A student dropping a course must consult with a counselor in order to initiate the withdrawal.)

I - The student will receive an *Incomplete* if the objectives of the course have not been satisfactorily achieved 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.



**\*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 Assistant Dean, Student Services, 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.

**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:** 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.

**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 Learning Resource 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. 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.

**VIEWS FOR WOMEN:** Many Community Service programs are planned to meet the special needs of women in today's changing society. The VIEWS program seeks to help women develop skills for deeper understanding of themselves and others, for maintaining their flexibility and for expanding their interests and activities. A bulletin listing current programs is available from the office of Community Services.

**LIFELONG DEVELOPMENT:** The College recognizes the individual's need for lifelong education and community involvement. Programs to help in the maintenance of self-reliance and freedom of choice have been developed with the special needs and interests of the increased population over 60 years of age in mind. Programs for all ages have been designed to increase understanding of self and others; to expand interests and skills; to identify and develop abilities or to choose careers. For information contact the office of Community Services.

**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.

**MINI COURSES:** Some 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.

**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.

# 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.

## 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.

### 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)

### 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)

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

BUS 1121 - pg. 19

BUS 2253 - pg. 19

SS 2253 - pg. 46

**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)

**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. Class meets three hours per week. 3 Credits (BUS 101)

**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)

**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 6699**

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. Laboratory by arrangement. 4 Credits (BUS 131)

**COBOL I** **BDP 4700**

*Prerequisite: BDP 6699*—use of COBOL programming language in solving typical problems. Emphasis on function and use of statements in the four divisions of ANSI COBOL. Computer used in compiling and executing the programs. Class meets three hours per week. Laboratory by arrangement. 4 Credits (BUS 133)

**COBOL II** **BDP 1702**

*Prerequisite: BDP 4700 and BDP 1698 (BDP 1698 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. Laboratory by arrangement. Fall 4 Credits (BUS 246)

**FORTRAN** **BDP 6703**

*Prerequisites: BDP 6699; 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. Laboratory by arrangement. Spring 4 Credits (BUS 144) 144)

**ASSEMBLER LANGUAGE I** **BDP 1698**

*Prerequisite: BDP 6699*—Use of Assembler language in solving typical problems. Emphasis on the statements used in ALC. Computer used in compiling and executing the programs. Class meets three hours per week. Laboratory by arrangement. Fall 4 Credits (BUS 243)

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

BAC 4092 - pg. 20	BDP 4700 - pg. 20	MTH 3427 - pg. 37
BAC 5096 - pg. 20	BDP 6699 - pg. 20	MTH 6079 - pg. 37
BDP 1698 - pg. 20	BUS 2084 - pg. 20	

**ASSEMBLER LANGUAGE II BDP 1684**

*Prerequisite:* BDP 1698—Advanced features of Assembler Language for IBM 360/370. Covers Macros, subprograms, table handling, the complete set of ALC instructions, and the different methods of file I/O. Class meets three hours per week. Laboratory by arrangement. Spring 4 Credits

**PL/1 BDP 4701**

*Prerequisites:* BDP 4700 or BDP 6703—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. Laboratory by arrangement. 4 Credits (BUS 242)

**RPG/2 BDP 7683**

*Prerequisite:* BDP 6699—Use of various approaches to RPG/2 problem solving. Define, code, test, debug and document RPG/2 programs. Systems/3 operations and OCL. Class meets three hours per week. Laboratory by arrangement. Spring 4 Credits

**APPLICATION PROGRAMMING: Applications BDP 7300**

*Prerequisite:* By permission  
*Corequisites:* BDP 4700, BDP 6703 or BDP 1698 —Computer operations or directly related work experience. A minimum of 15 hours supervised on-the-job training per week, or recognition and formalization of experience for those already employed. Hours by arrangement. Fall 3 Credits (BUS 241)

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

*Prerequisite:* By permission  
*Corequisites:* BDP 4700, BDP 6703 or BDP 1698 —Programming or directly related work experience. A minimum of 15 hours supervised on-the-job training per week, or recognition and formalization of experience for those already employed. 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. Spring 3 Credits (ENGR 149)

**TELEPROCESSING BDP 7224**

*Prerequisite:* BDP 6699—A form of information handling in which a data processing system utilizes communication equipment. Concerned with that part of the system which is external to the central computer. Class meets three hours per week. Fall 3 Credits (BUS 248)

**DATA FILE MANAGEMENT BDP 1036**

*Prerequisite:* BDP 1698—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 4700, BDP 6703 or BDP 1698 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)

**COMPUTER OPERATING SYSTEMS BDP 6451**

*Prerequisites:* BDP 1698 or concurrent enrollment —Basic concepts and principles of a digital computer operating system. Interrelationships between hardware and software and how they are controlled are developed and illustrated through study of a typical digital computing system. Class meets three hours per week. Spring 3 Credits (BUS 247)

**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)

Prerequisites shown with courses on this page may be found as listed below:		
BDP 1698 - pg. 20	BDP 6699 - pg. 20	BFM 7013 - pg. 21
BDP 4700 - pg. 20	BDP 6703 - pg. 20	

**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 three 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. A minimum of 15 hours per week on-the-job training by arrangement. Fall 3 Credits (BUS 182)

**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. A minimum of 15 hours on-the-job training per week by arrangement. Class meets two hours per week. Spring 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 developing career goals by exploring many career options in fashion. Class meets two hours per week. A minimum of 15 hours on-the-job training per week by arrangement. 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. A minimum of 15 hours on-the-job training per week by arrangement. Spring 3 Credits (BUS 282)

**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**

Menu planning and meal service for all phases of food service. Proper table service for various occasions. Buffet service, French service, American service and waiter training. Actual operation of an on-campus dining room including profit and loss statements, sales promotions and competitiveness studies. 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)

*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:****Purchasing BHM 1287**

*Prerequisite: Admission to the Hospitality Management Program*—Supervised work experience within an approved area in the hospitality field. Purchasing techniques and specification writing for items used in the hotel-motel food service field. Class meets two hours per week. A minimum of 15 hours on-the-job training per week by arrangement. 3 Credits (BUS 126)

**SEMINAR IN HOSPITALITY MANAGEMENT:****Operations and Procedures BHM 5008**

*Prerequisite: Admission to the Hospitality Management Program*—Supervised work experience within an approved area in the hospitality field. Principles and techniques of operating front office, posting machines and front desk procedures. Preparation of actual operation statements for food service operations, inventory preparation and control systems. 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)

**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, case problems and speakers. 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. A minimum of 15 hours on-the-job training per week by arrangement. Fall 3 Credits (BUS 171)

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

*Prerequisite: Admission to the Marketing and Management Program*—Supervised work experience at an approved business establishment in the community. Application of selling methods to the preparation of an advertising promotional campaign relating to the student's ultimate career objective. Sales Management concepts are incorporated in personal selling and mass sales promotion. Class meets two hours per week. A minimum of 15 hours on-the-job training per week by arrangement. 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. A minimum of 15 hours on-the-job training per week by arrangement. 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. A minimum of 15 hours on-the-job training per week by arrangement. Spring 3 Credits (BUS 274)

**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. A minimum of 15 hours per week on-the-job training by arrangement. Summer 3 Credits (BUS 272)

*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.*



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.

**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**

*Prerequisite:* BMR 6102—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

**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

**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. Instruction on transcription equipment and IBM Executive typewriter. 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. Individualized instruction and scheduled use of Secretarial Laboratory. Hours by arrangement. 3 Credits (BUS 157)

**SHORTHAND I BSC 1519**

*Prerequisite:* BSC 1263 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)

**SHORTHAND II BSC 4590**

*Prerequisites:* BSC 1263 and BSC 1519 or by permission—Designed for students with prior limited experience with shorthand. Review of shorthand theory, transcription techniques, spelling, punctuation and grammar through use of tapes and programmed materials. Class meets five hours per week. 3 Credits (BUS 153)

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

BMR 1043 - pg. 24	BMR 6102 - pg. 24	BSC 1519 - pg. 24
BMR 1325 - pg. 24	BMR 7111 - pg. 24	BSC 2376 - pg. 24
BMR 3245 - pg. 24	BSC 1263 - pg. 24	

**DICTIONATION AND TRANSCRIPTION BSC 3630**

*Prerequisites: BSC 4590 and BSC 2376 or by permission*

—Emphasis on increased speed and accuracy in writing shorthand from dictated material and transcribing notes. Class is instructor directed but includes individualized programmed materials. Student works at own ability level. 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 and 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 three 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 263)

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

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 165)

**SECRETARIAL FIELD STUDY: Management BSC 4492**

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 166)

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

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 264)

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

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 164)

**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 PSL examination should consult with the instructor prior to enrollment. Class meets two hours per week. 2 Credits (BUS 158)

**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)

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

BSC 1272 - pg. 25	BSC 2267 - pg. 25	BSC 3630 - pg. 25
BSC 1519 - pg. 24	BSC 2376 - pg. 24	BSC 4590 - pg. 24
		BSC 7633 - pg. 24

## COMMUNICATIONS

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

Students who are interested in journalism, 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 100.5)

### 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 narrative writing including the short story, the novel, the play, the poem and the article. Emphasis on planning, plotting, choice of material and styles. Examination of recommended models. Frequent assignments in the form of writing selected by each student. Manuscripts are submitted to professional editors. Class meets three hours per week. 3 Credits (COM 212)

### 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)

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

COM 1467 - pg. 26

COM 6133 - pg. 26

COM 6524 - pg. 26

## 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 300)

## WORLD MASTERPIECES

### COM 6024

Readings of selected western world writers, excluding British and American, with related writing projects. Course focuses on important works of various writers, emphasizing the relationship between their life and time to their art. Class meets three hours per week. 3 Credits

## 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 110)

## 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**

*Prerequisite:* 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 100.4)

**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 (COM 115)

**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)

**INTERMEDIATE DEBATE I** **CSP 2162**

*Prerequisite:* 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**

*Prerequisite:* 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**

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

**ACTING I: Stage and Television** **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)

**ACTING II: Stage and Television** **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)

**STAGECRAFT I: Stage and Television** **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)

**STAGECRAFT II: Stage and Television** **CDR 6241**

*Prerequisite:* 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)

Prerequisites shown with courses on this page may be found as listed below:		
CDR 3311 - pg. 27	COM 7488 - pg. 26	CSP 2162 - pg. 27
CDR 6215 - pg. 27	CSP 1001 - pg. 27	CSP 5545 - pg. 27
COM 7029 - pg. 27		

**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)

**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)

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

CFL 1239 - pg. 28	CFL 3196 - pg. 28	CFL 4570 - pg. 28
CFL 1442 - pg. 28	CFL 3285 - pg. 28	CFL 6207 - pg. 28
CFL 2293 - pg. 28	CFL 3401 - pg. 28	CFL 7221 - pg. 28



**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)

**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 207)

**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. 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)

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

BSC 1263 - pg. 24

CJO 2136 - pg. 29

MTH 4354 - pg. 37

**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**

*Prerequisites:* MTH 6463 and 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)

**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)

**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 processes 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 structural 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)

**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)

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

EDT 3586 - pg. 30	EET 5290 - pg. 30	EGR 6082 - pg. 30
EDT 5596 - pg. 30	EGR 1243 - pg. 29	MTH 3268 - pg. 37
EDT 7569 - pg. 30	EGR 5269 - pg. 29	MTH 4354 - pg. 37
		MTH 6463 - pg. 38

**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)

**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 communication 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)

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

EET 1255 - pg. 31	EET 4289 - pg. 31	EET 7490 - pg. 31
EET 2322 - pg. 30	EET 5056 - pg. 31	EET 7604 - pg. 31
EET 2367 - pg. 31	EET 5290 - pg. 30	MTH 4354 - pg. 37
EET 2468 - pg. 31	EET 7039 - pg. 31	MTH 5387 - pg. 37

**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. Class meets by arrangement. 1-3 Credits (ENGR 299)

**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 is 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)

Prerequisites shown with courses on this page may be found as listed below:  
EET 5290 - pg. 30

**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)

**DRAWING II****HAR 6125**

*Prerequisite:* HAR 7576—Fundamentals of figure drawing. Working from models, students study the structure of the human form as seen in action, stationary and as part of the environment. A variety of media is used in rapid gesture drawing, long poses, memory work and portraiture. Class meets six hours per week. 3 Credits (HUM 138)

**DRAWING III****HAR 6064**

*Prerequisite:* HAR 6125—Concentration on figure drawing and free-hand drawing with emphasis on the conceptual approach. The student will work from models and other classroom situations. A variety of media will be explored. Class meets 6 hours per week. 3 Credits

**PAINTING I****HAR 5004**

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

**PAINTING II****HAR 6011**

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

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

HAR 1620 - pg. 33      HAR 5601 - pg. 33      HAR 7576 - pg. 33  
HAR 5004 - pg. 33      HAR 6125 - pg. 33

**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)

**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 (HUM 211)

**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 (HUM 212)

**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. Neopolitan, 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**  
*Prerequisites: 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:

HAR 1192 - pg. 34	HMU 4113 - pg. 34	HMU 6014 - pg. 34
HMU 3515 - pg. 34	HMU 4249 - pg. 34	HMU 7656 - pg. 34
HMU 3559 - pg. 34	HMU 5010 - pg. 34	
HMU 3628 - pg. 34	HMU 5107 - pg. 34	



**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**  
*Prerequisites: 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 2262**  
*Prerequisite: High school playing experience*—Fundamental approach to rhythm and melodic lines involved in creative improvisation. Basic procedures in analyzing chords and chord structures as an outline for organized spontaneous playing. Class meets two hours per week. Fall 2 Credits (HUM 116.1)

**JAZZ IMPROVISATION II** **HMU 1245**  
*Prerequisite: HMU 2262 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**  
*Prerequisites: 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**  
*Prerequisites: 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**  
*Prerequisites: 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)

**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)

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

HMU 1049 - pg. 35	HMU 3671 - pg. 35	HMU 6676 - pg. 35
HMU 1374 - pg. 35	HMU 6018 - pg. 35	HMU 7022 - pg. 35
HMU 2262 - pg. 35	HMU 6529 - pg. 35	HMU 7542 - pg. 35
HMU 2305 - pg. 35		

**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**

*Prerequisites: 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 129.3)

**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 (HUM 129.1)

**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 (HUM 129.4)

**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)

**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.**

**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 sciences, social sciences, and foreign language sampling. 1 - 3 Credits.

- LC 4466** 1 Credit (CLC 101)
- LC 5549** 2 Credits (CLC 102)
- LC 7606** 3 Credits (CLC 103)

Prerequisites shown with courses on this page may be found as listed below:		
HMU 1069 - pg. 36	HMU 4166 - pg. 36	HMU 5202 - pg. 36
HMU 3146 - pg. 35	HMU 4169 - pg. 36	HMU 6513 - pg. 36
HMU 3510 - pg. 36	HMU 4610 - pg. 36	HMU 7619 - pg. 36

## 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 relates to everyday life. For those who need extra assistance in mathematics, the College Learning Center offers supportive services.

### 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

*Prerequisite: MTH 7246 or one year of high school algebra or equivalent*—Mathematics for the elementary education or liberal arts student. Includes inductive and deductive reasoning, number patterns, binary number system, geometry, 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: MTH 7246 or 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)

Prerequisites shown with courses on this page may be found as listed below:  
MTH 4354 - pg. 37      MTH 7091 - pg. 37      MTH 7246 - pg. 37  
MTH 6079 - pg. 37

**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)

**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 (MATH 301)

**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)

**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)

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

MTH 3268 - pg. 37	MTH 4313 - pg. 38	MTH 6357 - pg. 38
MTH 3427 - pg. 37	MTH 6079 - pg. 37	MTH 6463 - pg. 38

**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**

*Corerequisite:* 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 (NS 114)

**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)

**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**

*Corerequisite:* 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)

**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)

Prerequisites shown with courses on this page may be found as listed below:		
MTH 6079 - pg. 37	NPS 2244 - pg. 39	NPS 3278 - pg. 39
NLS 1144 - pg. 39	NPS 2637 - pg. 39	NPS 6634 - pg. 39
NLS 5593 - pg. 39		

**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)

**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)

**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)

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

*Prerequisite:* NRN 3131 and SS 3546—Care of individuals during acute, short-term 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 nursing process patient care plans. The role of the AD graduate seeking employment in the community. Five hours of class and fifteen hours of clinical laboratory per week. Spring 10 Credits (NS 232)

**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 dentistry are included. Class meets fourteen hours per week. Summer 3 Credits (NS 241)

Prerequisites shown with courses on this page may be found as listed below:		
MTH 4313 - pg. 38	NLS 1128 - pg. 39	NPS 5212 - pg. 40
MTH 6079 - pg. 37	NLS 1144 - pg. 39	NRN 1550 - pg. 40
NDH 4103 - pg. 40	NPS 3278 - pg. 39	NRN 2474 - pg. 40
NDH 6112 - pg. 40	NPS 3308 - pg. 40	NRN 3131 - pg. 40
		SS 3546 - pg. 46



**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. Principles and clinical techniques of local anesthesia. 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**

*Corequisite:* NDH 4103—Study of tissues of the oral cavity. Class meets four hours per week. Fall 2 Credits

**DENTAL MORPHOLOGY AND OCCLUSION NDH 1323**

*Corequisite:* NDH 4103—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)

**DENTAL RADIOLOGY NDH 6266**

*Corequisite:* NDH 6112—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**

*Corequisite:* 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**

*Corequisite:* 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**

*Corequisite:* NDH 5109—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 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 II Emergency Medical Technician. Hours by arrangement. 5 Credits (NS 107)

**FUNDAMENTALS OF DENTISTRY I NDA 2041**

*Prerequisite:* Admission to Dental Assisting program—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

Prerequisites shown with courses on this page may be found as listed below:		
NDA 1044 - pg. 41	NDH 2583 - pg. 41	NDH 6027 - pg. 41
NDA 1052 - pg. 42	NDH 4103 - pg. 40	NDH 6112 - pg. 40
NDA 2041 - pg. 41	NDH 5109 - pg. 41	NDH 7338 - pg. 40
NDA 3045 - pg. 41		

**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

**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 (NS 059)

**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 (NS 056)

**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 (NS 057)

**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 (NS 058)

**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 (NS 106.2)

**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 (NS 106.1)

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

NDA 1044 - pg. 41	NS 5381 - pg. 42
NDA 1047 - pg. 42	NS 6476 - pg. 42
NDA 1052 - pg. 42	

**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.

**CONCEPTS IN  
PHYSICAL DEVELOPMENT**

**PD 4055**

A study and application of physical fitness principles. The student receives a personal analysis of physical condition and a program of physical exercise and sport to eliminate deficiencies. 3 Credits

**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. 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. 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. 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. 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. 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. 2 Credits (PD 141)

**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. 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. 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. 1 Credit (PD 101)

**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. 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. 1 Credit (PD 121.1)

**PHYSICAL FITNESS AND  
WEIGHT TRAINING II**

**PD 3443**

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

*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.*

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**PHYSICAL FITNESS THROUGH DANCE PD 1058**

A planned, progressive fitness program designed to improve muscle tone, body contour and increase cardiovascular endurance through the utilization of dance and exercise. The student will perform basic movements in dance and exercise and choreograph routines to music. Class meets two hours per week. 1 Credit

**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. 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. 1 Credit (PD 103.1)

**TENNIS AND BADMINTON II PD 6452**

Continuation of PD 4309. Class meets two hours per week. 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. 1 Credit (PD 104.1)

**HANDBALL AND RACQUETBALL II PD 2398**

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

**GOLF I PD 3235**

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

**GOLF II PD 3668**

Continuation of PD 3235. Practice area scheduled by arrangement. 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. 1 Credit (PD 161.1)

**BOWLING II PD 2658**

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

**FENCING PD 6499**

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

**ARCHERY I PD 7129**

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

**ARCHERY II PD 5636**

Continuation of PD 7129. Practice area scheduled by arrangement. 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. 1 Credit (PD 157.1)

**HORSEMANSHIP II PD 3229**

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

**GYMNASTICS AND TUMBLING I PD 4536**

Individualized instruction 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. 1 Credit (PD 105.1)

**GYMNASTICS AND TUMBLING II PD 3355**

Continuation of PD 4536. Class meets two hours per week. 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. 1 Credit (PD 107.1)

**SOCCER II PD 1176**

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

*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.*

**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. 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. 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. 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. 1 Credit (PD 156.1)

**CHEERLEADING AND YELL-LEADING II PD 1314**  
Continuation of PD 2560. 1 Credit (PD 156.2)

**DRILL TEAM I PD 6370**  
*Prerequisite: By audition*—Precision drill team techniques. The Drill Team represents the College in community activities. 1 Credit (PD 154.1)

**DRILL TEAM II PD 7445**  
*Prerequisite: By audition*—Continuation of PD 6370. 1 Credit (PD 154.2)

**DRILL TEAM III PD 5150**  
*Prerequisite: By audition*—Continuation of PD 7445. 1 Credit (PD 154.3)

**DRILL TEAM IV PD 1522**  
*Prerequisite: By audition*—Continuation of PD 5150. 1 Credit (PD 154.4)

**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)

**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. 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. 3 Credits (PD 136)

**RECREATION FIELD STUDY PRL 1379**  
Application and study of the basic skills needed as a recreation leader including observation and actual experience. Emphasis on coordinating classroom knowledge with recreation and therapeutic situations in the community. Class meets for a one-hour weekly seminar. A minimum of 15 hours supervised laboratory experience by arrangement in an area agency, hospital or institution. 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. 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 of most four-year colleges and universities.**

**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)

**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)

*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.*

**ANTHROPOLOGY****SS 6562**

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

**SOCIAL PROBLEMS****SS 3428**

Provides a specific 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)

**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)

**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 the theoretical, political and administrative aspects of American government. Topics of study are American political theory, political parties, decision making, the Presidency, the Congress, the Courts and the nature of contemporary national government. Class meets three hours per week. 3 Credits (SS 222)

**STATE AND LOCAL GOVERNMENT SS 2678**

Survey of organization and theory of state and local governments through examination of executive, legislative, judicial and service functions in Kansas, and analysis of Federal theory and pluralist and elite-theorist arguments. Class meets three hours per week. 3 Credits.

**PSYCHOLOGY****SS 1068**

Introduces the basic concepts and methods of general psychology. 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)

**PERSONALITY AND ADJUSTMENT****SS 4639**

A study of three theoretical systems in psychology—The Freudian, Behavioral and Humanistic, and the application of the systems to every day adjustment problems. Class meets three hours per week. 3 Credits (SS 300)

**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 (CLC 300)

**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 (CLC 301)

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

SS 1068 - pg. 46  
SS 2253 - pg. 46



**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)

**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)

**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)

**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)

**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)

**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)

**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 TACTICS 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)

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

SLE 1160 - pg. 47	SLE 5137 - pg. 47	SLE 7108 - pg. 47
SLE 2461 - pg. 47	SLE 6261 - pg. 47	SLE 7161 - pg. 47
SLE 4588 - pg. 47		

**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)

**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)

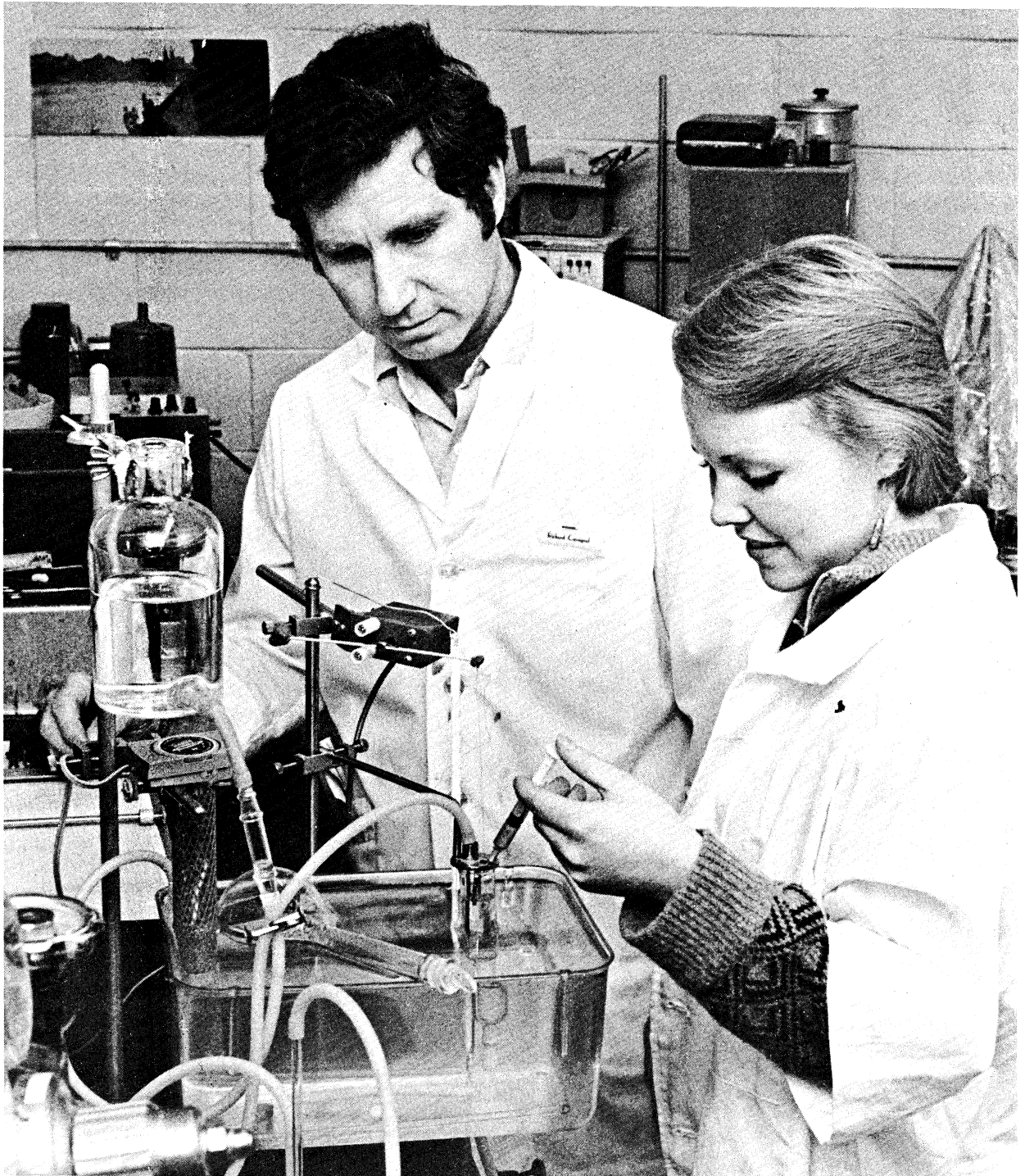
**INDEPENDENT STUDIES  
IN SOCIAL SCIENCES                            SS 5040**

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

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# STAFF DIRECTORY

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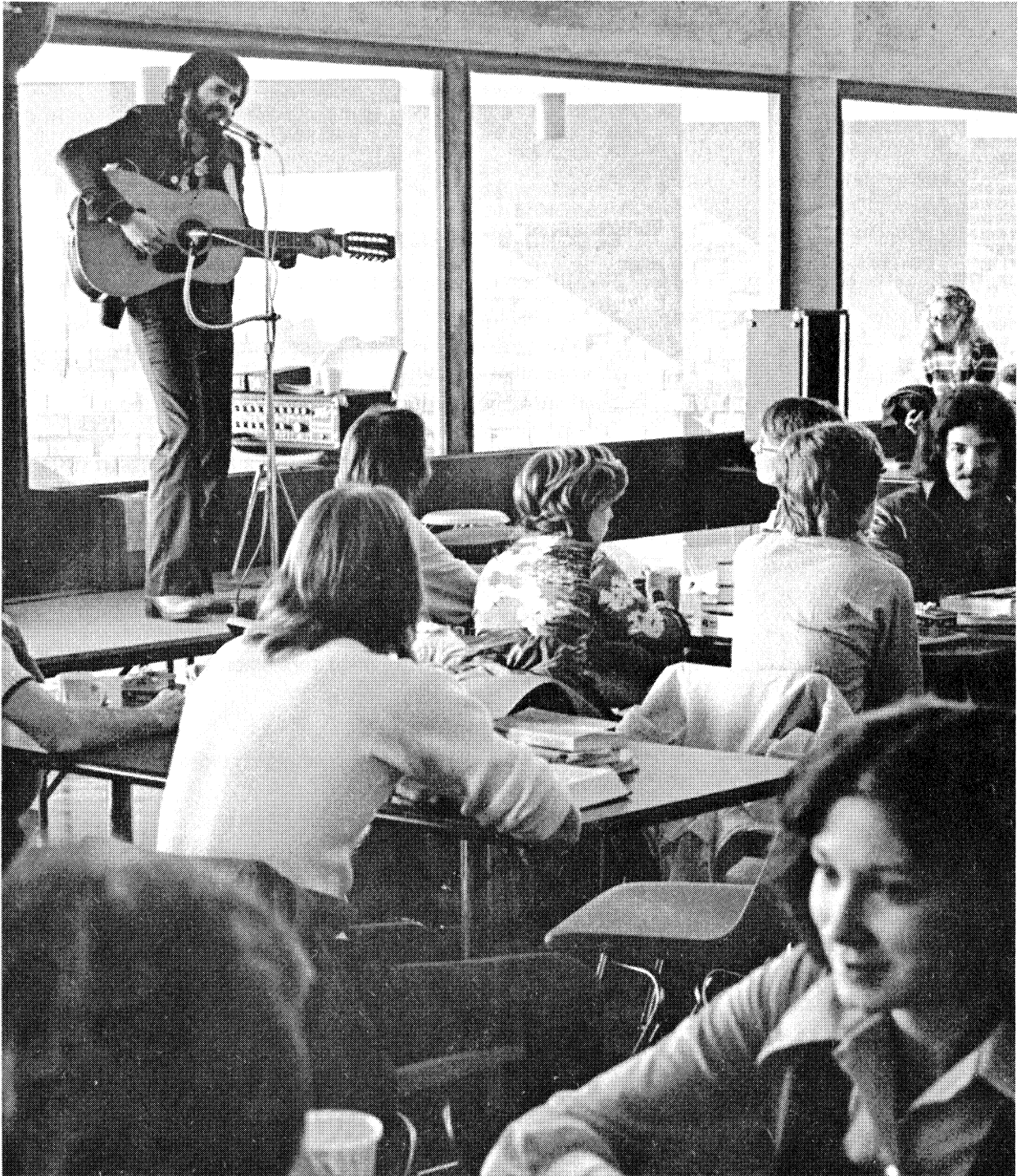
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# 1976 - 77 CALENDAR



# CALENDAR

## SUMMER SESSION AND FIRST MINI SESSION, 1976

<b>MAY</b>	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.
<b>JUNE</b>	Tuesday	1	Summer session and first mini session begins.
	Wednesday	2	Last day for registration or schedule changes without Division Director's permission.
	Monday	28	First mini session ends.

## SECOND MINI SESSION, 1976

<b>JUNE</b>	Monday	28	Registration and payment of fees for second mini session.
	Tuesday	29	Second mini session begins.
<b>JULY</b>	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	28	Second mini session and eight week summer session ends.

## FALL SEMESTER, 1976

<b>AUGUST</b>	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.
<b>SEPTEMBER</b>	Monday	30	Continuing Education registration begins.
	Monday	6	Labor Day Holiday. Classes not in session. College offices closed.
<b>OCTOBER</b>	Monday	13	Continuing Education classes begin.
	Tuesday	12	Staff Development Day. Classes not in session. College offices closed to the public.
<b>NOVEMBER</b>	Monday	22	Registration for winter mini session begins.
	Thurs.-Fri.	25-26	Thanksgiving Holiday. Classes not in session. College offices closed.
<b>DECEMBER</b>	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

<b>JANUARY</b>	Monday	3	Winter mini session begins.
	Friday	14	Winter mini session ends.

### SPRING SEMESTER, 1977

<b>DECEMBER</b>	Thurs.-Fri.	30-31	New Year's Holiday. College offices closed.
<b>JANUARY</b>	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. Continuing Education classes begin.
<b>FEBRUARY</b>	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.
<b>MARCH</b>	Monday	21	Spring recess begins. Classes not in session. College offices open.
	Monday	28	Classes resume.
<b>APRIL</b>	Wednesday	13	Staff Development Day. Classes not in session. College offices closed to the public.
<b>MAY</b>	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

<b>JUNE</b>	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.
<b>JULY</b>	Friday	1	First mini session ends.

### SECOND MINI SESSION, 1977

<b>JULY</b>	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	29	Second mini session and eight week summer session ends.



More detailed information is available in the following books:

- Student Handbook
- Career Book
- Continuing Education/Community Services Book

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