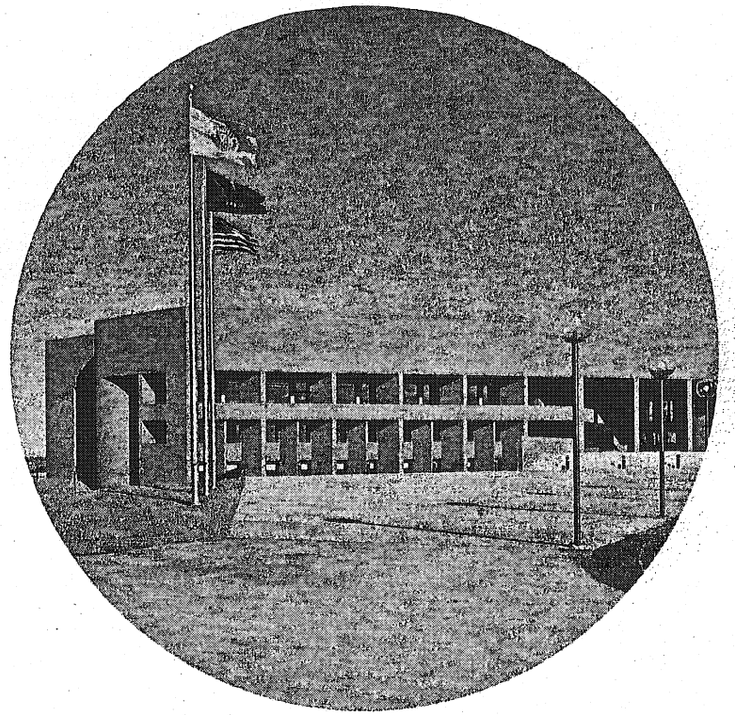
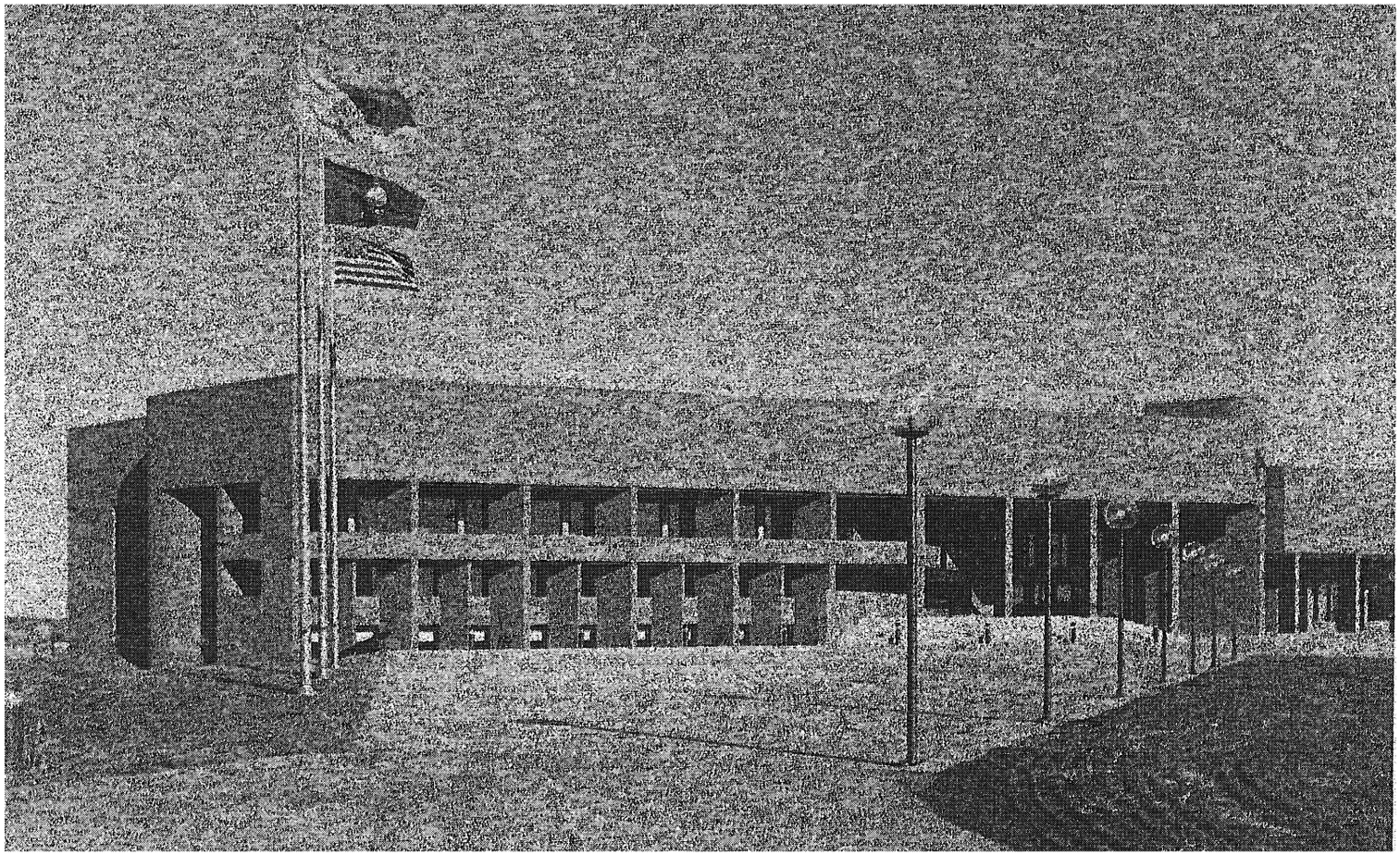
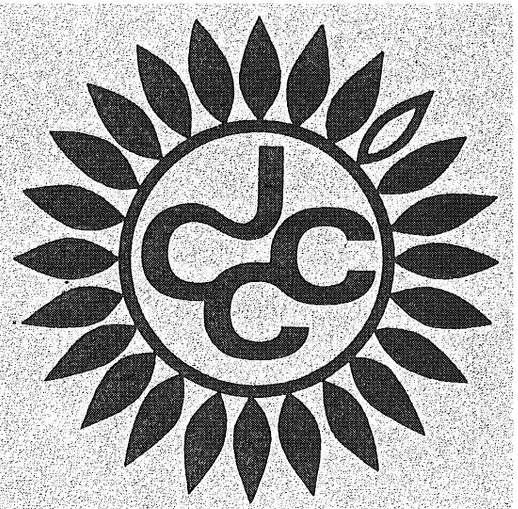


JOHNSON COUNTY COMMUNITY COLLEGE





1973—74
Number Four

JOHNSON COUNTY COMMUNITY JUNIOR COLLEGE

111th & Quivira Road
Overland Park, Kansas 66210
Area Code 913, 888-8500

Recognized candidate for accreditation status by
North Central Association of Colleges and Secondary Schools

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

All information herein including course offerings, times, instructors, fees, tuition and other charges are subject to change without further notice.

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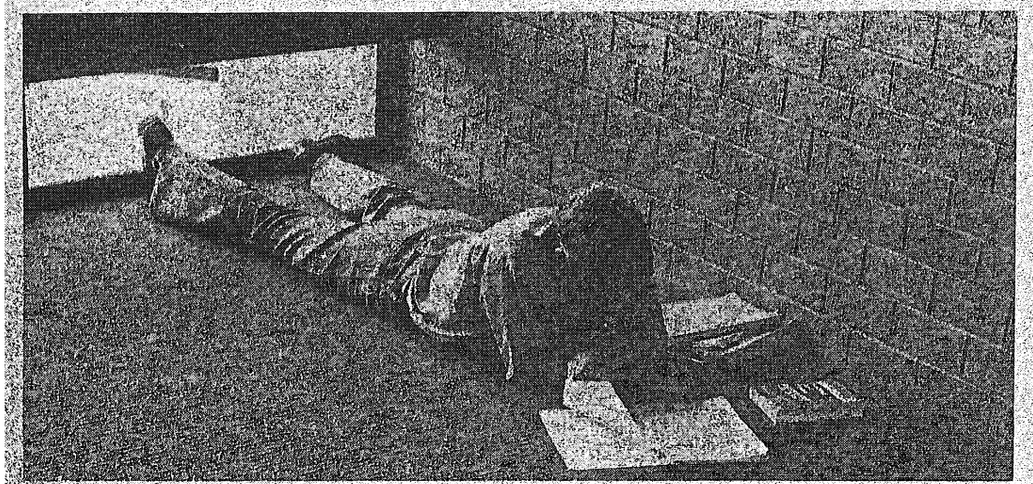


Message from the President

The Class of 1973 has been graduated from the new campus, climaxing a time of excitement and achievement at Johnson County Community College.

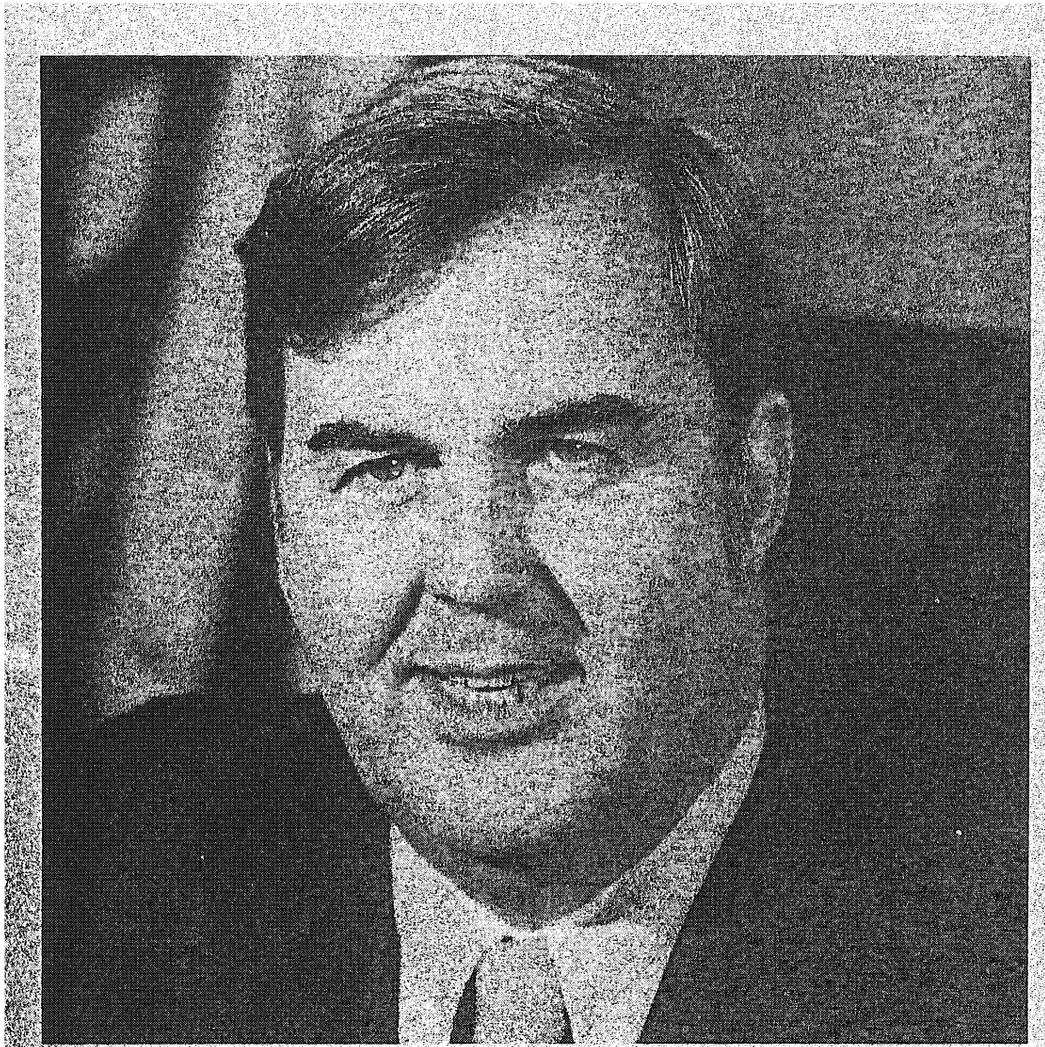
JCCC has grown rapidly in its brief four years of existence, both in number of students and variety of programs. New courses, seminars, workshops and other activities have been added and will continue to expand in the university transfer, career and general studies programs as well as in adult continuing education and community service.

Both extremes of the age spectrum are being reached. Many area high school seniors are enrolled concurrently in high school and JCCC. Young children participate with their parents in some adult continuing education activities while summer clinics have been planned for young people from 8 to 18 years of age. At the same time, senior citizens are becoming active participants in the classroom at JCCC as well as in programs tailored to their specific interests.

Television, the newest instructional medium, will be added to the existing audio-visual-tutorial approach during the 1973-74 academic year. Of major importance is the fact that the television system is designed for both on-campus use via closed circuit television and for off-campus education and information through the rapidly expanding cable system.

Although the move to the new campus marked the "end of the beginning" for JCCC, I'm sure that you will find the College has lost none of its zest for innovation and excellence. Physically and philosophically, the College is committed to serving the growing interests and needs of its community. We look forward to you joining the other "Kansans" enrolled at Johnson County Community College.

Robert G. Harris
President



BOARD OF TRUSTEES

The six members serve four-year terms. Three trustees are elected every other year from the county-at-large.

DR. WILBUR T. BILLINGTON
Terms: 1967-75

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

DR. JOHN R. PRICE
Terms: 1969-77

DR. JOYCE A. SMITH
Term: 1973-77

DR. O. DALE SMITH
Terms: 1967-75

DR. HUGH W. SPEER
Terms: 1967-75

PHILOSOPHY OF THE BOARD OF TRUSTEES AND STAFF

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 ability, talents and desires. Every effort will be made throughout the College to help each individual realize his goals.

A10

SUMMER SESSION AND FIRST MINI SESSION 1973

MAY & JUNE Thursday 31 and	Friday 1	Registration and payment of fees for eight week summer session and first mini session.
	Monday 4	Summer session and first mini session begin
	Tuesday 5	Last day for registration or schedule changes without Dean's permission
	Thursday 7	Last day for withdrawal from a course or from the College and receive a refund for summer and first mini session
	Friday 29	First mini session ends

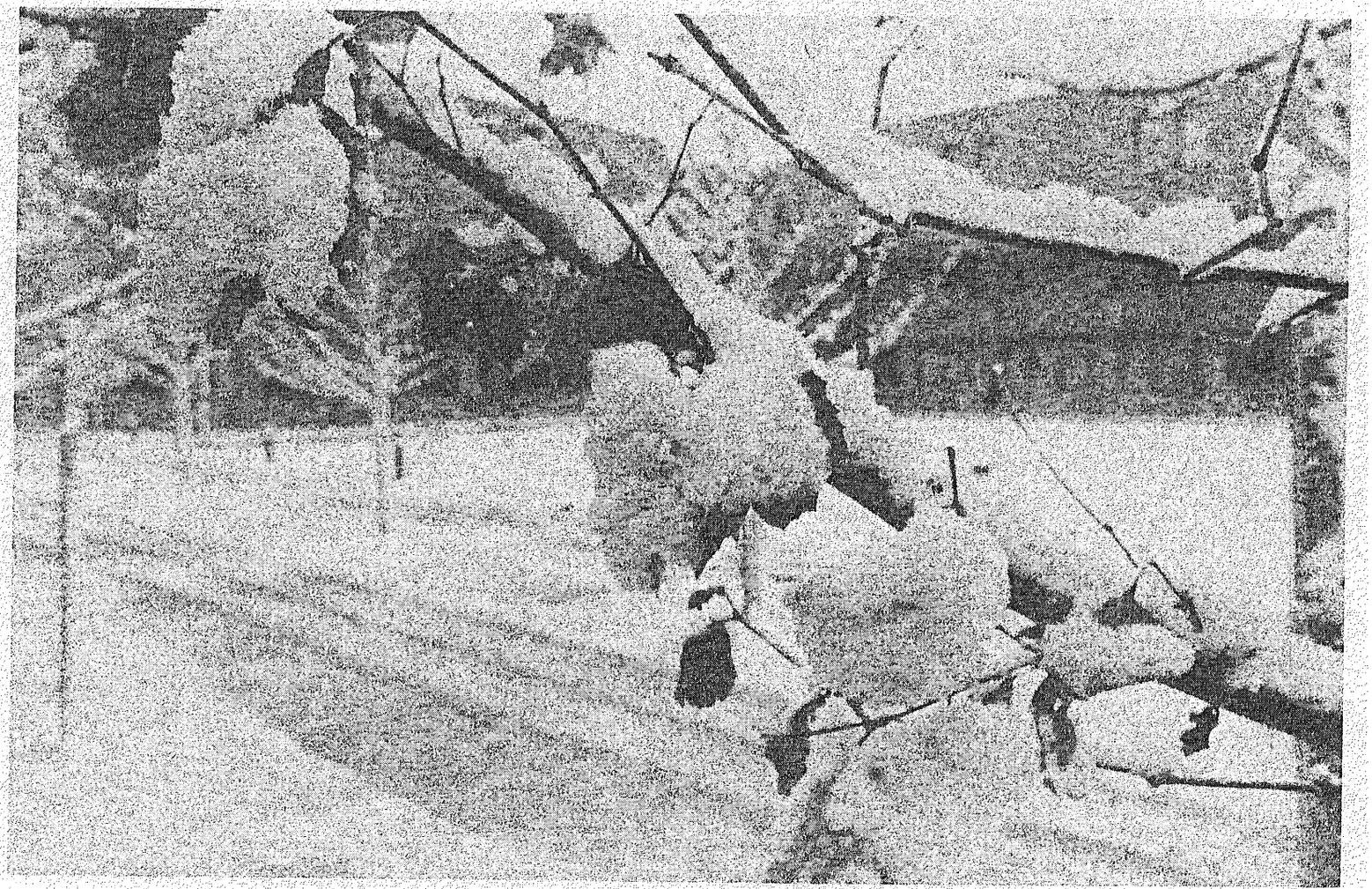
SECOND MINI SESSION

JUNE	Friday 29	Registration and payment of fees for second mini session
JULY	Monday 2	Second mini session begins
	Tuesday 3	Last day for registration or schedule changes without Dean's permission
	Wednesday 4	Independence Day Holiday. Classes not in session. College offices closed
	Friday 6	Last day for withdrawal from a course or from the College and receive a refund for second mini session
	Monday 30	Second mini session and eight week summer session ends

FALL SEMESTER 1973

AUGUST	Monday 6	Fall semester registration begins
	Monday 27	Fall semester begins
		Adult Continuing Education registration begins

A12



SEPTEMBER	Monday 3	Labor Day Holiday. Classes not in session. College offices closed
	Tuesday 4	Last day for registration or schedule changes without Dean's permission
		Last day for withdrawal from a course or from the College and receive a refund
	Monday 17	Adult Continuing Education classes begin
OCTOBER	Tuesday 16	In-Service Day. Classes not in session. College offices closed
NOVEMBER		Thanksgiving Holiday.
Thursday 22 -	Saturday 24	Classes not in session. College offices closed
DECEMBER	Wednesday 12	In-Service Day. Classes not in session. College offices closed
	Saturday 22	Last day of fall semester
Monday-Tuesday	24-25	Christmas Holiday. College offices closed
	Wednesday 26	Intersession begins
DECEMBER - JANUARY		
Monday 31 -	Tuesday 1	New Year's Holiday. College offices closed

SPRING SEMESTER 1974

JANUARY	Wednesday 2	Spring registration begins
		Adult Continuing Education registration begins
	Monday 14	Spring semester begins
	Monday 21	Adult Continuing Education classes begin
		Last day for registration or schedule changes without Dean's permission
FEBRUARY	Tuesday 5	In-Service Day. Classes not in session. College offices closed
	Monday 18	Washington's Birthday Holiday. Classes not in session. College offices closed

A14

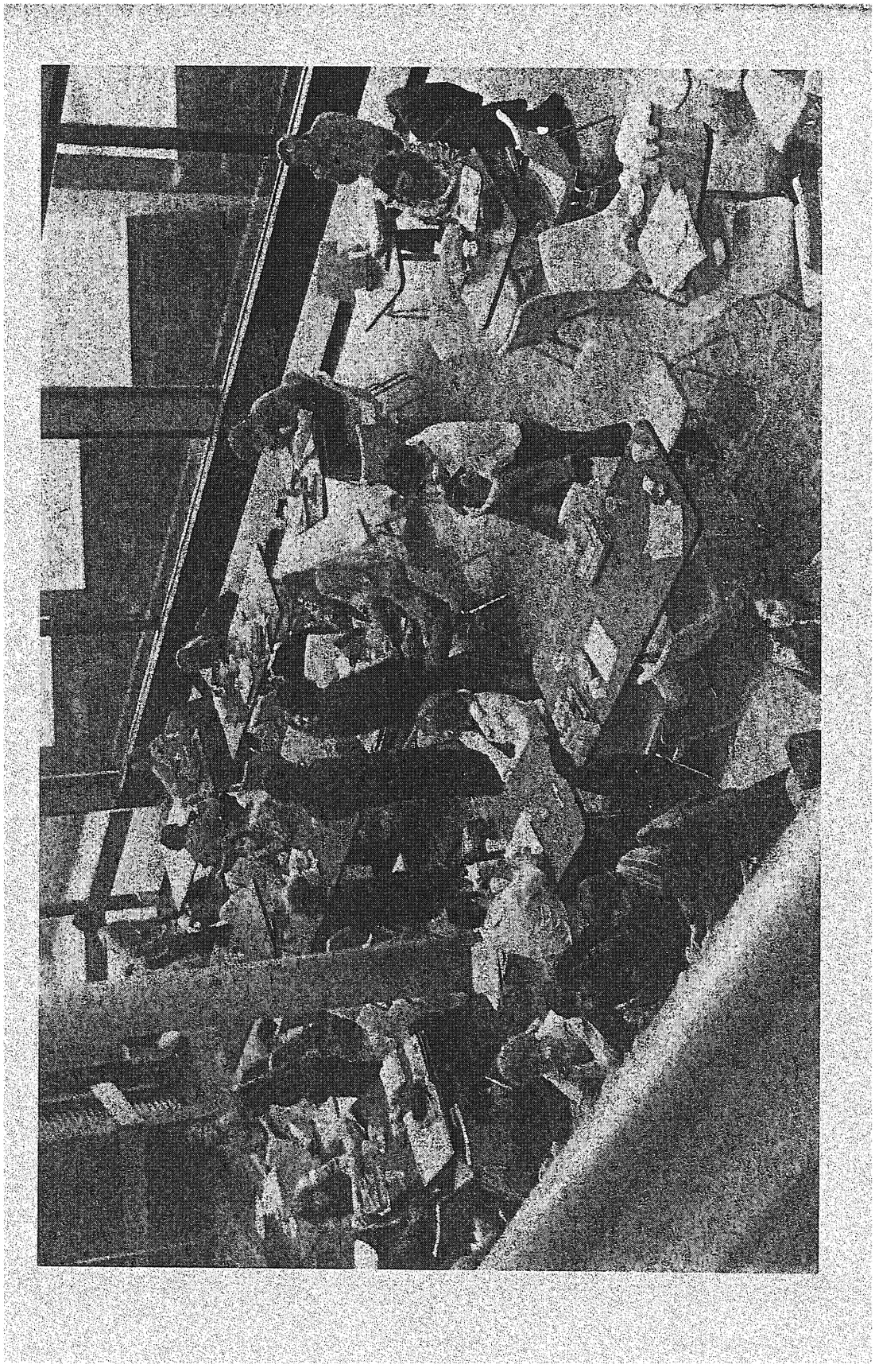
MARCH	Monday 25	Spring recess begins. Classes not in session. College offices open
APRIL	Monday 1	Classes resume
	Friday 19	In-Service Day. Classes not in session. College offices closed
MAY	Wednesday 15	Last day of spring semester
	Friday 17	Commencement
	Monday 27	Memorial Day Holiday. College offices closed

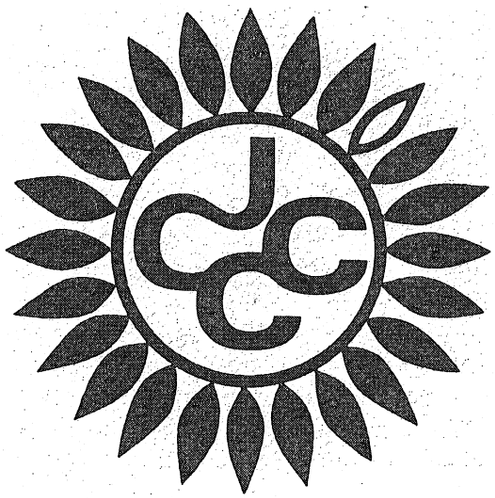
SUMMER SESSION AND FIRST MINI SESSION 1974

MAY	Thursday-Friday 30-31	Registration and payment of fees for eight week summer session and first mini session
JUNE	Monday 3	Summer session and first mini session begin
	Tuesday 4	Last day for registration or schedule changes without Dean's permission
	Thursday 6	Last day for withdrawal from a course or from the College and receive a refund for summer and first mini sessions
	Friday 28	First mini session ends

SECOND MINI SESSION

JUNE	Friday 28	Registration and payment of fees for second mini session
JULY	Monday 1	Second mini session begins
	Tuesday 2	Last day for late registration or schedule changes without Dean's permission
	Wednesday-Thursday 4-5	Independence Day Holiday. Classes not in session. College offices closed
	Monday 8	Last day for withdrawal from a course or from the College and receive a refund for second mini session
	Tuesday 30	Second mini session and eight week summer session ends





GENERAL INFORMATION

The expressed purpose of Johnson County Community College is to serve the community. The College attempts to fulfill this purpose in many ways . . . through an instructional program which is offered during the day and evening hours through fall and spring semesters and summer sessions; through adult continuing education activities which are offered in various locations throughout the area; and through community services which seek to meet the needs of the community.

The College attracts a diversified student body with varying backgrounds, motives and goals. In order to serve the wide range of individual needs, JCCC provides programs, services and personal counseling to assist students who wish to obtain one or more of the following educational objectives:

- attainment of an Associate of Arts degree
- improvement of present professional abilities
- advancement in present occupational skills
- achievement of personal satisfaction and enrichment

CURRICULUM

University Transfer

The College 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. These courses are designed for the student who is planning to continue his education at a four-year institution.

Career Programs

Career programs are designed to prepare students for entry into various occupations at the technical or mid-management level and may be completed in two years or less. Program areas include Commercial Pilot, Data Processing, Dental Hygiene, Drafting, Electrical/Electronic Engineering and Service Technologies, Fashion Merchandising, Journalism, Law Enforcement, Nursing, Marketing and Management, Secretarial Careers and others. Further information about the career programs may be obtained from the Counseling Office.

General Studies

General Studies are for the student who is in the process of determining his 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, the courses he has taken in General Studies may be applied to these requirements.

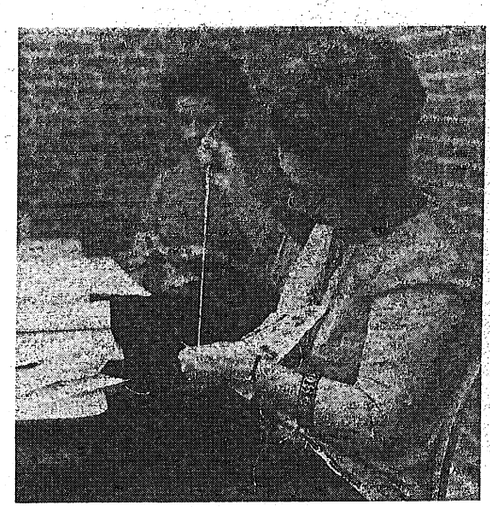
Adult Continuing Education

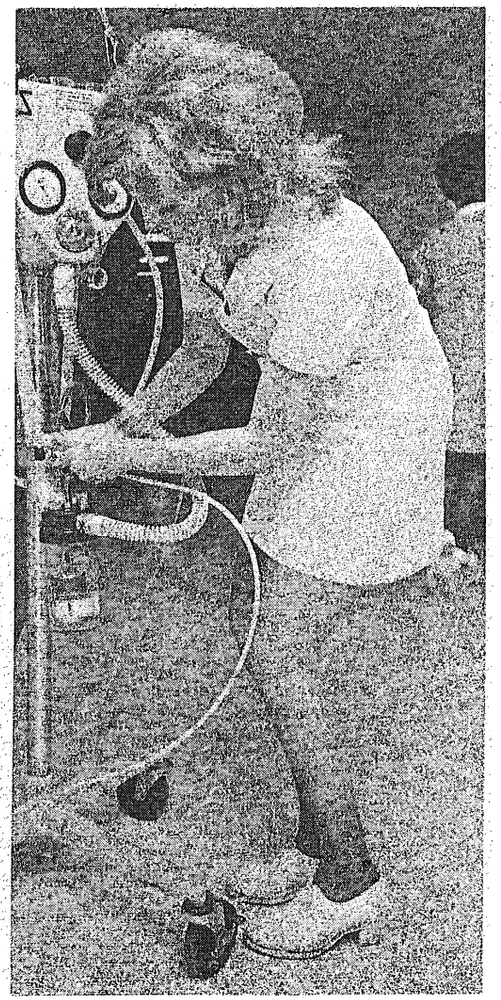
A wide variety of educational activities are provided by JCCC through Adult Continuing Education. Courses, workshops and other activities are offered in many subject areas including art, aviation, business and finance, developmental skills, foreign languages, folk arts, office education, sports and recreation, etc. Most Adult Continuing Education activities are not for college credit, are held in locations throughout Johnson County and are open to any person 18 years of age or over.

ACCREDITATION

The Johnson County Community College was granted Recognized Candidacy status by the North Central Association of Colleges and Secondary Schools in March, 1972, and is on schedule in the accreditation process for new institutions. The College articulates with neighboring colleges and universities to insure transferability of credits to these and other institutions.

The College is recognized by the American Association of Community Junior Colleges (AACJC), as a Servicemens' 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.



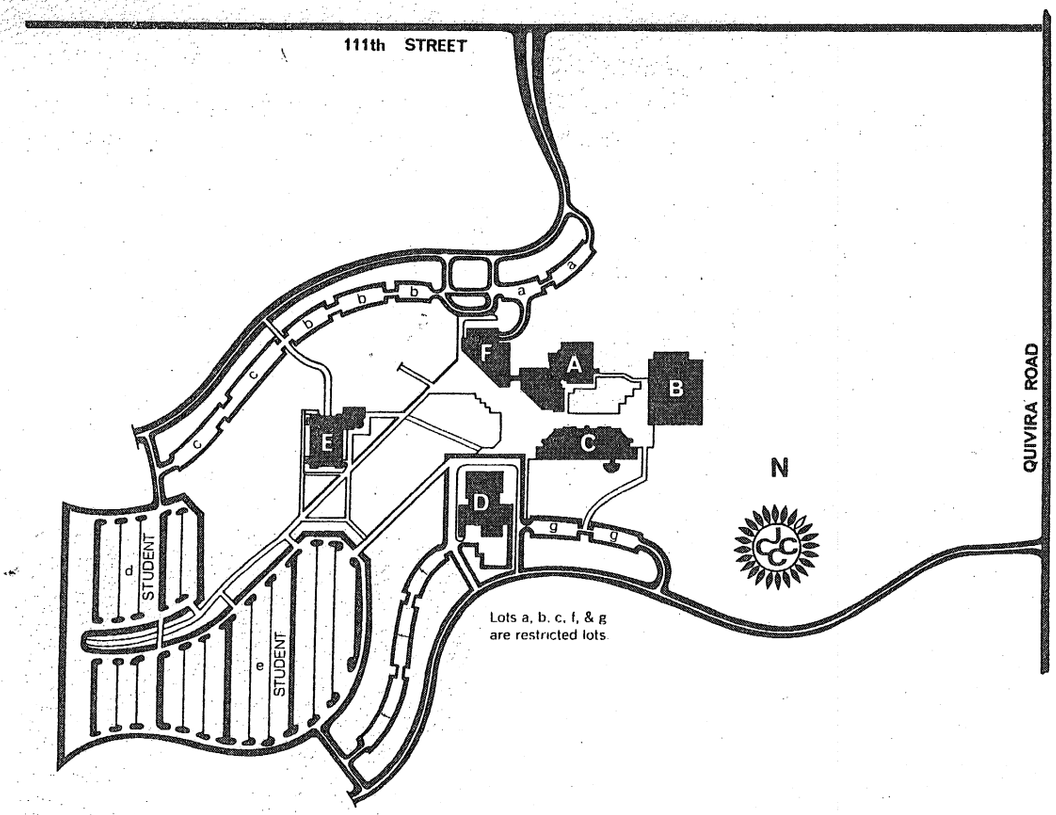


A **GENERAL EDUCATION BUILDING:** Instructional and administrative offices; a 300-seat lecture hall-little theater; general classrooms and specialized rooms; data processing, business management labs; seminar rooms on all floors.

B **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.

B4

C **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.



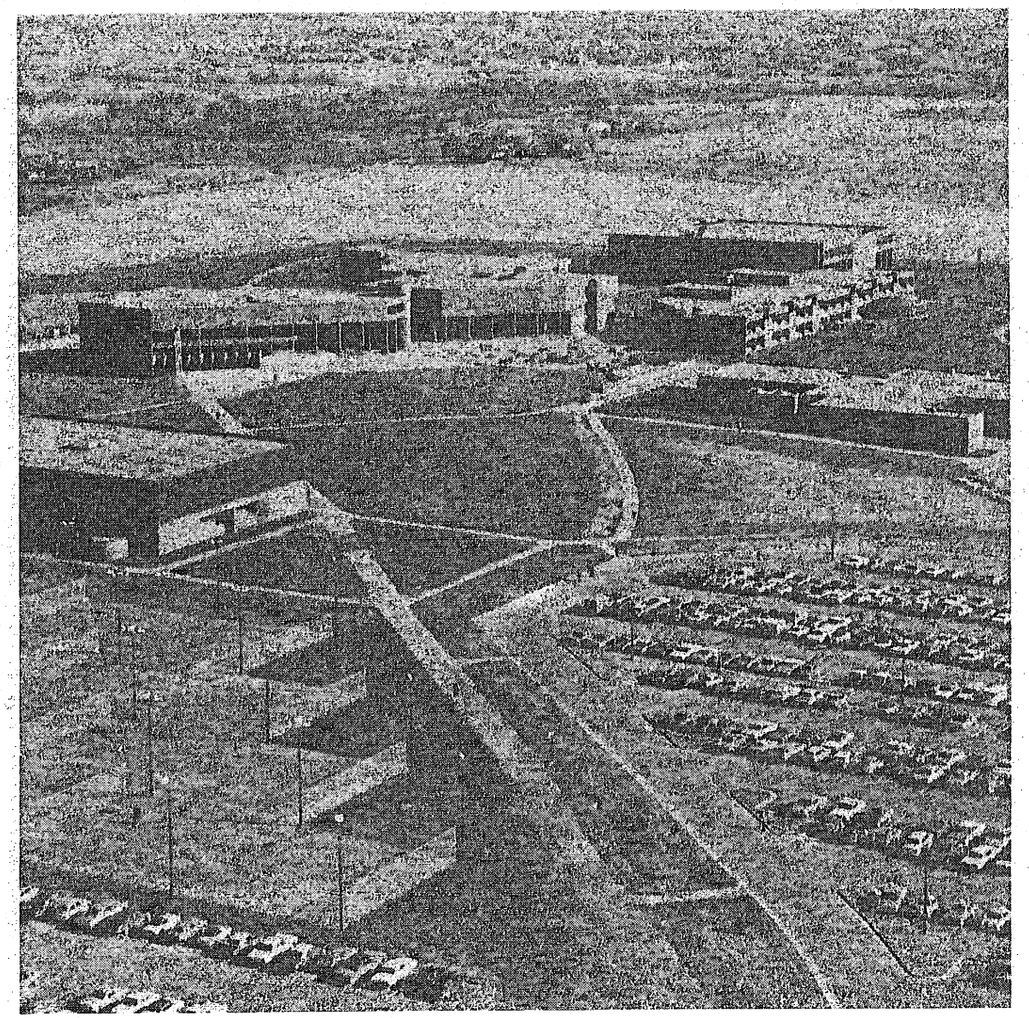
PARKING: 1800 parking spaces for students, staff and visitors.

SITE: 220 acres

D **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.

E **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.

F **COLLEGE COMMONS:** Bookstore, food service and recreational facilities; offices, meeting rooms and lounge space; College Commons administrative offices and meeting rooms.



ADMISSION REQUIREMENTS

Any resident of Johnson County may enroll as a student. Students with legal residence outside of Johnson County will be accepted only if the demands of resident students can be met.

High school students who have approval of their high school principal may enroll in College courses.

ADMISSION

Students who have not previously been enrolled in the 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 Transcipts: 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. If college transcripts are not received by the Admissions Office prior to registration a $5.00 fee will be charged and refunded when the transcript arrives.
- Residency: Residency in Johnson County requires six (6) months to establish. See the Director of Admissions for specific residency requirements. Students having legal residence in another Kansas community college district will be required to present a letter of permission from the chief executive officer of that community junior college district or be required to pay an amount equal to out-of-state tuition.
- Tests: It is recommended but not required that each full time student filing an application for admission provide American College Testing (ACT) scores. Students are advised to take the ACT test as early as possible on one of the national dates and to list the Johnson County Community College as one of the three colleges to receive the test results.
- Foreign Students: Foreign students are required to take the Test of English as a Foreign Language (TOEFL) or present evidence of proficiency in the English language.

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

REGISTRATION PROCEDURES

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

VETERANS' ELIGIBILITY (G.I. BILL)

The Veterans Administration fully approves the Johnson County Community College for veterans who wish to secure educational benefits under the G.I. Bill of Rights.

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

Financial benefits to veterans are based on the following V.A. schedule: 12 or more semesters—full time; 6 through 8 semester hours—½ time; 9 through 11 semester hours—¾ time; 1 through 5 semester hours—less than ½ time.

ACADEMIC INFORMATION

The College has established policies and regulations in regard to the work taken at the Johnson County Community College. These requirements undergo re-examination at regular intervals in relationship to the philosophy stated by the Board of Trustees.

In general, the evaluation, enforcement and interpretation of student regulations is a function of the office of College Services. Petitions for exceptions must be submitted through a counselor to the office of the Dean of College Services.

GRADING SYSTEM

Grades measure the student's performance in terms of the goals and objectives of a course. Grades 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 optional grading system.

Regular Grading System

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

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

B - *Superior* achievement of the educational objectives.

C - *Satisfactory* achievement of the educational objectives.

D - *Acceptable* achievement of the educational objectives.

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

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

Optional Grading System

A student in University Transfer should use the regular system in all courses that satisfy the normal freshman-sophomore requirements in the four-year college or university he plans to attend. He may select the optional grading system in all other courses.

A student in a Career program may use the optional grading system in any course that is not directly related to the major objectives of his program.

A student desiring to audit a course, generally for review purposes, is encouraged to select the optional grading system.

In all cases, the student must receive the approval of his counselor before he is allowed to select the optional grading system for any course. Generally, a student will be permitted to select the optional grading system for no more than one course per semester.

The student will have the opportunity to elect the optional grading system any time up to the Add-Drop date. Grades received under this grading system are not used in computing the student's grade point average.

The optional grading system is as follows: S - Credit earned; W - Withdrawal; and I - Incomplete.

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.

EXTERNAL CREDIT

Many students will enroll in Johnson County Community College who have received credits in other colleges. Others who enroll will have, through various types of experiences, attained competencies which would be equivalent to those resulting from formal courses offered by the College.

Credit Transferred From Other Colleges

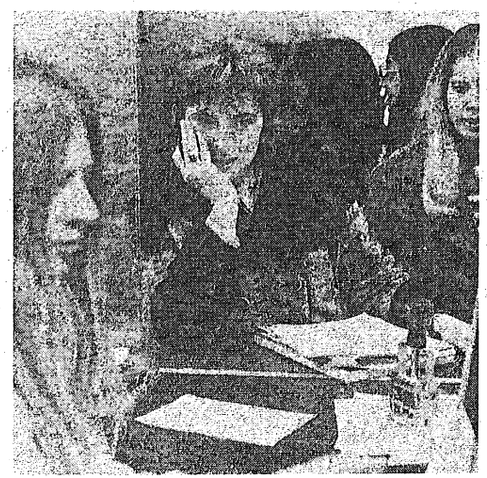
The Johnson County Community College may accept appropriate credits earned from a college of recognized standing and may permit up to forty-five (45) semester hours of transferred course work towards an Associate of Arts Degree.

Credit By Examination

In courses where a comprehensive examination is available, credit may be granted if a satisfactory level of achievement is demonstrated on the comprehensive examination. Permission to take such an examination may be granted upon petition by letter to the Director of Admissions with approval of the Dean of Instruction. A fee of $5.00 will be charged for all comprehensive course examinations.

Advanced Standing

Advanced standing is defined as credit granted for specific courses for which a comprehensive course examination has been satisfactorily completed.



Advanced standing credit will also be granted for students presenting scores of 3, 4, or 5 on The College Entrance Examination Board Advanced Placement tests.

Advanced standing credit not to exceed thirty (30) semester hours will be granted to students for performance of the 25th percentile or above on The College Level Examination Program (CLEP exams).

Advanced Placement

Advanced placement is defined as by-passing courses that are sequential.

Advanced placement (without credit) may be granted for students presenting scores of 1 or 2 on The College Entrance Examination Board Advanced Placement tests.

Credit For Experiences In The Armed Services

College-level credit may be granted for military service and for specialized training as recommended in a publication by the Commis-

sion on Accreditation of Service Experiences of The American Council on Education.

Credit For Other Experience

In general, the College recognizes the fact that experiences outside the College are often worthy of college credit when properly evaluated. College credit may therefore be granted for such things as on-the-job experience.

CLASSIFICATION OF STUDENTS

Freshmen: Students with fewer than twenty-six (26) semester credit hours.

Sophomores: Students with twenty-six (26) or more semester credit hours.

Post Graduates: Students who have completed all graduation requirements and are enrolled for further study.

Full-Time Students: Students carrying twelve (12) or more semester hours of credit. (see "Graduation Requirements").

GRADUATION REQUIREMENTS

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 his 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 he receives the degree.

HONORS

An Associate of Arts degree will be granted "With Honors" if the recipient earns an overall grade point 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 the Associate of Arts Degree from Johnson County Community College.

GRADUATION EXERCISES

Requirements for graduation may be completed during any semester, but the degree will not be conferred until the ceremony is held at the close of each spring semester.

EVALUATION OF CREDITS

If a student has received previous credit and wished to complete either an Associate of Arts degree or a Certificate of Graduation, the credits will be evaluated by the Director of Admissions and a copy of their acceptance will be given the student and a copy kept on file.

STUDENT PERSONNEL SERVICES

The student is an individual at Johnson County Community College. Each is seeking, through education, to fulfill his potential and to become a truly educated, mature, and contributing member of his community . . . each is seeking the educational and vocational key to his future.

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

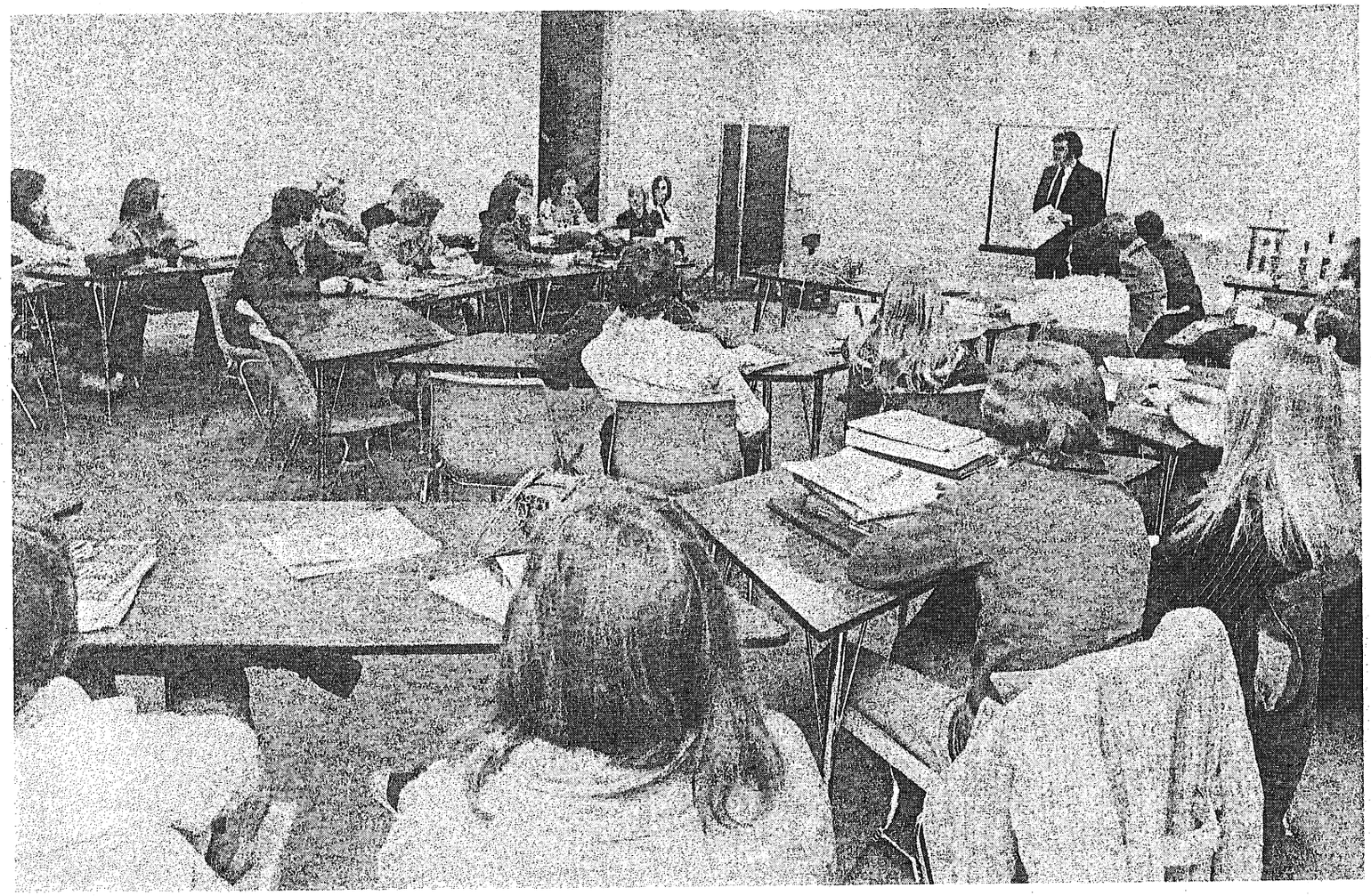
COUNSELING

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

Emphasis is placed on the student's responsibility for conducting his own life and making the most of it. Counselors do not make decisions for a student nor do they "solve" his problems for him. Students do find themselves better able to handle their situation in a mature and responsible fashion by coming to know more about themselves through a counseling experience. Students needing more intensive services will be referred.

Following admission, each full-time student has an individual conference with a member of the counseling staff to help plan his 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 he has selected is encouraged to discuss his situation with a counselor.

B13



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

Reassessment Of Student Progress

If a student does not have a cumulative grade point average of C (2.0) at the end of any semester, he needs to reassess the program or courses he has chosen.

At this time, with the assistance of his counselor, the student must re-evaluate his goals and aspirations in light of his talents, achievements and desires.

If a student has not been successful at the Johnson County Community College or another college, the student must work very closely with his counselor and instructors to achieve at least a C (2.0) average in a mutually agreed upon length of time.

Repetition Of Courses

Any student with good and sufficient reason may apply to his counselor to repeat a course. If the student repeats a course, the highest credit and grade earned will be recorded on the student's permanent record.

Dropping A Course

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

A student dropping a course must consult with a counselor if he is to receive a "W" grade before the drop date in a semester.

Withdrawal

A student who wishes to withdraw from the College before the final day of the semester without academic penalty may do so and receive a "W" on his official record.

A student who wished to withdraw after the final day of the semester will receive a grade other than a "W" for the official record.

The student must consult with a counselor if he is to effect an orderly withdrawal.

Refund Of Tuition And Fees

The total amount of tuition and fees will be refunded from the time of registration through the Add-Drop dates for both the fall and spring semester as well as the summer sessions. After the Add-Drop date no refund will be made unless the student can successfully present a hardship case, such as hospitalization or required military service. Such cases must be presented within the two weeks following Add-Drop date. In all cases requests for refunds must be initiated by the student through a College counselor.

ATTENDANCE

Regular attendance in all classes is expected. No absence is "excused"

in the sense that the student is excused from the work he has missed. It is the student's responsibility to fulfill all of the requirements of a course.

READMISSION

A student who has been suspended from the Johnson County Community College, or who has been similarily dismissed from any other college or university, may apply for readmission or admission the semester following suspension.

Applications for admission after suspension must be reviewed by the College Committee on Admissions. The Director of Admissions will act as chairman of the Committee but will not be a voting member. The chairman of the Committee will call all meetings and will be responsible for keeping records of the proceedings.

SUSPENSION

Academic

If satisfactory progress toward a student's goals is not being made, the student must reassess his program, motives, interests and aptitudes with a counselor. If satisfactory progress is not made after this reassessment, the student may be suspended.

Guidelines for grade point averages regarding dismissal from the College for a full-time student are:

End of Semester	Minimum Grade Point Average
1	1.25
2	1.65
3	1.75

Behavioral

The students and staff of Johnson County Community College constitute a special community engaged in the processes of education. The College assumes that its students will demonstrate a code of personal honor which is based upon courtesy, integrity, common sense and respect for others both within and outside the classroom.

The College reserves the right to dismiss a student for conduct which is detrimental to the proper conduct of the College's educational endeavors.

The following types of acts will be considered violations of the College standards for student conduct and could result in serious disciplinary action or permanent suspension:

- Threatening the life or physical safety of others.
- Preventing or attempting to prevent any student, College staff member of official College visitor from carrying out his responsibility to the College.
- Intentionally impeding normal pedestrian or vehicular traffic on the campus.
- Inflicting damage to College equipment or facilities.
- Violating any conditions of probation.
- Academic dishonesty.
- Unauthorized actions undertaken in the name of the College.

COSTS

STUDENT ACTIVITY FEE

No student activity fee is assessed at Johnson County Community College. Most of the costs of such student activities as social events, intramural activities and the intercollegiate athletic programs are supported by expenditures from the College general fund.

TUITION AND FEES

The tuition for Kansas residents attending Johnson County Community College is $12 per semester credit hour and a College Commons fee of $1.50 per semester credit hour.

Tuition for out-of-state, foreign students, or students from community college districts in Kansas who have not received permission from the chief executive officer of their district is $26.50 per semester credit hour and a College Commons fee of $1.50 per semester credit hour. The cost of tuition is subject to change from year to year by action of the College Board of Trustees.

LABORATORY AND/OR COURSE FEES

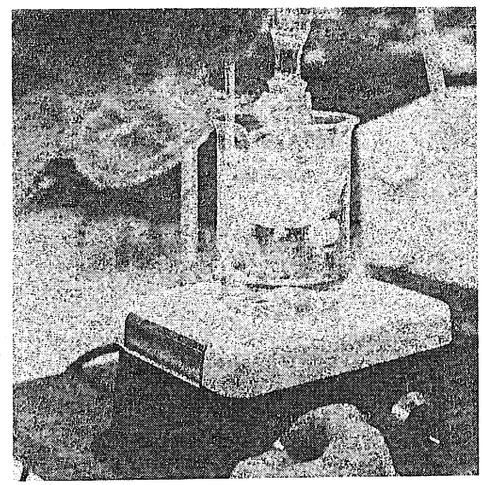
Laboratory and/or course fees to defray special course expenses, such as the cost of breakage or the replacement of expendable supplies, are charged in some courses. Fees are listed in the schedule of classes available at the time of registration.

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 he was enrolled. After that time, a fee of one dollar ($1) will be charged for each transcript.

TEXTBOOKS

Textbooks are purchased by the student. The estimated cost of textbooks is from $25 to $40 per semester. A bookstore, operated by the College, is located on the campus in the College Commons.



PARKING PERMITS

No parking fee is assessed at Johnson County Community College; however, all vehicles must be registered with the College. (Refer to "Student Parking" in the Student Handbook for complete information.) Ample parking space is provided on campus for students, staff and College guests.

FINANCIAL AIDS

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

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

DETERMINING FINANCIAL NEED

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

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

A student who is financially independent of his parents would follow the same procedure as other students but would not be required to provide parents financial information. Instead, he would provide the College with a notarized statement indicating that during the twelve months previous to the

application, he (1) has received no financial support from either parent, (2) has not been claimed by either parent as a deduction for income tax purposes, and (3) has not resided with either parent. These statement forms are available from the Financial Aids Counselor.

LOANS

Federally Insured Loans

Federally Insured Loans are obtained from any local participating lending agency and are underwritten by the Federal government. The education of young people from middle or upper income groups frequently places a financial burden on their families. In many cases, 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.

Students may borrow as much as $2,500 per academic year and an aggregate amount not to exceed $7,500 for undergraduate studies. Additional amounts are obtainable for graduate work. A student from a family with an adjusted income of less than $15,000 a year pays no interest while he is attending an eligible college or school. Repayment of principal and interest begins on a date between nine and twelve months after the student has ceased his course of study. A student from a family with an adjusted income higher than $15,000 a year pays the entire interest on the loan, but he may borrow under the program at the current rate of interest. Students may pick up applications from the Financial Aids Counselor and must receive verification of their enrollment from the College.

Obtain applications ("Student Application for Federally Insured Loan" OE Form 1154) from participating banks, savings and loan associates, credit unions, colleges, vocational schools or by writing to:

Director, Higher Education, Region VI
Office of Education, DHEW
601 East 12th Street
Kansas City, Missouri 64106

The student should, upon receiving the application:

- Complete Part A.
- Submit application to Johnson County Community College for completion of Part B.
- Complete Part C (with family, as applicable).
- Submit completed application to participating lending institutions for their approval.

Please note that under this program, loans are made or denied at the direction of the participating lender.

National Direct Student Loan

Johnson County Community College is a participating member of the National Direct Student Loan Program as is outlined in the Educational Amendments of 1972. High school seniors who have been accepted for admission to the College and currently enrolled 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.

Repayment of loans must be fulfilled within the period of 10 years plus a 9 month period of grace. Payments are to be made at least quarterly during the repayment period. This period may be interrupted and deferred for the following reasons: (1) when the borrower is pursuing at least a half-time course of study at an institution of higher education, or (2) not in excess of three years, during which the borrower is a member of the Armed Forces of the United States, Peace Corps or VISTA. Repayments of principal are not required during such periods, and no interest on the loan accrues. Interest is computed at 3% simple interest on the unpaid balance of the principal. The borrower who becomes a full-time teacher in public or private non-profit elementary and secondary schools and in institutions of higher education need not repay 10% of his loan, plus interest, for each academic year of teaching service up to 50% (five years) of the loan.

Short-Term

The College has established a short-term, non-interest loan fund which is available to students for emergency needs. As long as funds are available, students may borrow any amount from $5 to $30 during a semester. Students may not borrow from this fund to pay for tuition. All loans must be repaid before the end of the semester in which the loan was made. Applicants should be carrying a full load (12 hours or more) and be regular in attendance. Repayment may be made in monthly installments or in lump sum. Students desiring a short-term loan should contact the Financial Aids Counselor.

Optimist Club Of The Central Industrial District

This club contributed $500 to assist worthy students on a short-term basis, with the amount of any individual loan left to the discretion of the Financial Aids Counselor. The recipient must be a full-time student or be making satisfactory progress in an approved program.

Law Enforcement Education Program Loans

This loan program which is authorized by the Omnibus Crime Control and Safe Streets Act of 1968, 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 loans can be cancelled at the rate of 25% for each year of full-time employment in a public, state, local or Federal law enforcement agency. Applications may be obtained from the Financial Aids Counselor and from most law enforcement agencies.

GRANTS

Board Of Trustee Grants

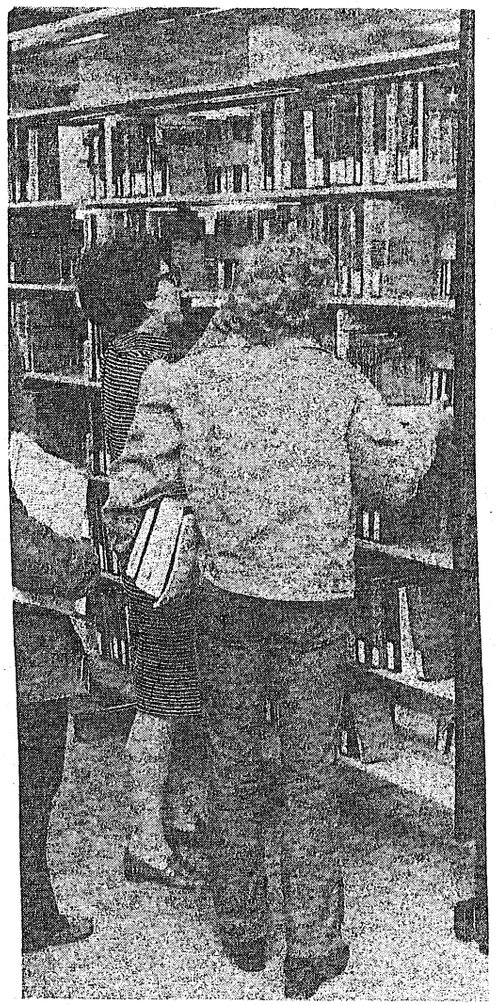
The Johnson County Board of Trustees has provided grants which will remit all tuition for the first semester. They are renewable for each of three consecutive semesters as long as the student's academic record is at or above the minimum level required to remain in good standing at the College. Grants are available to three groups of students: (a) those who have need, (b) those who have demonstrated superior academic achievement, and (c) those who have special talents and abilities. Applications may be obtained from the Financial Aids Counselor.

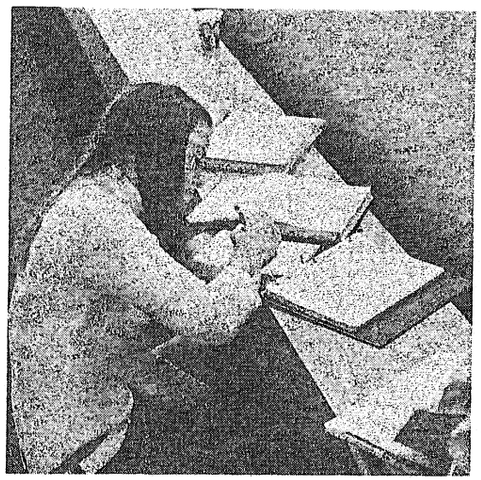
Law Enforcement Education Program Grants

Also authorized by the Omnibus Crime Control and Safe Streets Act of 1968 is a grant program which provides for payment of tuition and fees not exceeding $300 per semester for full-time or part-time enrollment in an undergraduate program leading to a degree or certificate in law enforcement. Recipients must be full-time employees of a publicly funded law enforcement agency and must agree to remain in the service of the employing agency for a period of two years following completion of any course of study funded by a grant. Applications may be obtained from the Financial Aids Counselor and from most law enforcement agencies.

Endowment Grants

A limited number of grants are





available to full-time students through the Financial Aids Office. These grants are provided by interested service organizations and individuals.

Most grants are renewable by application if the student maintains his eligibility and funds are available. Grants are awarded on the basis of (a) need for financial assistance, (b) academic achievement, and (c) special abilities. Applications are available from the Financial Aids Counselor.

SCHOLARSHIPS

Preferred Business Service Corporation Scholarships

This corporation offers an annual $250 scholarship for a student at Johnson County Community College who is capable of or making satisfactory progress toward a degree in Secretarial Science and is in need of financial assistance. Recipients are selected through the office of Financial Aids.

State Of Kansas Scholarships

Johnson County high school students who are planning to attend Johnson County Community College are eligible to apply for a State of Kansas Scholarship. The applicant's parents must be legal residents of Kansas and the applicant must receive a recommendation from his high school administrator. Recipients receive $500 annually or cost of tuition and regular fees, whichever is less. Applications may be obtained from high school counselors.

STUDENT WORK PROGRAMS

College Work-Study Programs

Johnson County Community College participates in the College Work-Study Program as established under the Economic Opportunity Act of 1964. This program enables a full-time student (12 or more hours) to pursue degree requirements while holding a part-time job. This employment may be located on or off-campus and may take place during the academic year (including vacation periods) or during the summer months. The student is permitted to work a maximum average of fifteen (15) hours per seven day week when classes are in session and full-time (40 hours per week) when classes are not in session, i.e., recesses and vacations. Eligibility for this program is based primarily on need. The student must remain in good academic standing at the College and be a citizen of the United States. Applications are available from the Financial Aids Counselor.

Employment Opportunities

In addition to various jobs on campus such as office assistants, library assistants, laboratory assistants, etc., the College will assist worthy and needy students in finding work in the community if they so desire. The student work-study program is under the direction of the Financial Aids Counselor.

APPLICATION FOR FINANCIAL AIDS

How To Apply

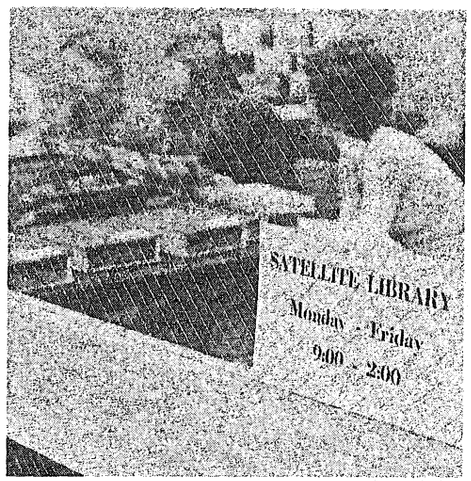
Students desiring financial aid should obtain an application for admission and complete all admission requirements prior to making any application for financial aid. Students should obtain the appropriate application form for the type of financial aid they are seeking from the Financial Aids Counselor.

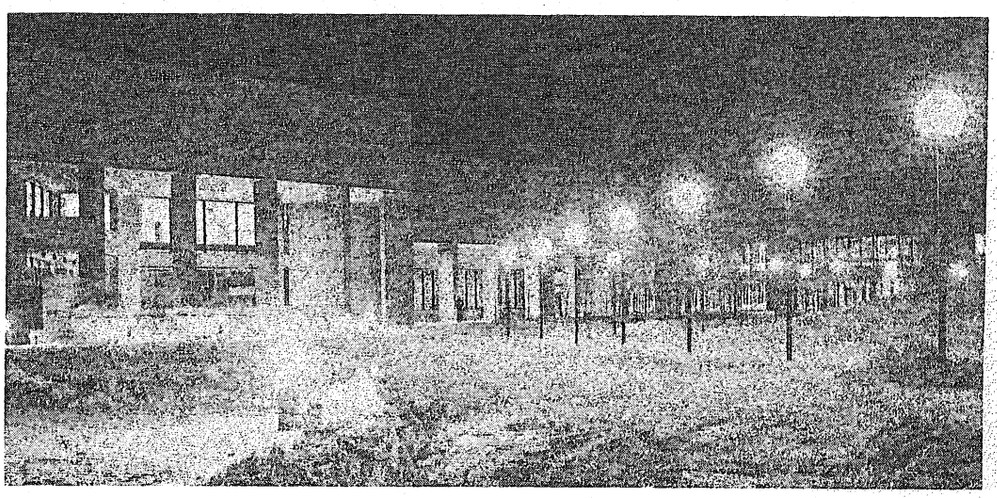
Notification Of Awards

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

Placement

Assistance in placement is available to students of Johnson County Community College. The Placement Center not only specializes in locating positions for students who are graduates of the career programs of the College but also assists students in locating part-time employment.





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; consequently, no student fees are assessed for this purpose.

STUDENT ACTIVITIES COORDINATING COUNCIL

All students are encouraged to participate in the planning and development of activities. The Student Activities Coordinating Council (SACC) serves as a vehicle for the long range planning and budgeting that is necessary for most activities. Whenever an individual or group of students determine the need and decide to organize an activity, they become a part of SACC and receive assistance and support from other students and the Student Activities Coordinator. Activities in the past have included intramural athletics, drama presentations, coffeehouses, 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 formation of policies and regulations in many areas within the College. Students serve on College 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.

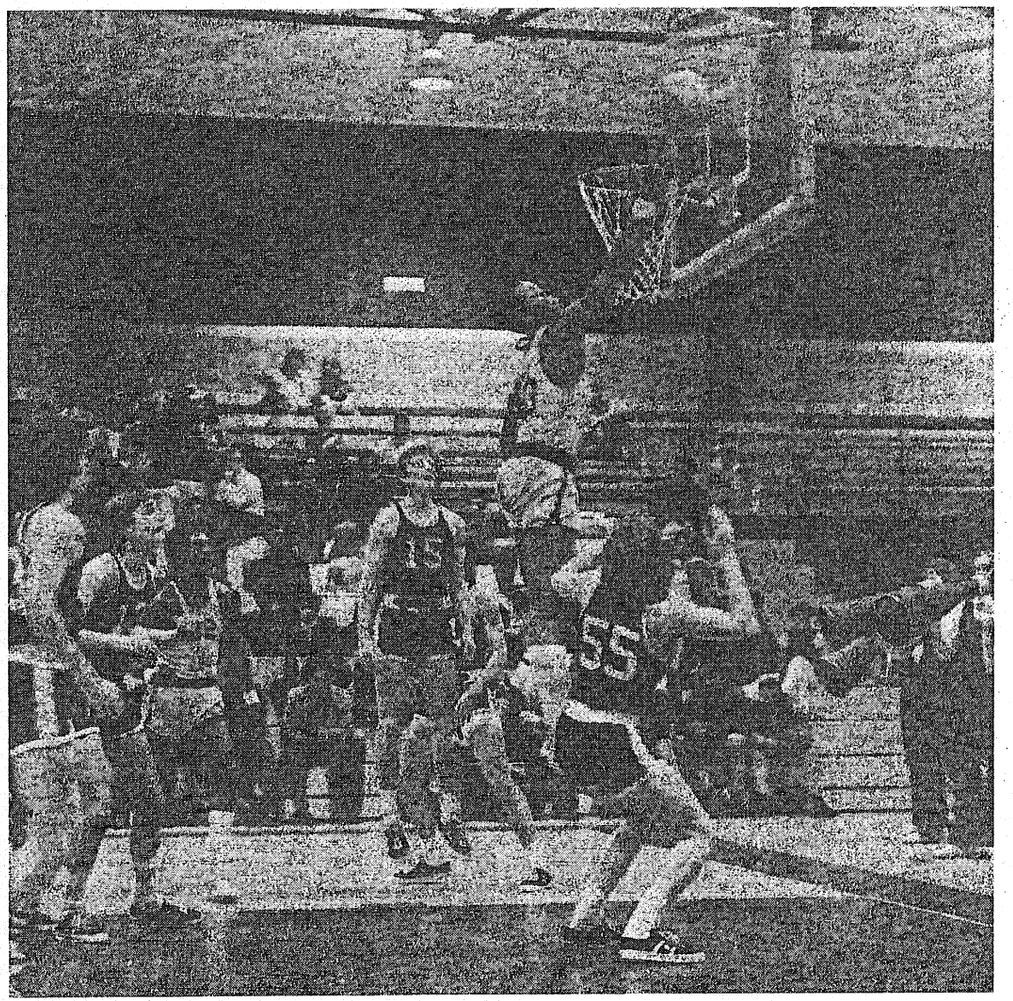
INTERCOLLEGIATE ATHLETICS

The Johnson County Community College participates in the basketball program of the Kansas Junior College Jayhawk Conference, as well as in golf, track and tennis programs. The College will participate in other intercollegiate athletics as approved by the College Board of Trustees.

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

INTRAMURAL ACTIVITIES

The College will provide 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

STUDENT HEALTH

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

The Johnson County Community College will comply with the requirements of Title VI of the Civil Rights Act of 1964 (P.L. 88-352) and all the requirements imposed by or pursuant to the Regulations of the Department of Health, Education and Welfare (45 CFR Part 181) issued pursuant to the title, to the end that no person shall, on the ground of race, 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 will not maintain an approved housing list nor assume any responsibility for student behavior off-campus.

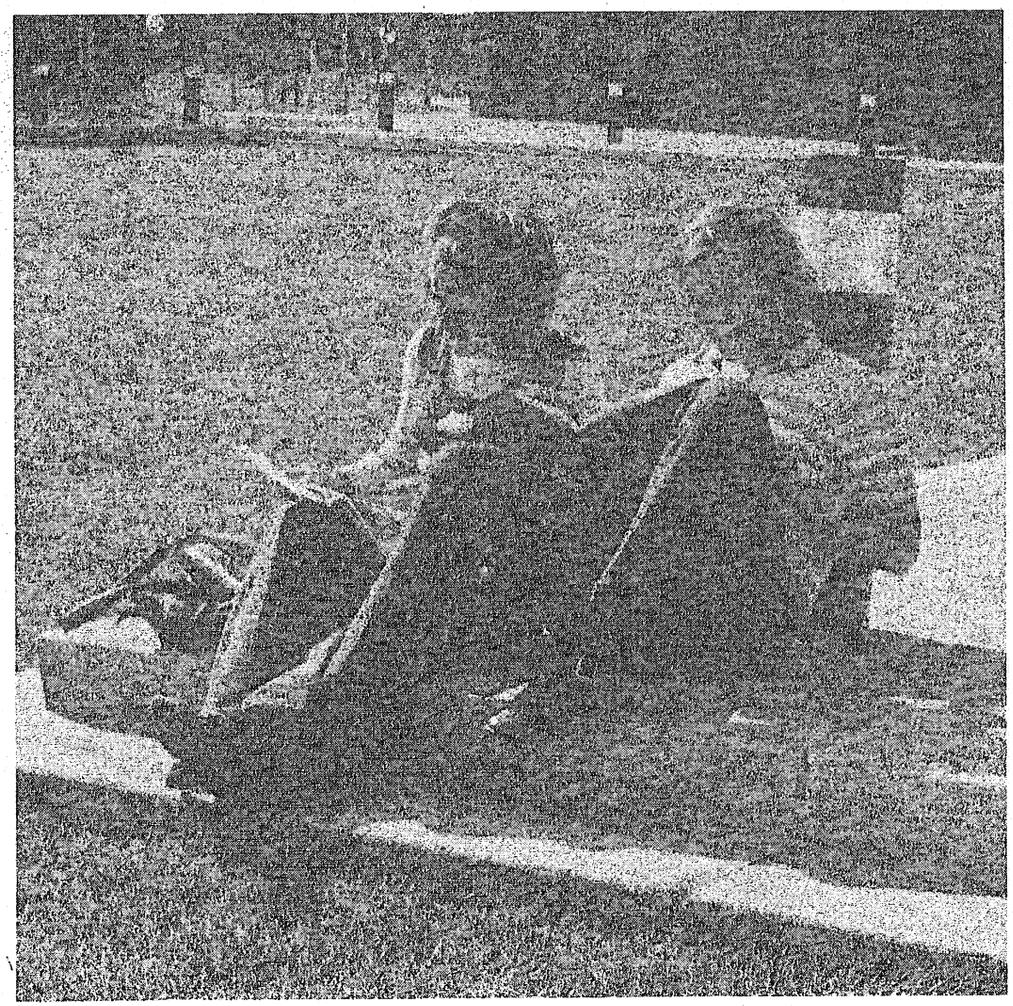
SMOKING, GAMBLING, ALCOHOL AND DRUG ABUSE

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 fulltime employment upon leaving the College.



EDUCATIONAL MEDIA CENTER
SERVICES

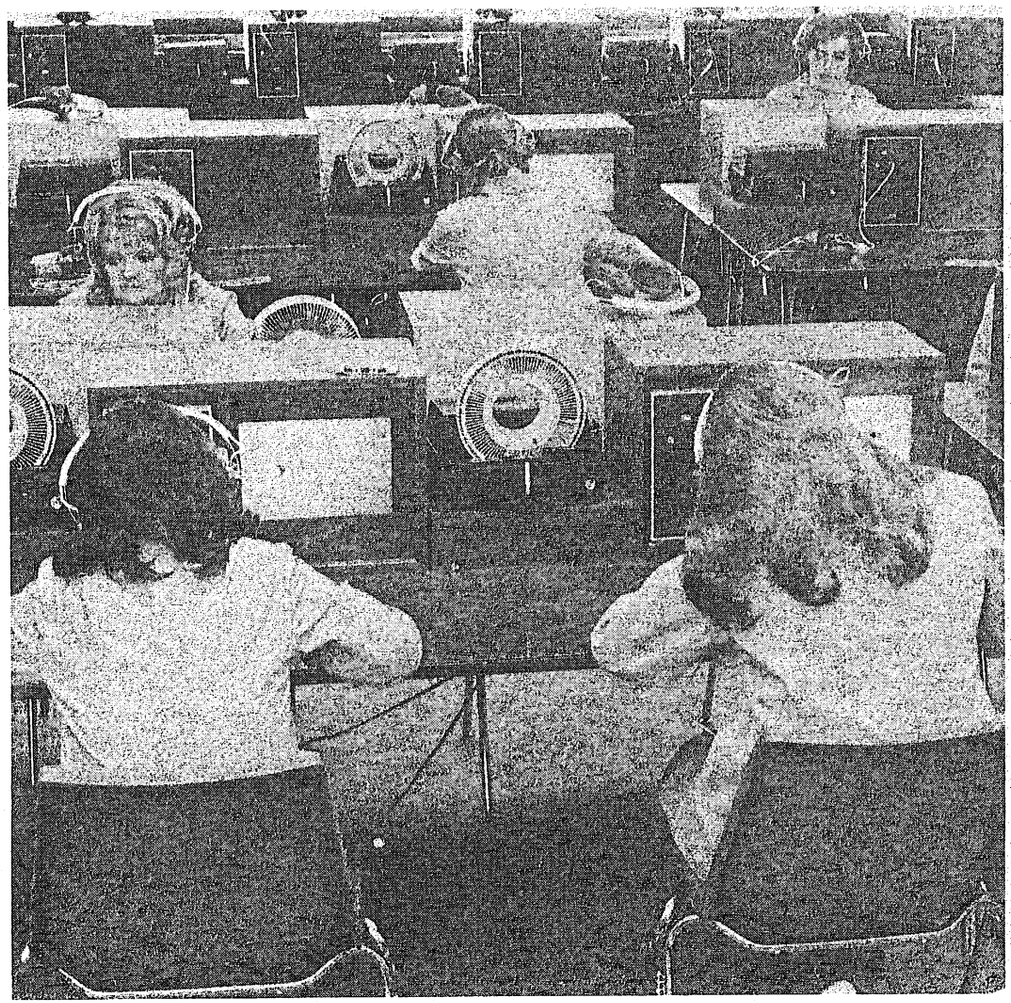
Library services in the College are the responsibility of the Educational Media Center. The EMC, however, is not just a library; it is a service division organized to provide comprehensive media services to the students and staff of the College. The EMC has three sections: the Media Production Section, the Word Production Section, and the Library. The Media Production Section produces audio and visual materials for use throughout the College. Once material has been produced it becomes the responsibility of the Library to make provisions for its use. The Word Production Section provides stenographic, printing, and duplicating services to the College staff.

LIBRARY COLLECTION

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 media needed in the College. Over 22,000 books, 500 current periodicals, over 60,000 documents on microfiche, plus hundreds of slides, video and audio recordings, and other media 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. There is no card catalog. Materials are organized according to the Library of Congress classification.

The EMC produces many slides, tapes, films, etc., for use in instruction. Frequently these materials are made available to students to use independently, supplementing classroom instruction with time spent viewing and listening on the equipment provided in the Library as well as at other locations on the campus.

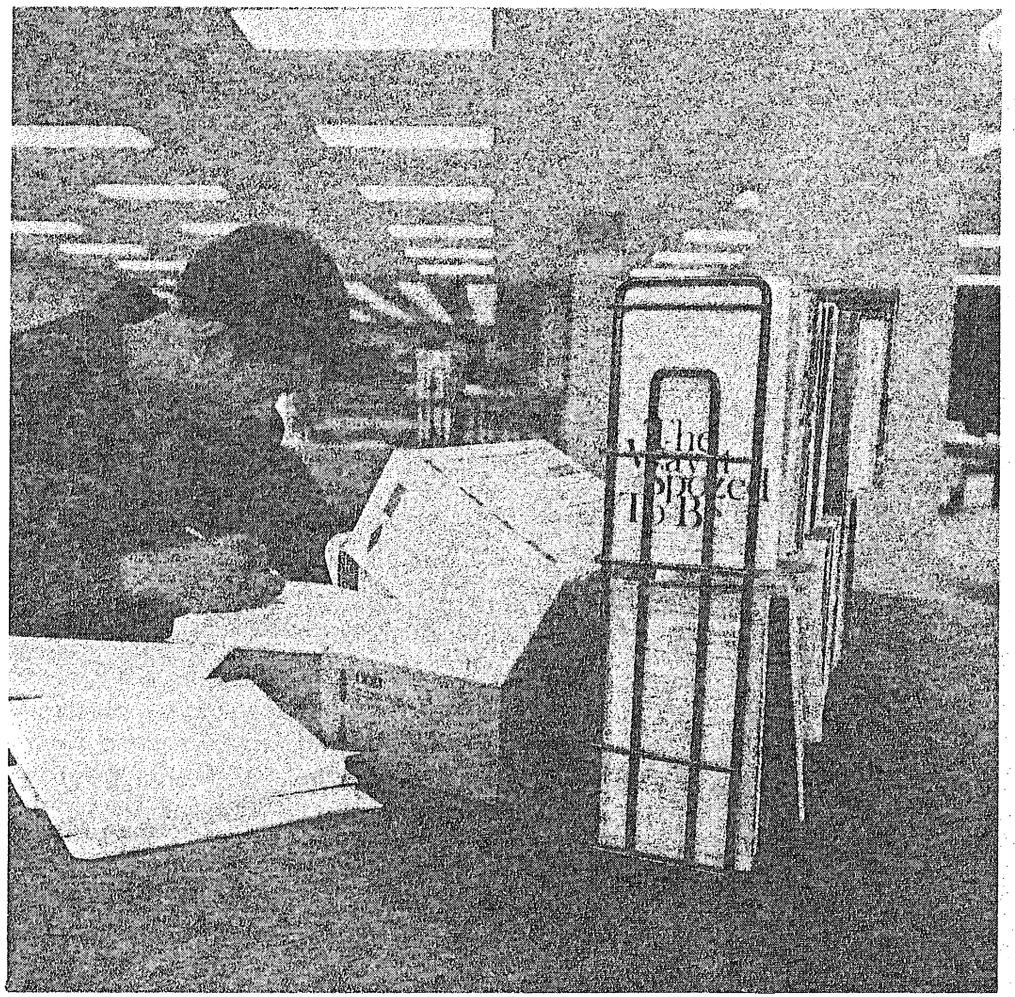


Services

In addition to assisting students and staff in locating and using media, the librarians select media for inclusion in the collection, frequently upon the recommendation of staff or students. They also compile bibliographies for instructors. Other staff members arrange for film showings, video and audio recordings, and other such activities. When the library does not have needed materials, the staff will secure books and photocopies of magazine articles from other libraries for students and staff.

COLLEGE LEARNING CENTER

The College Learning Center (CLC), located on the second floor of the Educational Media Center, contains basic learning services; a Hearing Impaired Program; the program for General Educational Development (GED); and the Adult Basic Education (ABE) Program; and the English as a Second



Language program. CLC services are available to all individuals of the community as well as to students enrolled at JCCC.

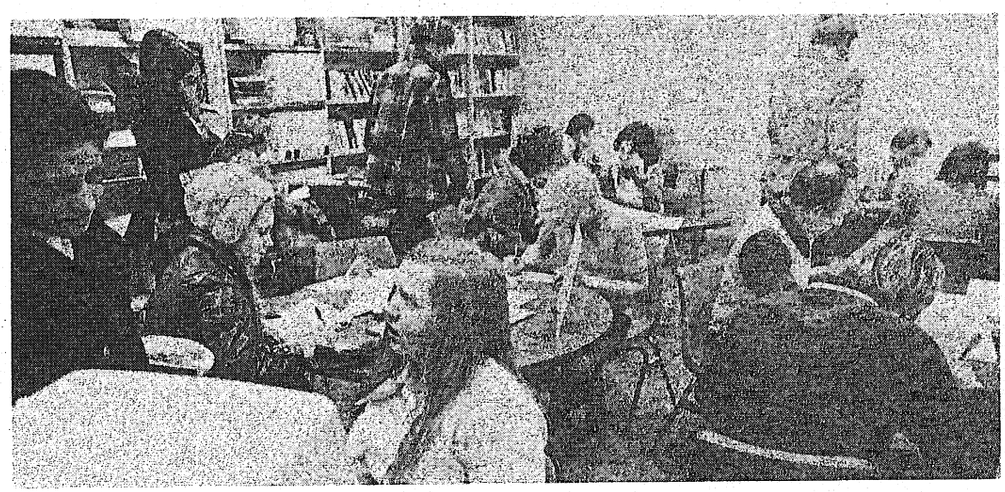
The learning services provided by the College Learning Center include improving reading rate and comprehension; phonics; study skills, memory improvement; spelling, vocabulary; in mathematics, science, social science, communications, and foreign languages skills.

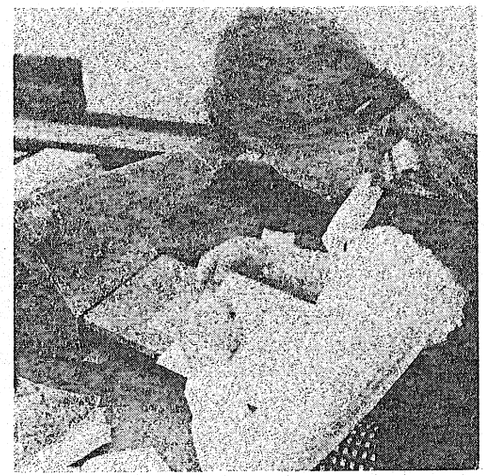
Diagnostic testing is conducted in order to develop an appropriate program of individualized instruction.

JCCC students may receive college credit or they may use the CLC on a no credit basis.

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. See page for more information.

GED Program

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

English as a Second Language

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

ADULT CONTINUING EDUCATION

SCHEDULE OF CLASSES

A separate schedule, giving the time, day, fees and location of classes is printed and made available prior to each term.

PARTICIPANTS

Any person 18 years of age or older may enroll in Adult Continuing Education classes by filling out the registration form and paying the class fee. As a general rule, these students are enrolled as special students and are not required to complete the regular admission procedure of the College. All adults may enroll in any listed class regardless of class location or student residence. Adults who have not completed four years of high school are invited to register. Some courses will require a degree of experience or skill as noted in the course description.

CREDITS AND GRADING

Most classes are not for college credit and the work and progress of the student are not graded.

COUNSELING

Student personnel services are available to those enrolled in the Adult Continuing Education program. The counseling service offers assistance to the individual by helping him to plan a program, select courses, and work toward the fulfillment of educational and occupational goals. For information concerning work in a specific subject, students may consult the instructor of the class in which they may be interested.

CERTIFICATES

When requested by the student, and approved by the instructor, a Certificate of Completion will be awarded to those who meet minimum attendance requirements.

INSTRUCTORS

The Adult Continuing Education staff includes instructors from the College, from nearby colleges and schools, persons from business, in-

dustry, and other areas of specialization.

OFF-CAMPUS ATTENDANCE CENTERS

Classes may be offered anywhere in Johnson County provided that there is sufficient interest and arrangements can be made for suitable facilities and a competent instructor.

FEES

The Adult Continuing Education program is largely self-supporting. Fees will be as low as operational costs will allow.

DAY OR EVENING CLASSES

Courses are offered at times best suited for presentation. These hours are dependent upon available facilities and when feasible are established to best serve the student or for the convenience of a particular group.

SHORT-TERM CLASSES AND SPECIAL PROGRAMS

In addition to regularly scheduled classes, Adult Continuing Education offers special activities for adults on a short-term basis. Any club, organization, business, or group of individuals desiring educational services should contact the Adult Continuing Education Office and make their needs known. The Director of Adult Continuing Education will make arrangements to work with groups in the development of specific programs or courses.

ADDING NEW COURSES

The Adult Continuing Education Office will organize and administer any socially acceptable course for which a competent instructor, equipment, and room can be secured. Inquiries concerning new courses or programs should be directed to the Director of Adult Continuing Education. If a reasonable number of persons is interested, a class can begin at any time during the school year.

COURSES

The following are representative of the various categories of Adult Continuing Education:

- Business and Finance
- Office Skills
- Physical Education
- Creative Arts & Crafts
- Foreign Language
- Health and Safety
- Language Arts
- Leisure Skills
- Aviation
- Recreation
- Home and Family
- High School Completion
- GED Preparation
- Adult Basic Education
- Industrial Education
- Cultural Affairs
- Discussion Groups
- Special Interests
- Practical Know-How
- Driver Education

COMMUNITY SERVICES

JCCC is committed to involving the community in the College and the College in the community. To fulfill this commitment, JCCC works with citizen's committees and cooperates in the use of community resources, talents and opportunities.

USE OF FACILITIES

The College offers the community the use of its facilities and the services of its staff when the academic calendar permits. Contact the office of Community Cooperation for more information.

COLLEGE INFORMATION

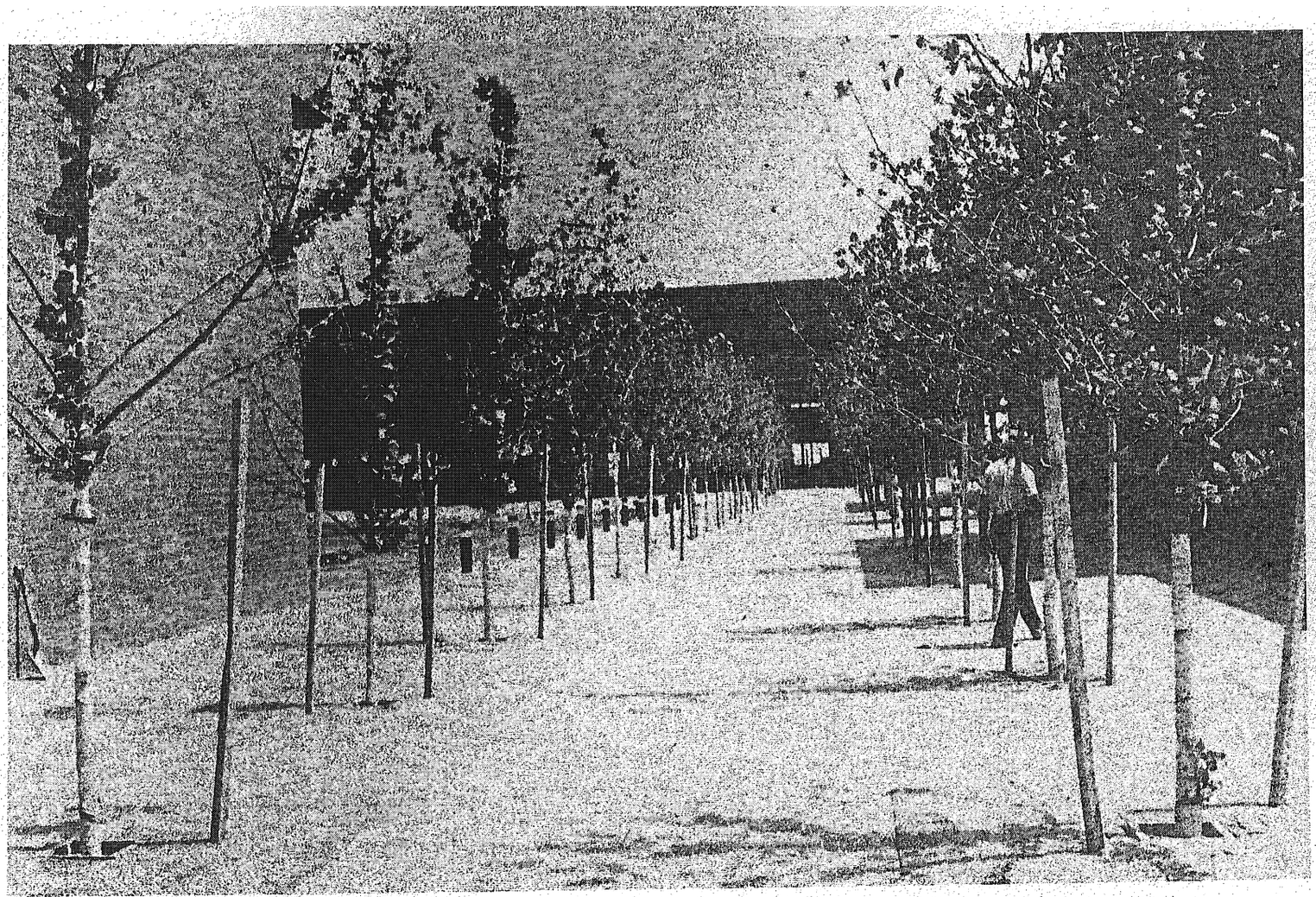
Information about the College and about special programs of general interest is offered to the public through a variety of media. Journalism students prepare a section of the "Johnson County Herald" which is published weekly and enjoys a wide distribution. In addition, visits and tours of the campus are encouraged.

COMMUNITY DEVELOPMENT

The College has developed extensive county, metropolitan and state information which is available to the public. These data and associated computer programs can be useful to organizations and agencies involved in long range planning. Additionally, the College staff will help in the necessary planning preparatory to conducting a survey, the selection of the sample for the survey and the mechanics of the survey itself.

SPEAKERS' BUREAU, PROGRAM PLANNING

Organizations may obtain help in locating speakers as well as assistance in planning programs and service projects by contacting the office of Community Cooperation.



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PROGRAMS TO MEET SPECIAL NEEDS

OPERATION QUICK STEP

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

PROGRAMS FOR WOMEN

JCCC's VIEWS for Women programs are designed to bring information, encouragement, support and exploration opportunities to women who are interested in the many options open in today's evolving society . . . both for personal fulfillment and for community/career involvement. Scheduled throughout the year, the programs include panel discussions, guest speakers, films, and organized class sessions, as well as counseling and assistance in finding paid or volunteer employment. In addition, following the precept that the "home should be the center but not the boundary," educational experiences are offered which are designed to aid in improving basic understanding and communication skills within the family and considering the individual and interdependent needs of each family member.

SENIOR CITIZENS

The special needs and interests of senior citizens in the community have become an area of growing consideration by the College. JCCC invites and encourages senior citizens to be active participants in the wide varity of College activities. Programs are provided on campus with special arrangements to attract senior citizens — including provision of some special bus transportation. The College also has programs in various locations throughout the county in coopera-

tion with senior citizens and their organizations. To develop better understanding of this growing segment of our population, JCCC also provides education regarding the psychology of aging, pointing out the potential and necessity for lifelong development and involvement. JCCC has been working with other agencies in the community to establish a county advisory committee of senior citizens and the groups who serve their interests. For more information concerning JCCC's cooperation with senior citizens, contact the Office of Community Cooperation.

MADCOP (Marine Associate Degree Completion Program)

The MADCOP program provides selected enlisted Marines with the opportunity to earn an Associate of Arts degree by attending JCCC as a full-time student. The U.S. Marine Corps pays all costs of tuition, books, laboratory fees and all other required fees for up to 21 consecutive months of instruction plus normal pay and allowances. Interested Marines should contact their Commanding Officer for more detailed information.

SOC (Servicemen's Opportunity College)

JCCC is recognized by the American Association of Community and Junior Colleges as a Servicemen's Opportunity College. This means that JCCC provides educational opportunities for active duty service personnel and their dependents, recognizing the exigencies of military service. JCCC provides special services to meet the needs of the serviceman, including a "contract for degree" option and a transfer policy that is generous in recognition of traditional and non-traditional learning obtained at other institutions. Active duty servicemen who are interested in educational opportunities at Johnson County Community College should contact the Counseling Office for more information.

GED (General Education Development)

The GED program offers students who did not graduate from high school the opportunity to earn a high school equivalency certificate. The GED certificate is accepted in most areas on the same basis as a high school diploma. To qualify for the certificate, the student must receive a satisfactory score on a series of examinations based on high school subjects. The examinations are offered every month through the College Counseling Office. To help students who wish to prepare for the examination, JCCC offers GED preparation classes, individualized instruction through the College Learning Center and tutoring on an individual basis. For more information about the GED program, contact the Counseling Office.

PROGRAMS FOR THE HEARING IMPAIRED

JCCC opens as many programs as

possible to the hearing impaired student. Students whose hearing is impaired attend classes with hearing students and are offered special assistance in the form of interpreters, tutors, note-takers and preparatory classes designed especially for the hearing impaired student in communications and mathematics. When the hearing loss of the student is not severe, special equipment to augment hearing is provided. Classes are arranged to accommodate both the oral and manual student. Some instructors use the simultaneous method (speaking and signing at the same time) while others use interpreters. The College employs only interpreters listed with the National Registry of Interpreters for the Deaf. Additionally, the College offers training in sign language to any individual interested in this method of communication. For more information concerning programs for the hearing impaired, contact the College Learning Center.

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 Adult Continuing Education.

MINI COURSES

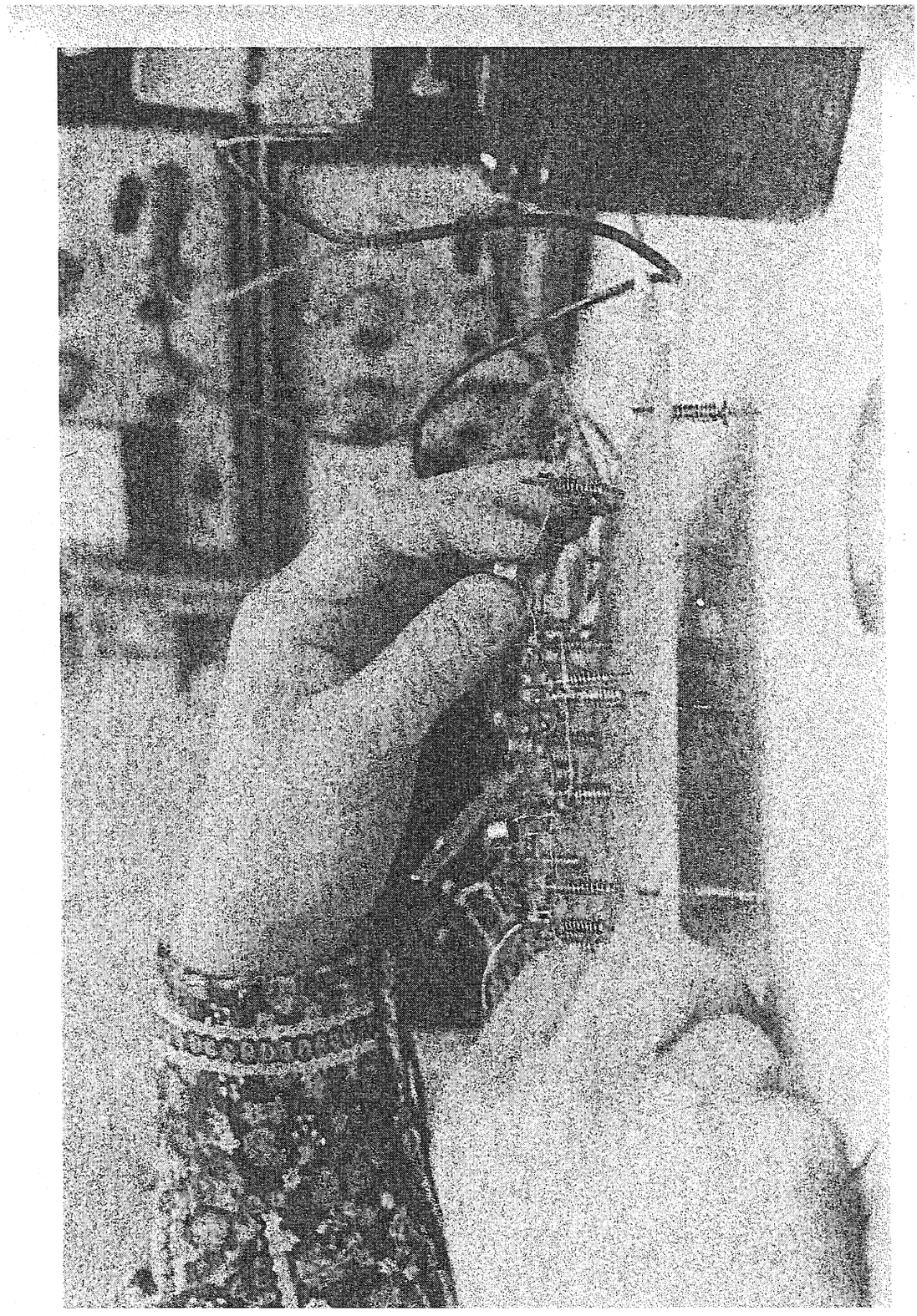
Many of the regular credit courses have been designed to be offered as Mini Courses which offer an unusual educational opportunity for those students who are interested in obtaining instruction in less than a semester. Students who for some reason are forced to enroll late may earn regular semester credit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

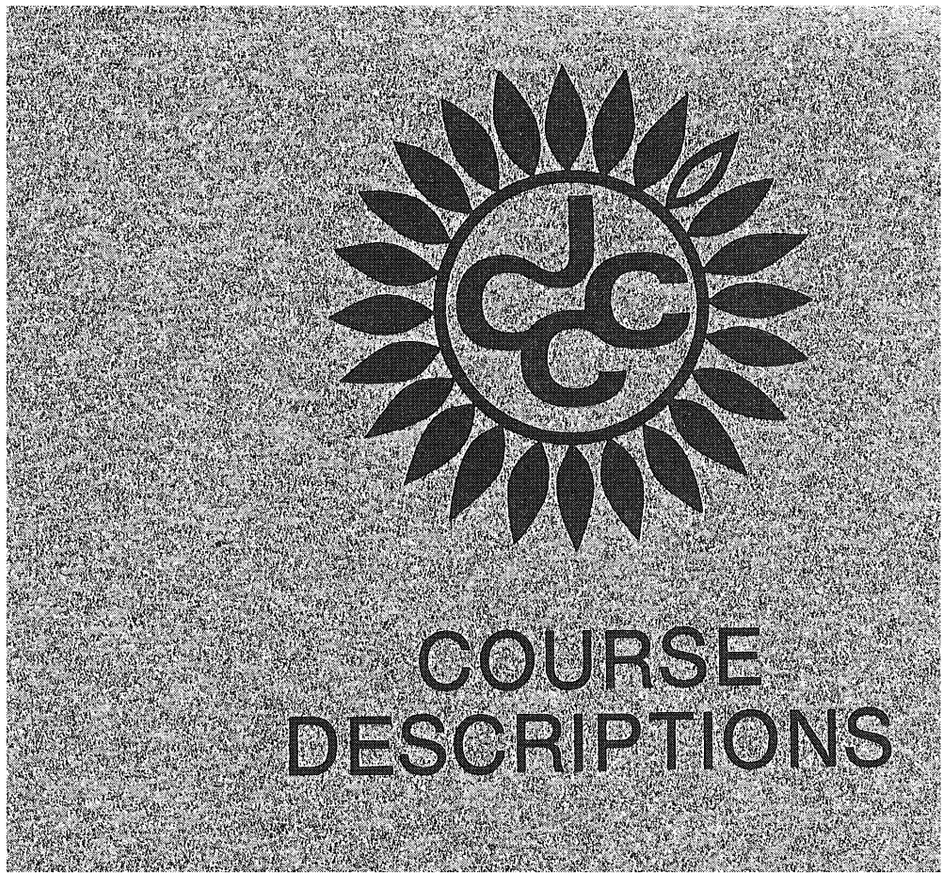
CERTIFICATE COURSES

Many credit and non-credit courses are offered at JCCC which are specifically designed to help a student update and improve his skills or to learn new ones. Such practical, occupationally oriented training may better suit the needs of many students. Graduates of these courses may receive a Certificate of Proficiency or a Certificate of Completion. Contact the office of the Dean of Instruction for more information about specific Certificate Courses.

ON-SITE TRAINING AND EDUCATION

On-Site Training and Education is another dimension of the services to the community offered by Johnson County Community College. When there is sufficient need, courses, seminars, workshops and institutes including those listed in the College Catalog and in the Adult Continuing Education Bulletin will be offered on the premises of any business or industry in the community. If any firm has a specific need for training or education for their employees, the College staff will help design a program to meet that need. For further information about On-Site Training, contact the office of the Dean of Instruction.




COURSE
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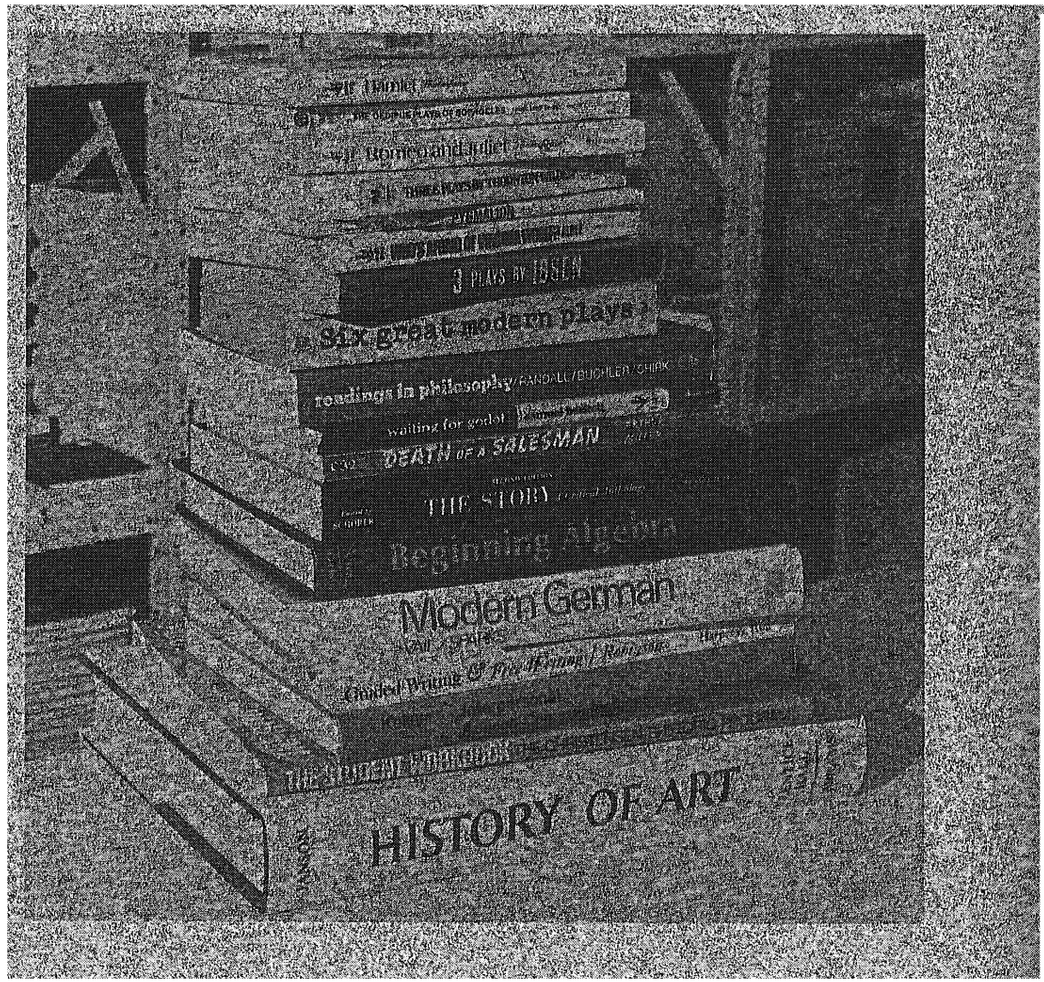

3 PLAYS BY IBSEN
Six great modern plays
readings in philosophy
waiting for godot
DEATH OF A SALESMAN
THE STORY
Beginning Algebra
Modern German
HISTORY OF ART

Basic to the philosophy of Johnson County Community College is the recognition that each individual has unique abilities, interests and goals. Consequently, each individual should have a unique instructional program designed to meet his needs.

In the following section of the catalog, the various areas of College curriculum are described. There are no program plans listed because each student at JCCC will have an individualized program plan prepared for him in cooperation with a counselor before enrollment takes place.

Program possibilities are practically unlimited. A student at JCCC may be interested in a program which includes courses from several disciplines or he may design a program in a specific area of concentration.

In order to meet the requirements for professional certification or for transfer to a specific four-year institution, individual programs can be arranged. However, even within these programs a certain amount of flexibility may exist, particularly in regard to credit for previous experience. For this reason, individuals will want to develop their program plans when they meet with one of JCCC's counselors. The counselor works closely with the instructional staff and will be able to assist the student in planning a program that will meet his needs.

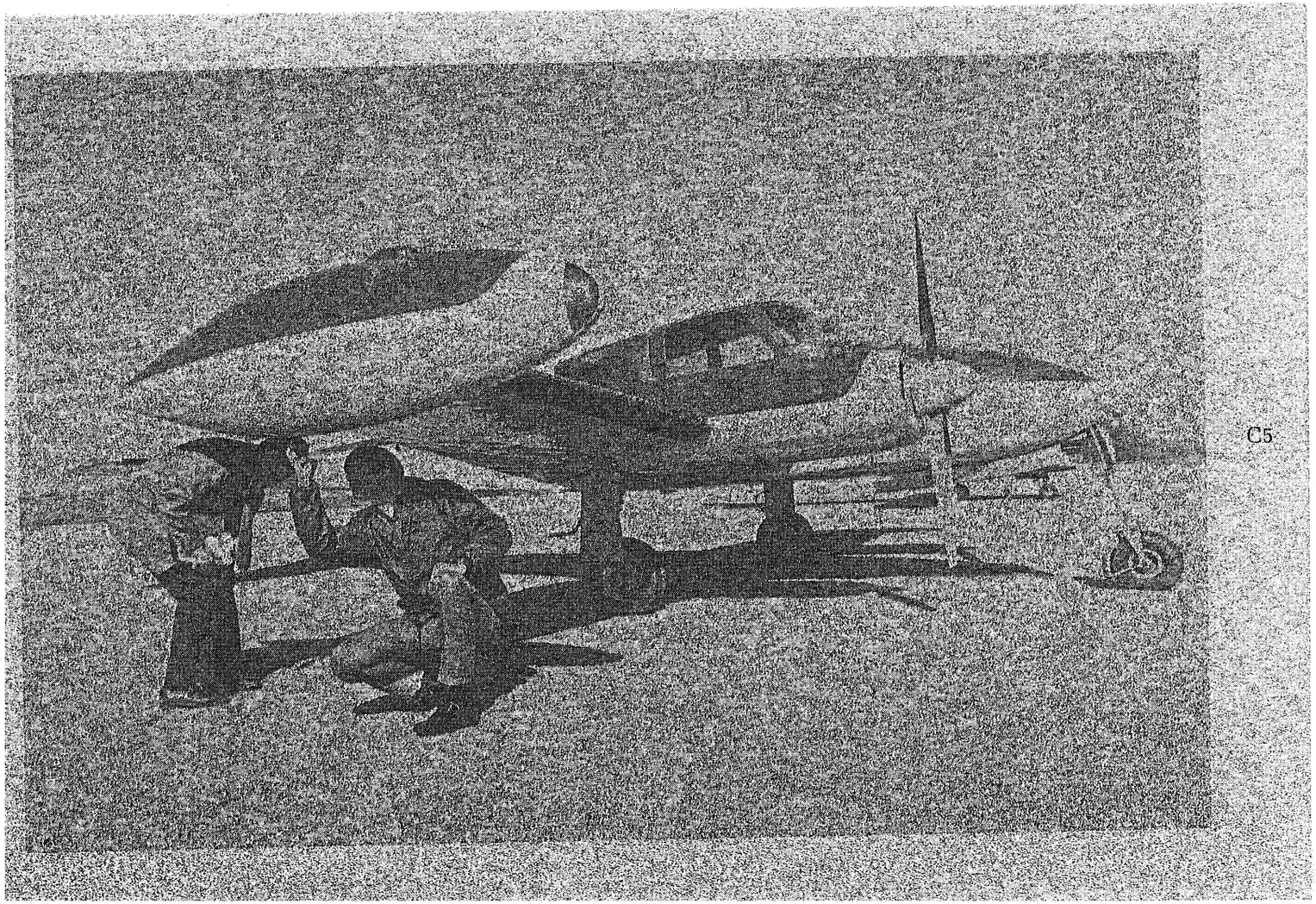
AVIATION

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

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

Through the division of Adult Continuing Education at the College, various courses are also offered in the field of aviation. For example, intensive ground schools are offered throughout the year for the student who wishes to up-date his skills or to brush-up before taking the FAA examinations.

An individual who is interested in any aspect of aviation should visit with a JCCC counselor concerning the many options available at JCCC in the area of aviation. Each student will have an individualized program designed especially to meet his needs during the student/counselor conference.



C5

AV 101 Private Pilot **1 Credit**

Prerequisite: FAA third-class medical certificate

A basic flight course providing flight instruction to prepare the student to qualify for the FAA private pilot rating. A total of 38 dual and solo flying hours will be provided. Flight hours by arrangement.

AV 102 Commercial Pilot I **1 Credit**

Prerequisites: AV 101 and FAA second-class medical certificate

The first of two phases of flight training in preparation for the FAA commercial pilot's rating. Emphasis will be on the procedures and maneuvers required for the commercial rating. A total of 60 hours of dual and solo flying hours will be provided. Flight hours by arrangement.

AV 105 Private Pilot Ground School **3 Credits**

The study of meteorology, navigation, theory of flight, radio communication and rules and regulations necessary to meet the training requirements for the FAA private pilot written examination. Class meets three hours per week.

AV 106 Commercial Ground School **3 Credits**

Prerequisite: AV 105 or an FAA private pilot rating

In-depth study of meteorology, radio navigation, instruments, flight information publications, charts, aircraft performance characteristics, rules and regulations, aircraft and engine operations, and cross-country flight planning necessary to prepare for the FAA commercial pilot written examination. Class meets three hours per week.

AV 110 Introduction To Aviation **3 Credits**

Introductory course covering the development of aviation and its importance in the American economy. Special emphasis on the history of aviation, the airlines, general aviation and the aviation industry. Class meets three hours per week.

AV 112 Introduction To Powerplants **3 Credits**

Introduction to the fundamental principles of aircraft engines, operation, basic construction, induction, ignition and lubrication systems. Designed to give pilots a better understanding of the powerplant. Class meets three hours per week.

AV 113 Introduction To Airframes **3 Credits**

An examination of methods and materials used in the construction of airframes. Emphasis is placed on safety and inspection techniques. Class meets three hours per week.

AV 115 Avionics **3 Credits**

Introductory course designed to give pilots an understanding of aircraft electrical systems and airborne avionics equipment. Class meets three hours per week.

AV 201 Commercial Pilot II **4 Credits**

Prerequisite: AV 102

Continuation of Commercial Pilot 102. The second half of the two phase flight and ground training necessary to complete the requirements for the FAA commercial pilot's rating. Hours by arrangement.

AV 202 Instrument Pilot **3 Credits**

Prerequisite: AV 101 or AV 201

This course of flight training leads to the FAA instrument rating. Actual instrument practice is given on holding patterns, time-distance problems, ADF and VOR tracking procedures, enroute and terminal navigation procedures. All flight time is with a certified flight instructor. Hours by arrangement.

AV 203 Multi-Engine Pilot **2 Credits**

Prerequisite: AV 101 or AV 201

This course leads to the FAA multi-engine pilot rating. All flight training is given in a modern twin-engine aircraft and is designed to provide the advanced pilot a greater depth of aircraft experiences. Hours by arrangement.

AV 206 Instructor Pilot **3 Credits**

Prerequisite: AV 201

This course prepares the student with teaching and practical experiences that are necessary to qualify for the FAA certified instructor rating. Hours by arrangement.

AV 215 Airport Management **Spring 3 Credits**

A survey and study of the major functions of airport management. Special attention is given to the areas of organization, zoning, financing, planning, safety, and the social-economic effect on the community or region. Class meets three hours per week.

AV 216 Aviation Seminar **3 Credits**

A survey of the "state of the arts" in aviation. Group discussion and reports on equipment, airport development, air traffic control, and other current topics in the field of aviation. Tours and field trips include FAA facilities, manufacturing plants, and airports. Lectures by aviation experts and papers on pilot techniques are also used as bases for class instruction. Class meets three hours per week.

AV 217 Air Transportation **Spring** **3 Credits**

The development and present status of air transportation. The organization and function of the Federal Aviation Agency and the Civil Aeronautics Board are studied. Class meets three hours per week.

AV 219 Ground Instruction Techniques **3 Credits**

Investigation of teaching techniques and supervised practice in the teaching of ground school aviation subjects. Class meets three hours per week.

BUSINESS

The area of business within the College curriculum offers a wide variety of educational opportunities. Career possibilities include accounting, retail advertising and display, fashion merchandising, news reporting, advertising copy writing, marketing management, personnel management, data processing, sales or one of the many secretarial options, including legal, medical and certified professional secretary.

Career programs have been designed within many of these business areas. The programs are planned to lead directly to employment and are developed in accordance with the needs of the community as expressed through advisory committees and through need surveys of the potential employment area. The curriculum is flexible, however, and a student may, with his counselor's assistance, develop a program that will include courses from several areas.

Other individuals may be interested in taking courses at JCCC which will transfer to a four-year college or university should they plan to work towards a baccalaureate degree in business. The counseling staff at JCCC has carefully examined the programs of other institutions and can assist each individual in selecting those courses which will most nearly meet his requirements.

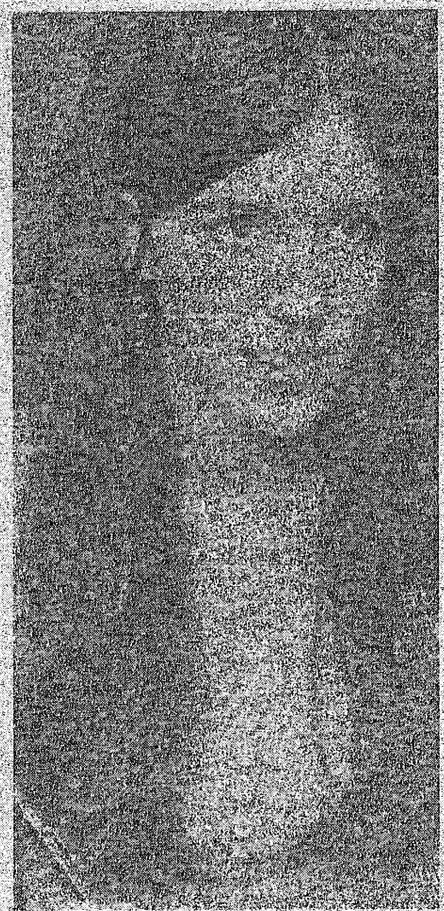
An interesting aspect of many of the business programs is the availability of Field Study. Field Study is an on-the-job work experience program which allows the student to gain actual experience in a career field of his choice. Placement for this training is made through the specific career program coordinator 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 fifteen or more work hours per week.

Audio-Visual Tutorial (AVT) instruction has been developed to supplement classroom teaching in many of the business courses. Individual learn-

ing units consisting of films, slides, tape recordings and written material are used by the students. This provides for learning on an individual basis with instructional assistance continuously available. Students may enroll in most AVT courses at any time during the year; instruction and practice periods are available between the hours of 8:00 a.m. and 10:00 p.m. daily.

The Adult Continuing Education division also offers many business courses. In cooperation with the Small Business Administration, courses in financial management, controlling retail theft and income tax workshops are offered throughout the year. In addition, office skill courses are available which can help an individual brush-up on necessary skills before attempting to enter the job market.

For the student with a strong interest in the area of business, a visit with one of the counselors at JCCC will offer insights into the many possibilities available. Each student, in cooperation with his counselor and the business instructional staff, can design an individualized program to meet his needs.



BUS 100 Applied Accounting Procedures **3 Credits**

Introduction to basic accounting procedures, with an emphasis on the daily records necessary in maintaining a small firm. Designed to meet the needs of the individual operating his own firm with the help of an outside accountant for the preparation of periodic statements. Does **not** prepare the student for Accounting II (BUS 102). Class meets three hours per week.

BUS 101 Accounting I **3 Credits**

Introduction to accounting fundamentals. Emphasis on the recording and analysis of transactions, use of journals, ledgers, and financial statements. A Practice Set is required of students. Class meets three hours per week.

BUS 102 Accounting II **3 Credits**

Prerequisite: BUS 101 or by permission

Continuation of Accounting 101 with increased emphasis on interpretation and use of accounting data by management. Continuation of accounting theory application for partnerships and corporations including preparation and use of financial statements. Class meets three hours per week.

BUS 103 Principles Of Journalism **3 Credits**

A study of journalism, its role in our society, and the social responsibility 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.

BUS 104 News Gathering And News Writing **3 Credits**

An evaluation of news and how news is gathered, written and published. Practical experience includes interview techniques and in-depth writing. Class meets three hours per week.

BUS 105 Fundamentals Of Advertising **3 Credits**

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.

BUS 106 Advertising Copy Writing **3 Credits**

Prerequisite: BUS 105 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 will execute an advertising campaign. Class meets three hours per week.

BUS 111 Introduction To Business **3 Credits**

Course acquaints beginning students with modern business enterprise. Functional areas such as marketing, personnel, accounting, production, etc., are emphasized as well as an examination of the relationship of business to its environment. Class room activities include discussion groups, lectures and case discussion. Class meets three hours per week.

BUS 114 Personal Finance **3 Credits**

Upon completion of this course, students will be able to apply techniques of money management and the preparation of a spending plan. The student will be able to manage his income through the proper use of consumer credit, buying and financing home loan real estate, shopping for and financing automobiles, food planning and food shopping, knowing what types of health insurance coverages are available in order to choose the best individual coverage, understanding of social security benefits and their effect on life insurance planning, buying of stocks, bonds and mutual funds, and the use of general estate planning. Class meets three hours per week.

BUS 131 Programming Fundamentals **3 Credits**

Prerequisite: BUS 132 or concurrent enrollment

Prepares an individual for enrollment in any one of the programming language courses. The viewpoint is primarily technical; Keypunch and terminal usage are covered at an advanced level; exposure to selected pieces of unit record equipment; flowcharting and BASIC computer programming are stressed; and digital computer equipment, data coding and numbering systems are covered. Class meets three hours per week.

BUS 132 Business Data Processing **2 Credits**

The uses of computers in government and business and the social and economic implications of computers are considered. The viewpoint is primarily nontechnical. Student will learn how to operate a keypunch and a terminal linked to a computer. The student will write and run simple computer programs. Class meets two hours per week.

BUS 133 Cobol I **Spring** **3 Credits**

Prerequisite: BUS 131

Use of COBOL programming language in solving problems. Emphasis is placed upon development of a complete understanding of the function and use of statements in the four divisions of ANS COBOL. Integrated applications of this knowledge in programming typical problems using COBOL and the data processing facilities are also stressed. Class meets three hours per week.

BUS 144 Fortran **Spring 2 Credits**

Prerequisites: BUS 131; MATH 106 or MATH 116; MATH 110 (MATH 110 may be concurrent).

Use of FORTRAN programming language in solving problems. Emphasis is placed upon the complete understanding of the vocabulary and grammar of ANS FORTRAN. Integrated application of this knowledge in programming typical problems using FORTRAN and the data processing laboratory facilities are also stressed. Class meets two hours per week.

BUS 151 Shorthand **3 Credits**

Prerequisite: BUS 155 or concurrent enrollment or by permission

Objectives are to learn Gregg (Diamond Jubilee) Shorthand through word building and phrasing. Class is instructor directed but includes programmed materials. Student is able to work at own ability level. Course includes scheduled use of Secretarial laboratory.

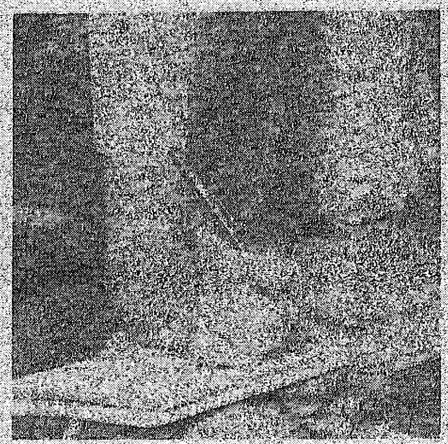
BUS 152 Dictation And Transcription **3 Credits**

Prerequisites: BUS 151 and BUS 155 or by permission

Objectives are to increase the speed the student can write shorthand from dictated material and to improve ability to transcribe notes. Class is instructor directed but includes programmed materials. Student is able to work at own ability level. Course includes scheduled use of Secretarial laboratory.

BUS 155 Beginning Typing **3 Credits**

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.



BUS 156 Intermediate Typing **3 Credits**

Prerequisite: BUS 155 or by permission

Emphasis on speed and accuracy in typing business letters, manuscripts, memoranda, tabulated reports, and financial reports. Periodic production and performance tests. Individualized instruction and scheduled use of Secretarial laboratory.

BUS 157 Production Typing **3 Credits**

Prerequisite: BUS 156 or equivalent

Development of high degree of proficiency in production typing. This course includes instruction on automatic typewriters and transcription equipment. Individualized instruction and scheduled use of Secretarial laboratory.

BUS 158 Legal Secretary I **2 Credits**

Provides legal secretaries and potential legal secretaries professional knowledge concerning various phases of the law office. Course includes topics recommended by the National Association of Legal Secretaries. Students wishing to prepare for the PLS examination should consult with the instructor prior to enrollment. This class is designed as a general overview of the field of law as it applies to a legal secretary. Also of interest and value to students considering law as a career. Class meets two hours per week.

BUS 159 Legal Secretary II **2 Credits**

Prerequisite: BUS 158 or one year's experience as legal secretary.

A continuation of Legal Secretary I. Particular emphasis placed on wills and probate, real estate transactions, and law library management as they apply to the legal secretary. Class meets two hours per week.

BUS 161 Records Management **2 Credits**

A study of 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 two hours per week.

BUS 170.1 - 170.5 Retail Field Study **3 Credits (each semester)**

Courses are designed to give the student work experience at an approved retail training station. Emphasis will be on coordinating the theory and knowledge acquired in the classroom and using it to solve case problems, discussion problems, situations experienced on the job, and hypothetical situations related to on-the-job experiences. Feature areas of interest for each section will be: 170.1 - Fitting yourself for business, 170.2 - Sales promotion and its purpose, 170.3 - Physical distribution, 170.4 - Management decision making, 170.5 - Marketing research. Seminar meets two hours per week. Students must acquire a minimum of 15 hours on-the-job training per week. Students must complete from 9 to 15 credit hours of field study by arrangement with coordinator.

BUS 176 Retailing **3 Credits**

Course gives the student an understanding of retail store organization and operation. Location and layout, retail buying techniques, human relations employee supervision, pricing and merchandising are explored. Class meets three hours per week.

BUS 177 Salesmanship **3 Credits**

Course covers the three main areas of selling — speciality, wholesale, and retail. Selling principles and tactics are developed into a wide variety of selling situations. Personality development is stressed in addition to the practical steps in making sales. Actual sales talks and demonstrations are an integral part of the work. Class meets three hours per week.

BUS 178 Fashion Fundamentals I **3 Credits**

Course acquaints student with careers in the fashion industry along with fashion history, fashion trends, fashion creators in Europe and America, fashion terminology and fashion periodicals. Student develops a total concept of fashion and its application to business. Class meets three hours per week.

BUS 179 Fashion Fundamentals II **Spring** **3 Credits**

Prerequisite: Algebra I and BUS 178 or by permission

Course is designed to acquaint students with the basics of merchandising, the role of a buyer, and buying principles. Emphasis is on technical processes in merchandising, merchandising math, and planning for profit. Class meets three hours per week.

BUS 180 Retail Advertising And Display **3 Credits**

Course deals with modern techniques of advertising and display. Topics covered include media selection and use, copy writing, ad layout and illustration, show-card writing, display techniques, sales promotion, budgeting and scheduling. Class meets three hours per week.

BUS 181 Textiles **2 Credits**

Study of natural and man-made textile fibers, weaves, finishes and their comparative characteristics. Knowledge and skills in selling techniques along with care and use of textiles are studied. Class two hours per week.

BUS 185.1 - 185.5 Fashion Field Study **3 Credits (each semester)**

Prerequisite: Application and Admission to the Fashion Merchandising Program

Courses are designed to give the student work experience in an approved fashion training station under faculty supervision. Emphasis is on relating classroom learning experience with actual on-the-job training. Specific areas of concentration include job orientation and sales effectiveness, case studies in business law, fashion publicity and media, the development of a promotional program for a hypothetical store situation, and individual study and preparation to achieve career objectives in fashion. Seminar meets two hours per week. Students must complete from 9-15 hours of field study by arrangement with the program coordinator.

BUS 191 Survey Of Economics **3 Credits**

This course is a survey of both micro and macro economics and is designed primarily for the student who is planning on taking only a single course in economics. Included in the topics covered in this course are: elements of supply and demand, national income accounting, money and banking, and market structures.

BUS 200 Personnel Management **3 Credits**

Study of the 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.

BUS 201 Economics I **3 Credits**

Prerequisite: By permission

Study of the basic economic problems of resource allocation, national income determination, money and banking, fiscal policy and international trade and finance. Class meets three hours per week.

BUS 202 Economics II **3 Credits**

Prerequisite: BUS 201 or by permission

Continuation of Economics 201 with emphasis on supply and demand, theory of the firm and market structures. Class meets three hours per week.

BUS 207 Journalism Field Study **3 Credits**

Prerequisite: By permission

Actual work experience at an approved training center under staff supervision. Emphasis is placed on the application of good writing techniques to producing news and/or advertising copy. Class meets for two hours and a minimum of 15 hours of on-the-job training per week by arrangement.

BUS 208 Journalism Field Study **3 Credits**

Prerequisite: By permission

Actual work experience at an approved training center under staff supervision. The student must be able to develop copy for news and/or advertising and have it published on a paid basis. Class meets for two hours and a minimum of 15 hours of on-the-job training per week by arrangement.

BUS 209 Journalism Field Study **3 Credits**

Prerequisite: By permission

Actual work experience at an approved training center under staff supervision. Emphasis is placed on producing a portfolio of published materials sufficient for the student to pursue his career objective. Class meets for two hours and a minimum of 15 hours of on-the-job training per week by arrangement.

BUS 210 Cost Accounting **3 Credits**

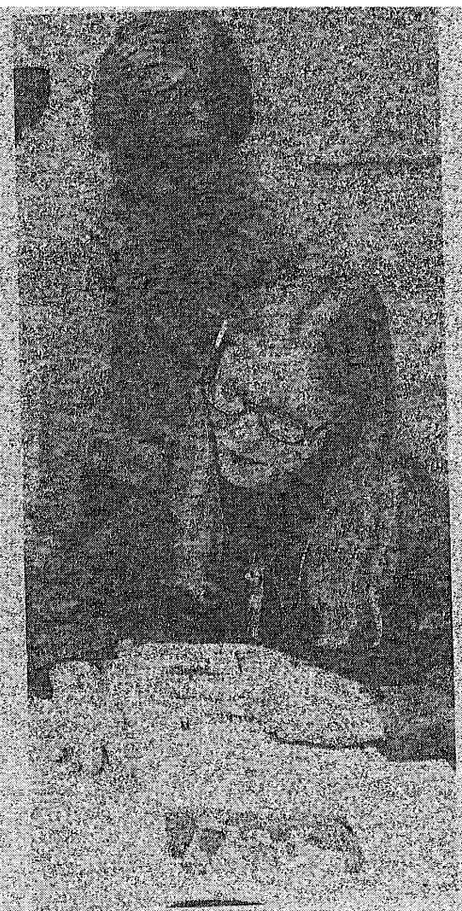
Prerequisite: BUS 102

Allocation of production costs to determine unit cost of goods manufactured and sold and the utilization of such data by management. Class meets three hours per week.

BUS 211 Intermediate Accounting **3 Credits**

Prerequisite: BUS 102

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.



BUS 212 Business Law **3 Credits**

Basic principles of law that apply to business transactions in the present business environment and legal system. Material is related to Uniform Commercial Code. Includes introduction to the study of law, business crimes and torts, contracts, and agency. Case studies are used. Class meets three hours per week.

BUS 213 Business Law **3 Credits**

Prerequisite: BUS 212

Continuation of Business Law 212 and includes negotiable instruments, personal property, real property, secured transactions, corporations, and partnership. Case studies are used. Class meets three hours per week.

BUS 214 Marketing **3 Credits**

Study of problems and policies of manufactures, wholesalers, and retailers in the marketing of goods and services. Channels of distribution, customer relations, functions of sales departments, price policies, and communications are included. Class meets three hours per week.

BUS 215 Managerial Accounting **3 Credits**

Prerequisite: BUS 102

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.

BUS 216 Federal Income Taxes **3 Credits**

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.

BUS 234 Systems Analysis **3 Credits**

Prerequisite: BUS 133

Examination in detail of the principles of systems design and analysis. Brief overview of potential systems for business and industry. Class meets three hours per week.

BUS 235 Data Processing Management **2 Credits**

Prerequisite: By permission

History of computers, input and output techniques, flowchart techniques, concepts of programming to understand how problem solving in business can be accomplished by the computer. Class meets two hours per week.

BUS 242 PL/1 **Spring 2 Credits**

Prerequisites: BUS 133 and/or BUS 144

Use of PL/1 language in solving problems. Emphasis is placed upon the development of a complete understanding of the function and use of the various statements and procedures of PL/1. Integrated applications of this knowledge in programming several typical problems using PL/1 and the data processing laboratory facilities also stressed. Class meets two hours per week.

BUS 243 Assembler Language **Fall 3 Credits**

Prerequisite: BUS 131

Use of Assembler language in solving problems. Emphasis is placed upon the development of a complete understanding of all the commands used in an assembler language. Integrated applications of this knowledge in programming several typical problems using an assembler language and the data processing laboratory facilities also stressed. Class meets three hours per week.

BUS 245 Application Programming **3-6 Credits**

Prerequisite: By permission

Corequisite: BUS 133 or BUS 144 or BUS 243

Work experience in Data Processing through on-the-job training, or recognition and formalization of experience for those already employed. Hours by arrangement.

BUS 246 COBOL II **Fall 3 Credits**

Prerequisites: BUS 133 and BUS 243 (BUS 243 may be concurrent)

Advanced COBOL programming techniques; use of ANS 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. Class meets three hours per week.

BUS 247 Computing Systems **Spring 3 Credits**

Prerequisite: BUS 243 or concurrent enrollment

Basic concepts and principles of a digital computing system. The general framework of the interrelationships between hardware and software and how the whole is controlled is developed and illustrated by a study of a typical digital computing system. Class meets three hours per week.

BUS 248 Teleprocessing **Fall 2 Credits**

Prerequisite: BUS 131

Study of a form of information handling in which a data-processing system utilizes communication equipment. The course is concerned with that part of the system which is external to the central computer. Class meets two hours per week.

BUS 249 Data File Management **Spring 2 Credits**

Prerequisite: BUS 243

Comprehensive coverage of the various file organizations and access methods available. Concepts are integrated into the development of an inquiry data base file system. Study of techniques and potential use of system in industry and business also included. Class meets two hours per week.

BUS 250 Systems Project **2 Credits**

Prerequisites: BUS 247 and BUS 243

Design and development of software for either compilers (syntax directed and table driving techniques) or operating system software. Class meets by arrangement.

BUS 252 Legal Dictation and Transcription **3 Credits**

Prerequisite: BUS 152 or BUS 157

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 MT/ST. Course includes scheduled use of Secretarial laboratory.

BUS 262 Secretarial Procedures I **3 Credits**

Prerequisites: BUS 151 and BUS 156 or concurrent enrollment or by permission

Individual projects. Content areas: office layout, furnishings, equipment, telephone and telegraph services, mailing and shipping, financial activities and records, filing, organization of time and work, and improvement of secretarial skills. Course includes scheduled use of Secretarial laboratory.

BUS 263 Secretarial Procedures II **3 Credits**

Prerequisite: BUS 262

Individual projects. Content areas: meetings and conferences, travel arrangements, letter writing, supervision of others, reproduction equipment and services, seeking and terminating employment, and improvement of secretarial skills. Course includes scheduled use of Secretarial laboratory.

BUS 266.1 - 266.5 Secretarial Field Study **3 Credits (each semester)**

Student must work an average of 15 hours a week in an approved office situation. Emphasis is placed on coordinating. Seminar meets one hour each week. A different part of the Certified Professional Secretary Examination is emphasized each semester. Topics include human relations, business law and regulatory legislation, management and supervision, financial aspects of business, and office procedures.

BUS 279 Fashion In Society **3 Credits**

Study of economic psychology, social needs and satisfaction in the selection of clothing. The student gains an understanding of the influence of fashion and clothing upon society through studying interrelationships of the consumer, the distributor and producer. Class meets three hours per week.

BUS 299 Independent Studies In Business/Management **3 Credits**

Opportunity for the student to pursue his special interests in business and management, through guided independent study in his chosen area.

COLLEGE LEARNING CENTER

The College Learning Center offers a variety of learning services to JCCC students and individuals within the community. Designed to aid all students, the CLC offers diagnostic testing in order to develop an appropriate program of individualized instruction for each student.

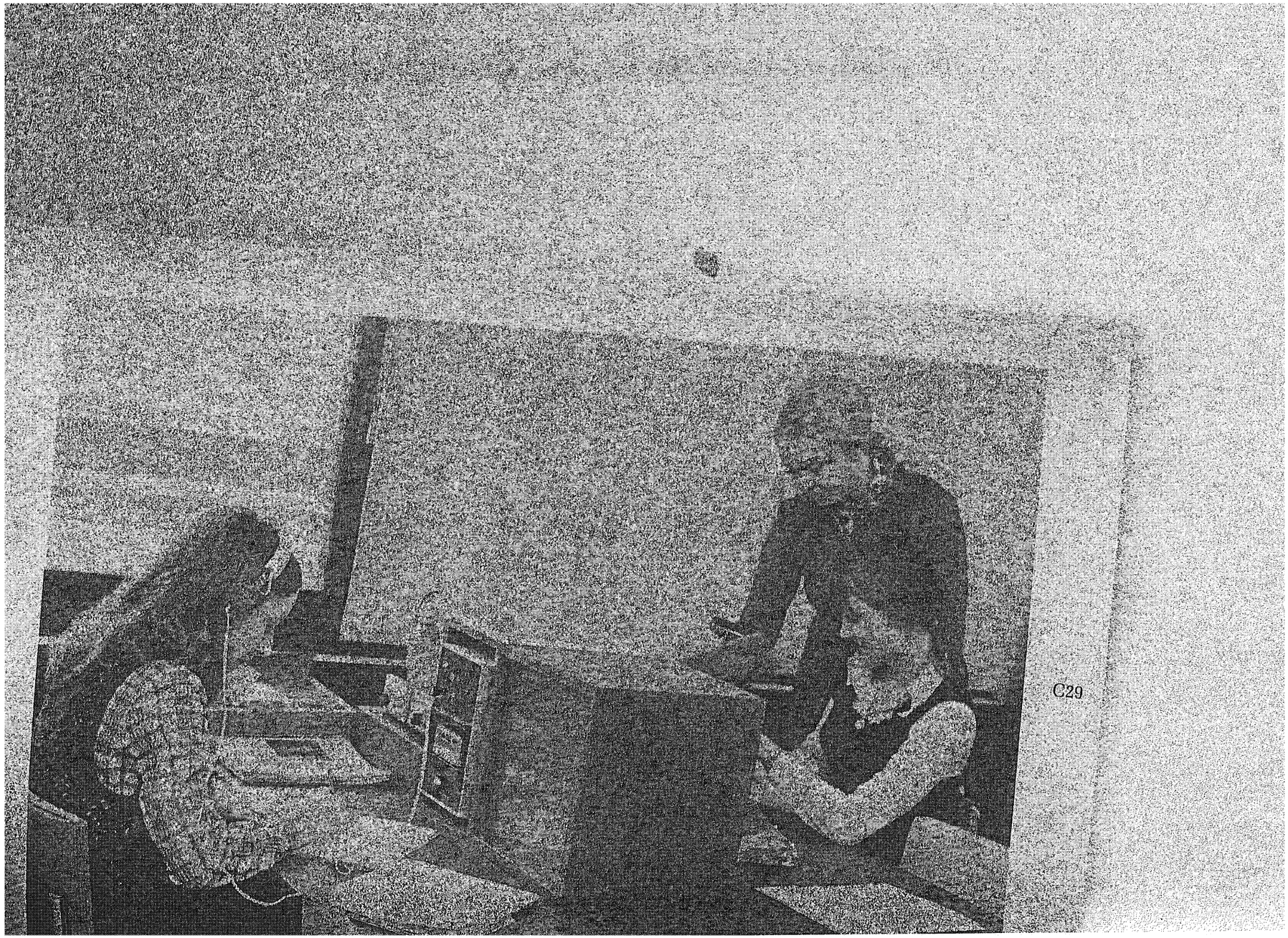
An individual who is interested in improving his reading rate and comprehension or in advancing his skills in mathematics, science, social science, communications and foreign language will receive expert help from the instructors in the College Learning Center.

Students may enroll in the College Learning Center on either a credit or non-credit basis.

Before enrolling in the CLC, interested individuals should see one of the JCCC counselors for assistance in planning his program. The College Learning Center staff will work closely with both the counselor and student in preparing an individualized program to meet the student's needs and abilities.

CLC 101 - 103 College Learning Center **1-3 Credits**

Individualized instruction in areas of special need and interest prescribed on the basis of diagnostic tests. Reading rate and comprehension, study skills, memory improvement, communications, mathematics, spelling, vocabulary and phonics, natural science, social science, health and safety, and foreign language sampling. Courses may be taken for credit or on a non-credit basis.



C29

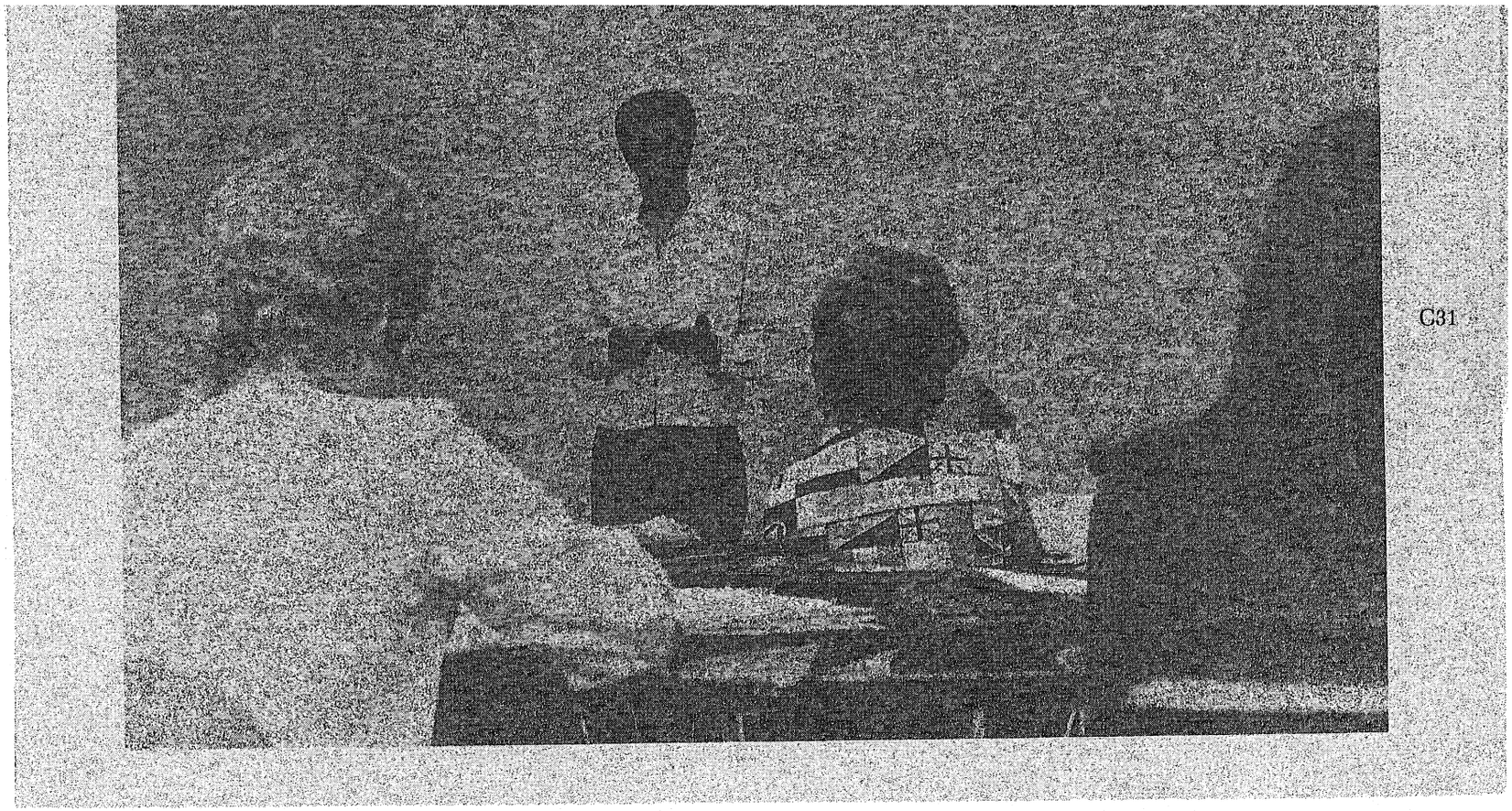
COMMUNICATIONS

In the College curriculum, communications includes all aspects of oral and written communication. Students interested in speech, debate, foreign languages such as French, German or Spanish or the area of written communication including literature, poetry and creative writing will find courses in this area to suit their individual needs.

Basic to all careers, the area of communications can lead to careers such as copywriting, teaching, acting, translating, law, besides adding to the personal growth and enrichment of the student. Students seeking a baccalaureate degree will find that JCCC offers the courses necessary to complete the freshman and sophmore requirements at most four-year colleges and universities.

Courses such as "Tryouts: The Art of Auditioning" and "French, German or Spanish for Travelers" are offered through the area of Adult Continuing Education. These courses can supplement and enrich a student's program plan.

Each individual will have a program tailored to meet his specific needs in the area of communications when he meets with one of JCCC's counselors prior to enrolling.



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COM 100.1 - 100.3 Fundamentals Of Writing **3 Credits**

Basic written communications. Emphasis on grammar, sentence structure, organization, idiomatic usage, spelling and vocabulary, leading to clear written composition. Class meets five hours per week. May be taken for three semesters.

COM 101 Communications I **3 Credits**

Course examines the rhetoric of the sentence, paragraph and multi-paragraph communication. During the third unit of the course, the student chooses the study of business communications, technical writing, or the expository essay. Class meets two hours per week with the addition of a minimum of two hours of individually scheduled use of the writing laboratory.

COM 102 Communications II **3 Credits**

Prerequisite: COM 101

Course emphasizes a variety of written subjective responses to personal experience, literature and special topics. Assignments include narrative, descriptive and expository writing. Class meets three hours per week.

COM 105 Basic Manual Communications **2 Credits**

The basic course of American sign language as applied to communication with deaf adults. Subject material related to language, psychological, and social aspects of the deaf person. Class meets two hours per week.

COM 110 Masters Of American Cinema **2 Credits**

History of the American motion picture; themes, genres, and style contribution to the development of film in this country. Class meets two hours per week.

COM 114 Speech **3 Credits**

The basic speech course deals 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.

COM 115 Public Speaking **3 Credits**

Prerequisites: High School Speech, COM 114, or by permission

An advanced course to Speech 114 for students interested in continued work in public speaking. Increased proficiency in a variety of speaking situations is stressed. Class meets three hours per week.

COM 116 Argumentation And Debate **3 Credits**

Prerequisites: High School Speech, COM 114, or by permission

A study of the theories and principles of argumentation and debate, with an emphasis on tournament debating. Class meets three hours per week.

COM 117 Oral Interpretation **3 Credits**

A basic course in the study of literature through oral communication. Emphasis is to analyze and perform prose, poetry, and dramatic literature. Class meets three hours per week.

COM 119 Techniques Of Acting I **3 Credits**

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.

COM 120 Techniques Of Acting II **3 Credits**

Prerequisite: COM 119

Continuation of Techniques of Acting I; greater emphasis on character analysis and development with corresponding greater responsibility of the actor for his own creativity. Class meets three hours per week.

COM 121 French I **5 Credits**

Basic course in French language includes grammar study, conversation, composition and an introduction to the culture of French-speaking countries. Class meets five hours per week.

COM 122 French II **5 Credits**

Prerequisite: COM 121 or by permission

Continuation of French 121 with graded reading selections added to be used as basis for conversation and composition in the discussion periods. Course structure same as French 121. Class meets five hours per week.

COM 123.1 - 123.4 Intercollegiate Debate **2 Credits (each semester)**

Prerequisites: COM 116, High School Debate, or by permission

Practical application of argumentation and debate principles by individual involvement in intercollegiate competition. Class meets three hours per week.

COM 130 Spanish I **5 Credits**

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

COM 131 Spanish II **5 Credits**

Prerequisite: COM 130 or by permission

Continuation of Spanish 130 with graded reading selections added to be used as basis for conversation and composition in the discussion periods. Course structure same as Spanish 130 with an audio study period replacing the audio-visual. Class meets five hours per week.

COM 140 German I **5 Credits**

Basic course in German language includes grammar study, conversation, composition and an introduction to the culture of German-speaking countries. Class meets five hours per week.

COM 141 German II **5 Credits**

Prerequisite: COM 140 or two years of high school German

Continuation of German 140 with reading selections added to be used as basis for conversation and composition. Class meets five hours per week.

COM 210 Short Story And The Novel **3 Credits**

Prerequisite: COM 102

Introduction to the short story and novel form. Readings from contemporary fiction. Class meets three hours per week.

COM 211 Poetry And Drama **3 Credits**

Prerequisite: COM 102

An exposure to poetry and drama for insight and appreciation. Great plays of past and present and a broad selection of poetry of all types and styles will be read. Occasional performances of both literary forms, when available and appropriate, will be attended. Class meets three hours per week.

COM 212 Creative Writing **3 Credits**

Prerequisite: COM 102

Principles and practice in writing the short story, the essay, the play, the poem. Emphasis on planning, plotting, choice of material and styles. Examination of recommended models. Frequent writing assignments in chosen areas. Class meets three hours per week.

COM 213 Children's Theater **3 Credits**

Children's Theater will concentrate on literature and performance methods as they relate to presentation both for children and/or by children. Some workshop situations will be provided to allow students an opportunity of working in the medium. Class meets three hours per week.

COM 223 French III **3 Credits**

Prerequisite: COM 122 or by permission

Intermediate reading course to build vocabulary and comprehension ability. 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.

COM 224 French IV **3 Credits**

Prerequisite: COM 223 or by permission

Continuation of French 223. Advanced reading. Study of contemporary novels and literature. Complete grammar review. Conversation and composition in French. Class meets three hours per week.

COM 225 Conversational French **2 Credits**

Prerequisite: COM 122 or by permission

Course develops a proficiency in everyday, colloquial French through the use of modern and up-to-date situations similar to the ones a traveler would encounter while visiting France. A speaking knowledge of French will be developed. Class meets two hours per week.

COM 232 Spanish III **3 Credits**

Prerequisite: COM 131 or by permission

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.

COM 233 Spanish IV **3 Credits**

Prerequisite: COM 232 or by permission

Continuation of Spanish 232 with extensive study of Hispanic literature. Advanced reading. Composition and conversation in Spanish. Grammar review continues. Class meets three hours per week.

COM 234 Conversational Spanish **2 Credits**

Prerequisite: COM 131 or by permission

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.

COM 242 German III **3 Credits**

Prerequisite: COM 141 or by permission

Vocabulary building and grammar review primarily through extensive reading of German expository prose and literature, with additional practice of listening, speaking, and writing skills. Class meets three hours per week.

COM 243 German IV **3 Credits**

Prerequisite: COM 242 or by permission

Continuation of German 242, with emphasis on more advanced reading material. Class meets three hours per week.

COM 244 Conversational German **2 Credits**

Prerequisite: COM 141 or by permission

Special 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.

COM 299 Independent Studies **1-3 Credits**

Independent studies in communications. Opportunity for students to pursue special interests through guided independent studies in his chosen area. Class meets by arrangement.

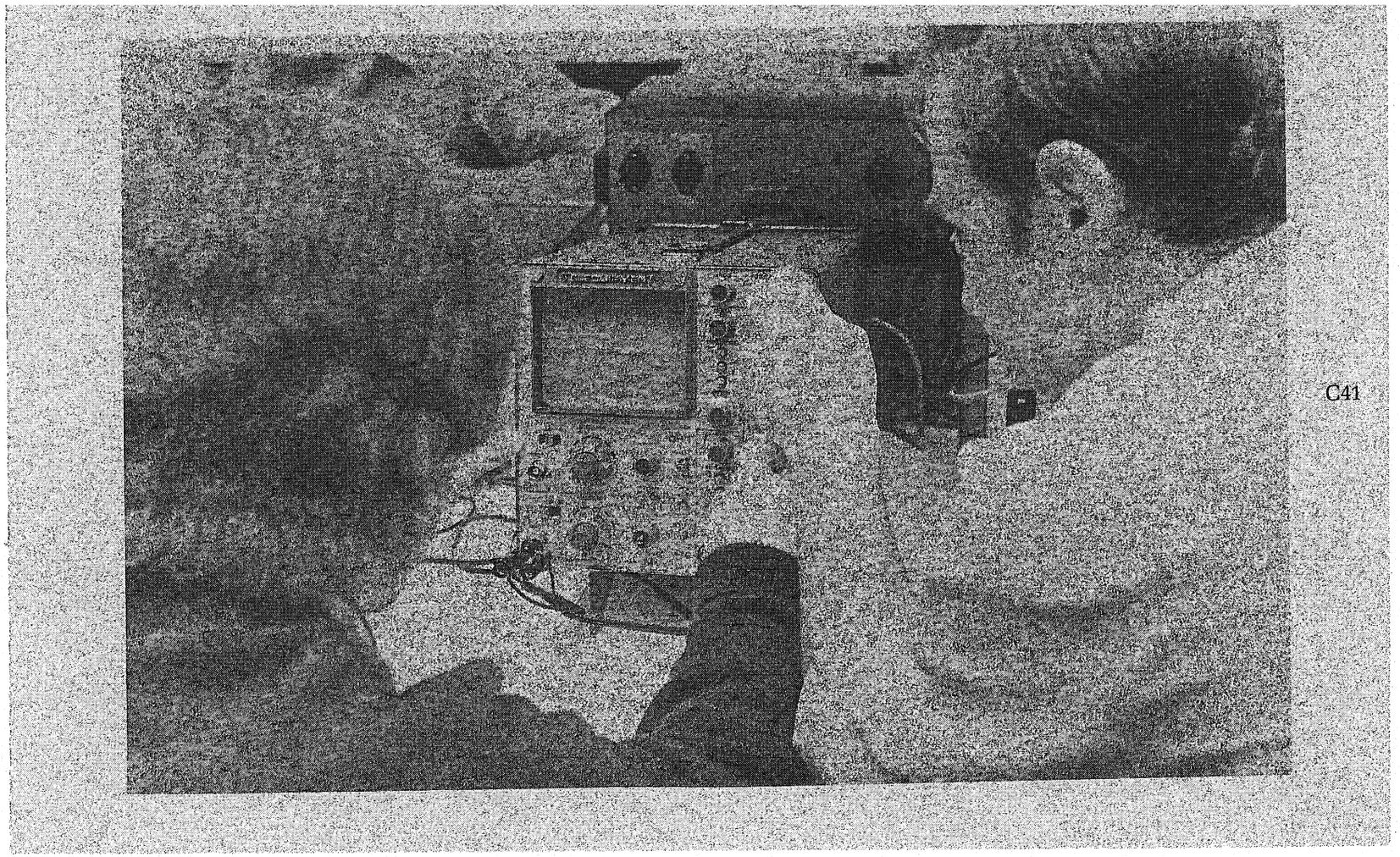
ENGINEERING

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.

At JCCC, the engineering student is expected to develop a good understanding of mathematics, physical science, engineering science and economics; an inquisitive and objective attitude; the capacity of innovative and logical problem solving; skill in experimentation, design, communication and human relations; and an appreciation and concern about the interaction of engineering technology with other elements of society.

These programs possess a balance of theoretical education with practical experience over a broad field. Engineering technicians must have 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.

Individuals with interest in the many fields of engineering and their related technologies should plan to visit with a JCCC counselor about the available options. Together, the student, counselor and the engineering instructional staff will design an individualized program that will help the student reach his goals.



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ENGR 101 Drafting I **7 Credits**

Industrially structured to provide activities and experiences typical to those encountered by drafting technicians. Covers 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.

ENGR 102 Drafting II **7 Credits**

Prerequisite: ENGR 101

Continuation of ENGR 101 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.

ENGR 103 Graphic Communications **1-7 Credits**

Activities provided for individual student needs whether experienced or inexperienced in drafting. Students may use this course to explore the field of drafting with credits earned applicable to the drafting technology program. Three hours of laboratory per week per credit hour.

ENGR 105 Engineering Graphics I **3 Credits**

Theory and application in the 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.

ENGR 106 Engineering Graphics II **3 Credits**

Prerequisite: By permission

Advanced study and applications 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.

ENGR 107 Technical Illustration **3 Credits**

Provides opportunity to learn and apply 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.

ENGR 110 Basic Photography **3 Credits**

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.

ENGR 115 Avionics **3 Credits**

Introductory course designed to give pilots an understanding of aircraft electrical systems and airborne avionics equipment. Class meets three hours per week.

ENGR 121 Processes And Materials Of Manufacturing **3 Credits**

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

ENGR 123 Building Materials And Construction **3 Credits**

Study of the principle materials in building. Emphasis on properties and applications in building construction. Class meets three hours per week.

ENGR 128 Industrial Science I **3 Credits**

Prerequisite: MATH 101

Introduction to principles of mechanics, work, power, and energy. Class meets three hours per week.

ENGR 129 Industrial Science II **3 Credits**

Prerequisite: ENGR 128

Continuation of ENGR 128 with emphasis on applications. Class meets three hours per week.

ENGR 140 Introductory Electronics **3 Credits**

Provides familiarization with laboratory instruments, circuit components and basic measurement techniques. Introduces basic circuits used as building blocks in any electronics system. One hour of class and six hours of laboratory per week.

ENGR 141 Resistive Electronics **3 Credits**

Prerequisites: ENGR 140, MATH 101, and ENGR 150 or concurrent enrollment

Study of resistive circuits in which electronic devices are employed. Introduces the volt-ampere characteristics and physics of diodes, transistors, multielement vacuum tubes and a number of practical resistive circuits using these devices. Two hours of class and three hours of laboratory per week.

ENGR 142 Basic Control Systems **3 Credits**

Prerequisite: ENGR 140

Theory and application of electromagnetic, and electromechanical transducers in control circuits. Emphasis is on transducer functions. Two hours of class and three hours of laboratory per week.

ENGR 143 Basic Electronic Communications **3 Credits**

Prerequisite: ENGR 140

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.

ENGR 144 Systems Maintenance **3 Credits**

Prerequisite: ENGR 147 or ENGR 245 or ENGR 241

Principles of fault location and correction. Two hours of class and three hours of laboratory per week.

ENGR 145 Alignment Techniques **3 Credits**

Prerequisites: ENGR 143 and concurrent enrollment in ENGR 147

Service and alignment of radio frequency equipment, including tuners, amplifiers, antennas and connections for TV, AM, and FM. One hour of class and six hours of laboratory per week.

ENGR 146 Synchronization Techniques **3 Credits**

Prerequisite: ENGR 143

Techniques of servicing timing circuits, including sweep, synchronization, triggering and gating circuits. One hour of class and six hours of laboratory per week.

ENGR 147 Electronic Communication Systems **3 Credits**

Prerequisite: ENGR 143 or concurrent enrollment in ENGR 240

Theory and service of electronic communications systems, including black and white television; color television; AM and FM radio receivers; and transmitters. Three hours of class per week.

ENGR 148 Digital Electronics **3 Credits**

Prerequisite: ENGR 140

Analysis and synthesis of the electronic circuits utilized in digital equipment such as computers, numeric machine controls and telemetry. Two hours of class and three hours of laboratory per week.

ENGR 149 Basic Computer Components **3 Credits**

An introduction to 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.

ENGR 150 Resistive Circuits **3 Credits**

Prerequisites: ENGR 140 and MATH 101 or concurrent enrollment

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.

ENGR 151 Capacitive And Inductive Circuits **3 Credits**

Prerequisites: ENGR 150 and MATH 102 or concurrent enrollment

Capacitors and inductors are introduced as circuit elements. Construction of magnetic devices and AC analysis using complex algebra are covered. Two hours of class and three hours of laboratory per week.

ENGR 160 Fire Suppression Fundamentals **3 Credits**

Designed for in-service fire personnel and students who wish to enter the profession. Fire suppression organizations; basic elements of ground tactics and organization; manpower and equipment utilization; building designs and construction; hazardous materials; extinguishing agents; equipment; and apparatus are covered. Class meets three hours per week.

ENGR 201 Drafting III **7 Credits**

Prerequisite: ENGR 102

Provides theory and practical applications typical of industry in axonometrics, obliques and perspective drawings, conventions, and symbols. Introductions to electronics, piping and hydraulic drafting. Extended coverage of photo-drafting. Two hours of class and 15 hours of laboratory per week.

ENGR 202 Drafting IV **7 Credits**

Prerequisite: ENGR 201

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.

ENGR 210 Statics **3 Credits**

Prerequisite: MATH 121 or concurrent enrollment

Study of vectors, force systems, friction, centroids, and moments of inertia. Class meets three hours per week.

ENGR 211 Dynamics **3 Credits**

Prerequisite: ENGR 210

Study of unbalanced force systems and the resulting motion, work and energy, impulse and momentum, and impact. Class meets three hours per week.

ENGR 220 Mechanics Of Materials **3 Credits**

Prerequisite: ENGR 210

Theory of simple stress and strains in elastic materials, torsion, beams and columns. Class meets three hours per week.

ENGR 225 Mechanisms **3 Credits**

Prerequisite: ENGR 105

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.

ENGR 230 Tool Design **3 Credits**

Prerequisites: ENGR 105, ENGR 106, ENGR 200, and ENGR 225

Problems in the design, construction, and operation of dies, jigs and fixtures. Six hours of laboratory per week.

ENGR 240 Nonlinear Electronics **3 Credits**

Prerequisites: ENGR 141 and ENGR 151

Study of electronic switching circuits: clippers, clampers, pulse formers, multivibrators, blocking oscillators, logic circuits and sweep circuits. Two hours of class and three hours of laboratory per week.

ENGR 241 Linear Electronics **3 Credits**

Prerequisites: ENGR 141 and ENGR 151

Study of electronic circuits operating under linear or small signal conditions. Covers wideband cascaded amplifiers and operational amplifiers. Two hours of class and three hours of laboratory per week.

ENGR 242 Systems Analysis **3 Credits**

Prerequisites: ENGR 241 and ENGR 250

Study of complete systems covering communications, controls, digital, etc. Two hours of class and three hours of laboratory per week.

ENGR 244 Advanced Communication Systems **3 Credits**

Prerequisite: ENGR 241

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.

ENGR 245 Measurements And Instrumentation **3 Credits**

Prerequisite: ENGR 140

Problems and techniques involved in precision measurements required in industrial instrumentation applications. Two hours of class and three hours of laboratory per week.

ENGR 250 Network Analysis **3 Credits**

Prerequisites: ENGR 151 and MATH 102

Application of mathematical techniques to the analysis of complex electrical circuits or networks. Class meets three hours per week.

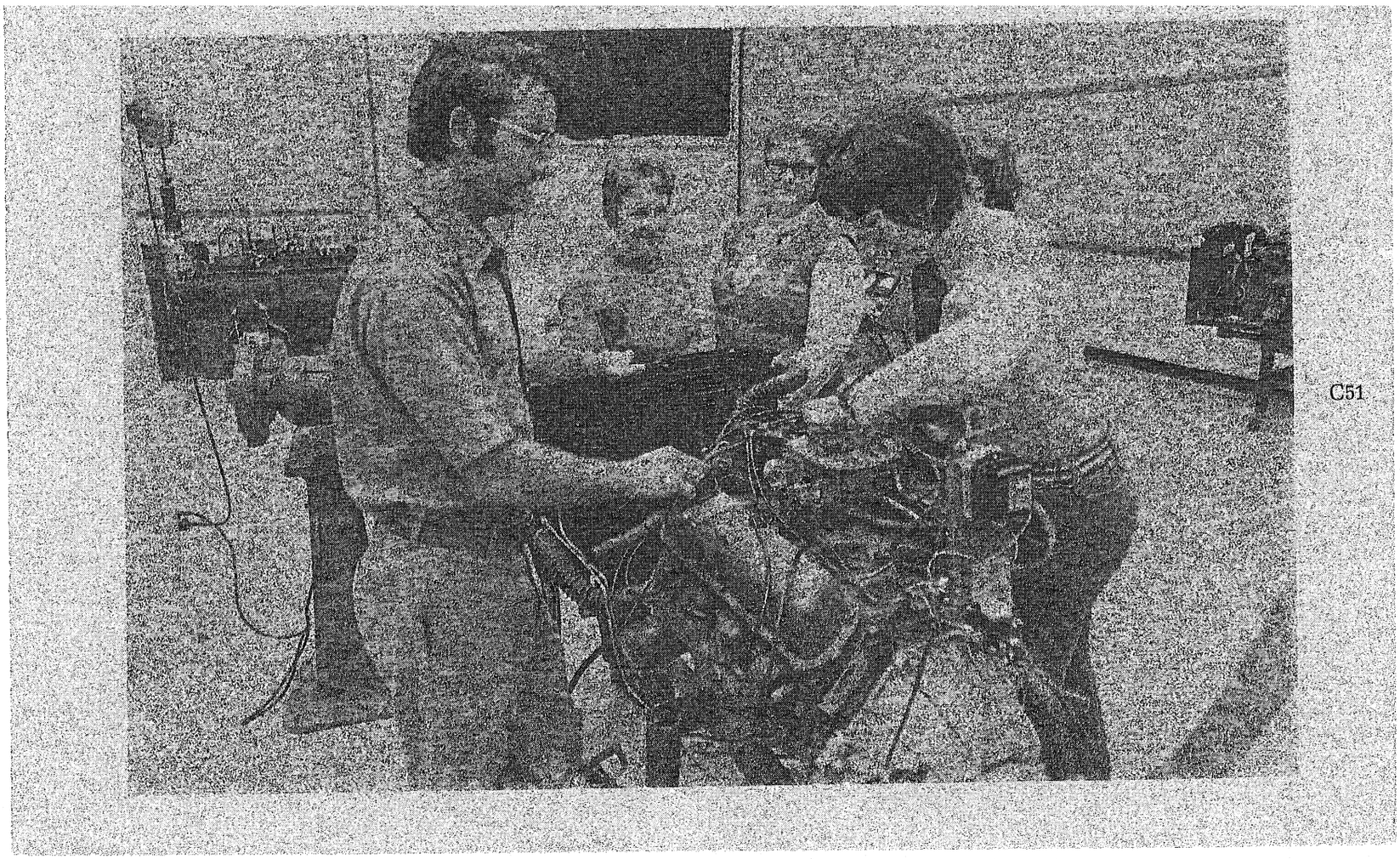
ENGR 260 Electronics Project Laboratory **1-4 Credits**

Prerequisites: ENGR 140 and by permission

Laboratory experience requiring construction or design and construction of an electronic system or device. By arrangement.

ENGR 299 Independent Studies **3 Credits**

Opportunity for the student to pursue special interests through guided independent study in his chosen area. Class meets by arrangement.



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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 vocal or instrumental music, art, teaching, diplomacy or any career in which a broad acquaintance with cultural values is desirable will find the humanities courses both useful and interesting.

An interdisciplinary approach is used in the study of comparative cultures involving the disciplines of the fine arts, history, philosophy and religion. The courses are designed to enable the student to view the disciplines as a complex unity of values which result from man's examination of himself and the universe.

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

Beginning students, students with previous musical training and students who are interested in music for personal enrichment will find courses in the humanities curriculum to suit their needs. The College also offers an opportunity for interested students to hear guest artists perform and sponsors such Adult Continuing Education activities as "Music at the Library", "Big Band Jazz of Today" and "Anglo-American Folk Instruments and Songs."

An individual who is interested in the area of art will find an unusually wide range of activities designed to meet the needs of both those students who wish to prepare for a career and those students who wish to explore the field of art for their personal pleasure and enrichment. Opportunities for students to display their work are provided both on campus and in the community. Courses in acrylic, water color and oil painting are among those offered in the area of art by the Adult Continuing Education division of the College.

Those who have an interest in any of the disciplines included in the humanities curriculum at the College should plan to visit with a JCCC counselor before enrolling. An individualized program will be designed that will meet the student's needs, desires and abilities.

HUM 101 Humanities **3 Credits**

Examination of the components and concepts of aesthetics as expressed in painting, sculpture, and music; further examination of identity, war, and love as expressed in literature, poetry, and drama. Class meets three hours per week.

HUM 102 Comparative Cultures **3 Credits**

Interdisciplinary study of cultures of civilizations. The course will emphasize development of the humanities in selected cultures as a background to the arts in contemporary society. Three European cultures and one non-European culture will normally be studied. The concept of culture and the role of the humanities in culture in general also will be investigated. Class meets three hours per week.

HUM 111 Sight-Singing And Ear-Training I **1 Credit**

Course presents the melodic, harmonic and rhythmic elements of music by integrating aural and sight-reading skills. Class meets one hour per week.

HUM 112 Sight-Singing And Ear-Training II **1 Credit**

Prerequisite: HUM 111

Course presents an advanced study of the melodic, harmonic and rhythmic elements of music by integrating aural and sight-sight-reading skills. Class meets one hour per week.

HUM 113.1 - 113.4 Band **1 Credit (each semester)**

Performance of jazz and popular music at public concerts and college functions. Class meets three hours per week.

HUM 117.1 - 117.4 Chamber Choir **1 Credit (each semester)**

Prerequisite: By permission

Rehearsal and performance of vocal music. Choir performs at various student and community activities. Class meets three hours per week.

HUM 121.1 - 121.4 Chorus **1 Credit (each semester)**

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.

HUM 122.1 - 122.4 Orchestra **1 Credit (each semester)**

Rehearsal and performance with the Kansas City, Kansas Symphony Orchestra. Enrollment by audition. Class meets on Mondays, 7-9 p.m.

HUM 123 Music Theory: Harmony I **2 Credits**

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.

HUM 124 Music Theory: Harmony II **2 Credits**

Prerequisite: HUM 123

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.

HUM 125 Music Theory: Harmony III **2 Credits**

Prerequisite: HUM 124

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 vehicles for study of materials. Class meets two hours per week.

HUM 126 Music Theory: Harmony IV **2 Credits**

Prerequisite: HUM 125

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.

HUM 128.1 - 128.4 Applied Music **1 Credit (each semester)**

Private lessons in vocal and instrumental music are provided depending on the number of interested students. Lesson time is by arrangement, one hour per week.

HUM 129 Applied Music (Class) **1 Credit**

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

HUM 130 Elementary Art Methods **3 Credits**

Exploration of art activities appropriate for children from pre-school through sixth grade with emphasis on relating activities to the child's patterns of growth and development. Three hours of class and three hours of laboratory per week.

HUM 131 Design I **3 Credits**

Introductory study of the basic elements and principles common to all the visual arts, emphasizing their creative application in two-dimensional design. Class meets six hours per week.

HUM 132 Design II **3 Credits**

Prerequisite: HUM 131

A continuation of Design 131 in which the principles and elements of design are studied and applied in relation to three-dimensional forms. Class meets six hours per week.

HUM 133 Sculpture I **3 Credits**

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.

HUM 134 Sculpture II **3 Credits**

Prerequisite: By permission.

Continuation of Sculpture 133. Focus on more advanced methods and techniques. Emphasis on sculptural materials and forms. Class meets six hours per week.

HUM 135 Painting I **3 Credits**

Emphasis on the formal study from visual experience with still life, landscape, the human figure, and imaginative themes in conjunction with expanded conceptual awareness. Class meets six hours per week.

HUM 136 Painting II **3 Credits**

Prerequisite: By permission

Awareness of historical and contemporary painting. Advanced painting with emphasis on personal direction and the development of a consistent body of work. Class meets six hours per week.

HUM 137 Drawing I **3 Credits**

Introductory course explores a wide variety of drawing media. Emphasis on the development of fundamental drawing skills, increased powers of observation, and an awareness of the personally expressive and compositional aspects of drawing. Class meets six hours per week.

HUM 138 Drawing II **3 Credits**

Prerequisite: By permission

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

HUM 139 Ceramics I **3 Credits**

Basic course in hand-building and wheel-throwing techniques. The student becomes familiar with glazing and other methods of surface enrichment, stacking and firing procedures, and the process of casting from a mold of his own design. Class meets for two three-hour sessions per week.

HUM 140 Ceramics II **3 Credits**

Prerequisite: By permission

Continuation of Ceramics 139. More advanced methods and techniques. Specific problems explored in greater depth. Class meets for six hours per week.

HUM 141 Printmaking I **3 Credits**

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

HUM 142 Printmaking II **3 Credits**

Prerequisite: HUM 141

Introduction to contemporary intaglio processes of etching and engraving, and a variety of silk screen and mixed media techniques. Class meets six hours per week.

HUM 143 Silversmithing I **3 Credits**

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.

HUM 144 Art Fundamentals **3 Credits**

Examination of the major art forms: sculpture, printmaking, painting and drawing. Tracing their historical development focusing on 20th century forms and philosophies. Class meets six hours per week.

HUM 145 Silversmithing II **3 Credits**

Prerequisite: HUM 143

Course in basic metalsmithing techniques of casting, constructing, etching, enameling and chasing, utilizing copper, brass, bronze, silver and other metals. Class meets six hours per week.

HUM 146 Weaving **3 Credits**

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.

HUM 147 Leather Working **Spring 1 Credit**

Five week course of instruction in contemporary leather working techniques. Emphasis on creativity in a variety of class projects ranging from leather sculptural forms to leather clothing. Class meets six hours per week.

HUM 148 Lettering **Spring 1 Credit**

Five week specialized study of lettering techniques focusing on contemporary typographic design, hand and transfer lettering, mechanically produced letter forms and layout. Class meets six hours per week.

HUM 151 Introduction To Philosophy **3 Credits**

Study of the basic questions 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.

HUM 152 Logic **3 Credits**

Study of typical forms of reasoning and the discrimination of valid from invalid reasoning. Emphasis on methods of deductive proof, the basic concepts of induction, and fallacies. Class meets three hours per week.

HUM 210 Philosophy Of Religion **3 Credits**

Study of the components and concepts of religion as expressed by various world religions. Emphasis on the nature of God, God's existence, religious language, human destiny, faith, evil and effects of science on religion. Class meets three hours per week.

HUM 250 Philosophy Of Current Civilization **3 Credits**

A systematic and critical analysis of some major current issues in American civilization and the philosophies presupposed by diverse views about these issues; analyzed through relevant philosophical articles and news media. Class meets three hours per week.

HUM 253 Ethics **3 Credits**

Study of the great problems of ethics, such as free will and determinism, relativism and absolutism, the relationship between individuals and between man and society. Emphasis on studying traditional positions in order to better understand contemporary social and moral issues. Class meets three hours per week.

HUM 299 Independent Studies In Humanities **1-3 Credits**

Opportunity for the student to pursue special interests through guided independent study in his chosen area. Class meets by arrangement.

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MATHEMATICS

The mathematics curriculum at the College is designed to meet the needs of those students who desire basic mathematical background courses as well as for students 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. Students interested in the field of education may enroll in finite mathematics in order to meet their education math requirements.

Individuals may wish to explore a course in practical, fundamental mathematics which relate to their everyday life. For those who need extra assistance in mathematics, the College Learning Center offers supportive services which can help a student improve his skills. Through the Adult Continuing Education division of the College, other courses and activities are offered which can supplement or enrich an individual's program.

Students who are interested in mathematics should contact a counselor at JCCC. The counselor and the mathematics instructional staff will work closely with the student in developing an individualized program to meet his needs.

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MATH 100 Introduction To Algebra **3 Credits**

Intended for the student who has had 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.

MATH 101 Technical Mathematics I **5 Credits**

An introduction to applied mathematics for the engineering-related professions. Contains selected topics from algebra, geometry, and trigonometry with emphasis on engineering applications. Student with two years of high algebra should consider Trigonometry 117 instead. Class meets five hours per week.

MATH 102 Technical Mathematics II **5 Credits**

Prerequisite: MATH 101

Continuation of MATH 101. Trigonometry and analytic geometry. Class meets five hours per week.

MATH 103 Finite Mathematics **3 Credits**

Mathematics for the elementary education or general education student. Designed to provide a background for a better understanding of the nature of mathematics. Includes sets, relations, mathematical reasoning, axiomatic systems and graphing. Class meets three hours per week.

MATH 104 Fundamentals Of Mathematics **3 Credits**

Concepts of personal finance: budgeting, income tax, vocational opportunities, and buying. Basic statistics and practical applications of the operations with fractions, decimals, percents, and whole numbers. Class meets five hours per week.

MATH 106 Algebra **5 Credits**

Prerequisite: Two years of high school math including one year of algebra

A study of the fundamental laws, exponents, radicals, linear and quadratic equations, inequalities, systems of relations, graphing, polynominals and polynominal functions, logarithms, and series. Class meets five hours per week.

MATH 110 Statistics **3 Credits**

Prerequisite: MATH 106 or equivalent

Introduces descriptive statistics, probability models, sampling distribution, hypothesis testing, chi-square test, regression, and correlation. Class meets three hours per week.

MATH 115 Algebra-Trigonometry **5 Credits**

Prerequisite: MATH 106 or two years of high school math

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 are studied. Class meets five hours per week.

MATH 116 College Algebra **3 Credits**

Prerequisite: MATH 106 or two years of high school math

Course presents an intensive study of important topics in algebra. Functions, polynominals, conic sections, logarithms, matrices and determinants, sequences and series, binomial theorem, induction, permutations and combinations are studied. Class meets three hours per week.

MATH 117 Trigonometry **3 Credits**

Prerequisite: MATH 106 or equivalent. Not recommended for the student with high school credit in trigonometry.

A study of trigonometric functions, identities, graphs, equations, inverse trigonometric functions, polar coordinates, complex numbers and applications. Class meets three hours per week.

MATH 121 Analytic Geometry-Calculus I **5 Credits**

Prerequisite: MATH 117 or equivalent

The first course of a three semester sequence in analytic geometry and calculus. Consists of calculus of algebraic functions of one variable, limits, implicit differentiation, definite and indefinite integrals, and applications. Class meets five hours per week.

MATH 122 Analytic Geometry-Calculus II **5 Credits**

Prerequisite: MATH 121 or equivalent

The second course of a three semester sequence in analytic geometry and calculus. Includes the conics, trigonometric and exponential functions, polar coordinates, vectors in a plane, techniques of integration, and applications. Class meets five hours per week.

MATH 223 Analytic Geometry-Calculus III **5 Credits**

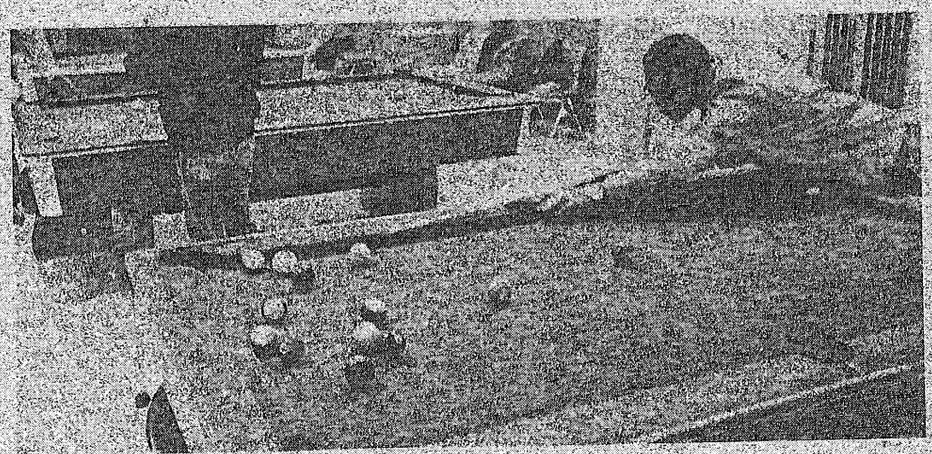
Prerequisite: MATH 122 or equivalent

The third course in a three semester sequence in analytic geometry and calculus. Consists of solid analytic geometry, vectors in space, infinite series, partial differentiation, multiple integration, and linear algebra. Class meets five hours per week.

MATH 224 Differential Equations **3 Credits**

Prerequisite: MATH 223 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.



NATURAL SCIENCE

The curriculum within the division of natural science is broadly 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 inhalation therapy.

The life and physical science course offerings provide the student with an increased awareness of the biosphere and the physical universe. They 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.

The Associate Degree Nursing program provides the student with supervised clinical experience, formal nursing courses and related biological and behavioral science courses. After successfully completing this program, students are qualified to take the state board examination for Registered Nurse (R.N.) to receive licensure in the state.

The Inhalation Therapy program includes pre-clinical work at JCCC and theory and practice in clinics at affiliated hospitals.

Individuals who are interested in a career in Dental Hygiene will find the program at JCCC offers supervised experience with patients in a dental hygiene clinic which is located on the campus. After successfully completing the program, students will be eligible to take the national and state board examinations for licensure as a dental hygienist.

An individual who has a strong interest in any of the science fields should contact a JCCC counselor for assistance in preparing an individualized program to suit his needs and abilities.

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NS 051 Inhalation Therapy Procedures I **3 Credits**

Orientation to hospital, patient care and management, medical ethics and inhalation therapy as a profession. Introduction to the design and function of basic inhalation therapy equipment, the designs and principles of various methods of gas supply, procedures and techniques of equipment maintenance and applications of equipment to various types of gas supply. Class meets three hours per week.

NS 052 Inhalation Therapy Procedures II **5 Credits**

Prerequisite: NS 051

Introduction to the clinical situation. Nursing arts and applied inhalation therapy procedures relating to internal medicine, surgical care, obstetrics, pediatrics and emergency. Two hours of class and six hours of laboratory per week.

NS 053 Clinical Application **4 Credits**

Prerequisite: NS 052

Work experience with inhalation therapy techniques and procedures. Eight hours of laboratory per week.

NS 054 Inhalation Therapy Procedures III **4 Credits**

Prerequisite: NS 053

Advanced theory of applied inhalation therapy procedures. Emphasis on cardiopulmonary physiology and pathophysiology. Four hours of class and four hours of laboratory per week.

NS 055 Inhalation Therapy Procedures IV **5 Credits**

Prerequisite: NS 054

Pharmacology, cardiopulmonary resuscitation, pulmonary insufficiency, pulmonary function testing, blood gas analysis, electrocardiography and cardiac monitoring equipment. Four hours of class and eight hours of laboratory per week.

NS 056 Departmental Management **1 Credit**

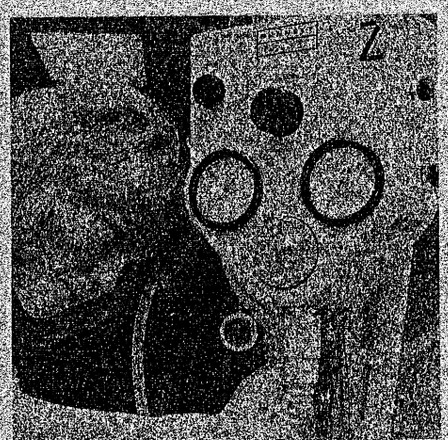
Prerequisite: NS 055

Management and coordination of inhalation therapy service. Class meets one hour per week.

NS 057 Inhalation Therapy Seminar **2 Credits**

Prerequisite: NS 055

Current problems. Therapeutic complications. Review of current literature. Reports on scientific meetings. Special projects. Class meets two hours per week.



NS 058 Advanced Inhalation Therapy Procedures **2 Credits**

Prerequisite: NS 055

Advanced pulmonary function techniques. Compliance resistance. Diffusion. Perfusion. Work of breathing. Oxygen consumption and physiological dead space. Class meets two hours per week.

NS 101 Natural Science/Life Science **4 Credits**

Introduces the fundamental laws, theories and principles of biology, and to meet laboratory science requirements for the non-science major. Provides a basic understanding of living organisms and their interrelation with the non-living world. An Audio-Visual-Tutorial (AVT) presentation aids in understanding. Two hours of class and four hours of Natural Science AVT laboratory per week.

NS 102 Natural Science/Physical Science **4 Credits**

Introduces the fundamental concepts and principles of physics, chemistry and stronomy to meet laboratory science requirements for the non-science major. Atomic and molecular theory, the periodic system, chemical combinations, and the structure of the universe are studied. Applications in mechanics, electronics, sound, heat, and light are used. An Audio-Visual-Tutorial (AVT) presentation aids in understanding. Two hours of class and four hours of Natural Science AVT laboratory per week.

NS 106 Medical Terminology **2 Credits**

An Audio-Visual-Tutorial (AVT) approach to learning general medical terminology. General knowledge concerning the body's functions and how they are impaired. How physicians determine the location and cause of injury and how injuries heal is discussed. Terms are learned in context. The role of paramedical personnel in the care of the injured is covered. One hour of class and four hours of laboratory per week.

NS 108 Astronomy **3 Credits**

Study of our solar system, the stars, the evolution of stars, and the expansion of the universe. Class meets four hours per week including several telescopic viewing sessions.

NS 110 Biology Of Animals **5 Credits**

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.

NS 111 Biology Of Plants **5 Credits**

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.

NS 115 Microbiology **5 Credits**

Prerequisite: One year of high school chemistry or NS 125

Morphology, physiology, classification, culture, and distribution of microorganisms. Emphasis on their relationship to health and disease and basic techniques of working with microorganisms. Transfer, culture and identification of common microorganisms. Class meets seven hours per week.

NS 116 Human Anatomy-Physiology **5 Credits**

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.

NS 117 Human Anatomy **4 Credits**

Gross and microscopic aspects of cells, tissues and organ systems of the human body are studied. Concentration is on detailed analysis of structure of each body system. Class meets six hours per week.

NS 118 Human Physiology **4 Credits**

Prerequisite: One year of high school chemistry or NS 125

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.

NS 120 General Chemistry I **5 Credits**

Prerequisite: MATH 116 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.

NS 121 General Chemistry II **5 Credits**

Prerequisite: NS 120

Presentation of oxidation-reduction, chemical thermodynamics and kinetics, with particular emphasis upon solution and equilibrium. Laboratory consists of supportative experiments with the latter portion devoted to an introduction to qualitative analysis. Class meets seven hours per week.

NS 125 Principles Of Chemistry **5 Credits**

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.

NS 131 Nursing Care Of The Individual **Fall 6 Credits**

Prerequisite: Admission to the Nursing Program

Introduction to nursing with emphasis on the maintenance and promotion of physical and mental health in the individual of any age group. The role of the nurse as a member of the health team is discussed; the effects of interpersonal relationships and utilization of communicative skills will be included. Clinical laboratory practice is an integral part of the course. Three hours of class and nine hours of clinical laboratory per week.

NS 132 Nursing Care Of The Individual: Adaptation To Change **Spring 6 Credits**

Prerequisite: NS 117 and NS 131

Continued study of the maintenance and promotion of health with special emphasis on the family, the community and society. The concept of illness is introduced and the expanded use of community health care is included. Basic concepts of public health are examined in relation to trends in patient care. Clinical laboratory practice is an integral part of the course. Three hours of class and nine hours of clinical laboratory per week.

NS 141 Dental Morphology And Occlusion **Fall 2 Credits**

Prerequisite: Admission to Dental Hygiene Program

Anatomy and physiology of the teeth and their supporting structures. A laboratory course combined with selfteaching opportunities utilizing various media. The laboratory work includes tooth identification, the relationship of malocclusion to mastication and pathological conditions. Four hours of laboratory per week.

NS 143 Clinical Dental Hygiene I **Fall** **3 Credits**

Prerequisite: Admission to Dental Hygiene Program

History of dentistry and dental hygiene; the development and current state of the profession. Introduction to the necessary skills of the hygienist. Theories of stains and oral deposits and the principles and methods of removal of deposits are studied and practiced through direct application to the mouth. One hour of class and six clinical hours per week.

NS 144 Clinical Dental Hygiene II **Spring** **3 Credits**

Prerequisite: NS 143

Continuation of application of skills learned in NS 143, utilizing sterile technique and principles of patient education while performing oral prophylaxis on patient in the clinic. Introduction to the various speciality areas of dentistry including periodontics, orthodontics, prosthodontics, endodontics, and oral surgery as well as the principles and techniques of four-handed dentistry and dental hygiene. One hour of class and six hours of clinic per week.

NS 145 Dental Radiology **Spring** **2 Credits**

Prerequisite: NS 143

Provides instruction in the theory of taking, processing, and mounting oral radiographs. Bisecting angle and paralleling techniques are taught with emphasis upon radiation safety for patient and operator. One hour of class and two hours of lab per week.

NS 147 Head And Neck Anatomy **Spring 2 Credits**

Prerequisite: NS 141

Study of the embryologic development, and of microscopic and gross anatomy of the head and neck. Clinical application is emphasized. One hour of class and two hours of laboratory per week.

NS 149 Nutrition And Diet Analysis **Spring 3 Credits**

Prerequisite: NS 143

Fundamental principles of normal nutrition, sources and utilization of essential nutrients. Special emphasis on the action of these substances on the dental and peridontal tissues. Evaluation of various diets and recommendations for alterations of diets for prevention of oral disease are discussed. Three hours of class per week.

NS 150 General Physics I **4 Credits**

Prerequisite: MATH 106 or equivalent

Introductory survey of important topics in physics such as motion and energy, matter and heat, and electricity and magnetism. Class meets six hours per week.

NS 151 General Physics II **4 Credits**

Prerequisite: NS 150

Continuation of General Physics I. Subjects include wave motion and light relativity, quantum physics, and fundamental particles of nature. Class meets six hours per week.

NS 171 Principles Of Animal Science **3 Credits**

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

NS 172 Plant Science **4 Credits**

Prerequisite: NS 111

Principles of the production of economic plants, including morphology, taxonomy, physiology, ecology, propagation, preservation, storage and utilization. Class meets five hours per week.

NS 181 Floral Arrangement **2 Credits**

Floral design for the home and commercial flower shop. Basic fundamentals are emphasized as well as stylized floral designs including corsages, wedding designs, funeral pieces and party and banquet decorations. Class meets three hours per week.

NS 215 General Genetics **3 Credits**

Fundamental principles of heredity and variation. Concepts of Mendelian and non-Mendelian genetics are illustrated. Plant, animal and human variations are presented. Class meets three hours per week.

NS 220 Organic Chemistry I **Fall 5 Credits**

Prerequisite: NS 121

Develops the nomenclature, principles and theories of organic chemistry

with emphasis on electronic theories and reaction mechanisms. The laboratory is supportive in nature with emphasis on developing laboratory techniques and prearation of representative compounds. Three hours of class and six hours of laboratory per week. Offered in evenings in odd numbered years.

NS 221 Organic Chemistry II **Spring 5 Credits**

Prerequisite: NS 220

Continuation of Organic Chemistry 220 to include an introduction to organic qualitative analysis. Three hours of class and six hours of laboratory per week. Offered in evenings in even numbered years.

NS 225 Principles Of Organic Chemistry **5 Credits**

Prerequisite: NS 121 or NS 125

Introduction to aliphatic and aromatic compounds with emphasis on application to biochemistry and related fields. Nomenclature, principles, and basic theories of organic chemistry will be studied. Class meets seven hours per week.

NS 231 Nursing Care Of The Individual: During Illness Fall **10 Credits**

Prerequisites: NS 116 and NS 132

Continued study of the care of individuals and their needs during illness. Pathophysiology and the application of basic scientific principles in the problems solving process are stressed. Special emphasis is placed on the preparation of care plans and the evaluation of the effectiveness of the care given. Clinical laboratory experience in health care agencies is an important part of the course. Five hours of class and 15 hours of clinical laboratory per week.

NS 232 Nursing Care Of The Individual: Adaptation To Illness **Spring 10 Credits**

Prerequisite: NS 231

Continued study of illness with emphasis on the adjustment of the individual to long term care and rehabilitation. The use of patient care plans is required. Adjustment to the role of the graduate seeking employment in the community is discussed. Clinical laboratory experience in health care agencies is an integral part of the course. Five hours of class and 15 hours of clinical laboratory per week.

NS 241 Clinical Dental Hygiene III **Spring 3 Credits**

Prerequisites: NS 144 and NS 145

An intensive clinical experience during which one may perfect the previously learned clinical skills. Interpretation of radiographs and radiation hygiene is emphasized. Additional experience in the specialty areas provided through affiliations with UMKC School of Dentistry and Kansas City Veterans Administration Hospital. Management of medical and dental emergencies is discussed. Two hours of class and twelve hours of clinic per week.

NS 242 Clinical Dental Hygiene IV **Summer 5 Credits**

Prerequisite: NS 241
Corequisite: NS 248

Continuation of Clinical Dental Hygiene 241. Continued application of the necessary skills to practice dental hygiene effectively. Emphasis placed on the more advanced techniques of root planing and soft tissue curettage. Current concepts and theories in the area of preventive dentistry are discuss-

ed. Field experience at UMKC School of Dentistry, Kansas City Veterans Administration Hospital, Kansas State School for the Deaf and Johnson County public schools. One hour of class and twelve hours of clinic per week.

NS 243 Clinical Dental Hygiene V **Fall 5 Credits**

Prerequisite: NS 242

Continuation of experience in the clinical areas of dental hygiene with additional experience in performing diet analysis and finishing restorations. Principles of professional ethics, laws and regulations related to dentistry and dental hygiene and the effective administration of the dental practice are presented. On hour of class and twelve hours of clinic per week.

NS 245 Dental Materials **Spring 2 Credits**

Prerequisite: NS 145

Continuation of the study of the procedures utilized in dentistry. Provides the student with a basic understanding of the properties of dental materials as well as the influence of manipulative variables. Basic laboratory techniques are performed. One hour of class and two hours of laboratory per week.

NS 246 Dental Pharmacology **Spring 2 Credits**

Prerequisite: NS 245

Study of drugs, anesthetics and therapeutic agents with emphasis on those used ine dental office as well as commonly prescribed medications, their effects upon the body and upon the clinical practice of dentistry and dental hygiene. Class meets three hours per week.

NS 248 Pathology And Periodontology **Fall 3 Credits**

Prerequisites: NS 241 and concurrent enrollment in NS 242.

Fundamentals of microscopic and gross pathology; discussion of general pathological processes. Study of the diseases of the highly specialized dental and peridontal tissues, their etiology and prevention. Special emphasis on therapeutic practice of periodontics including demonstrations of clinical practice of the skills involved in history taking and perio charting, root planing, and soft tissue curettage. Class meets three hours per week.

NS 249 Community Dental Health **Fall 3 Credits**

Prerequisite: NS 143

Combines the principles of public health and dental health education in providing the student the opportunity to study the principles, practices, and materials used in teaching dental health to people of all ages, and from all socio-economic groups. The needs and demands for dental treatment and mechanisms for financing dental care are emphasized. Field experience is included. Three hours of class per week.

NS 250 Engineering Physics 1 **Fall 5 Credits**

Prerequisite: MATH 122 or concurrent enrollment

Introduction to physics for student of science and engineering which stresses mathematical approaches to the study of mechanics, wave motion, and thermodynamics. Class meets seven hours per week. Offered in evening in even numbered years.

NS 251 Engineering Physics II **Spring 5 Credits**

Prerequisite: NS 250

Continuation of Engineering Physics I with emphasis on electricity and magnetism, light, and topics in modern physics. Class meets seven hours per week. Offered in evenings in odd numbered years.

NS 271 Soil Science **4 Credits**

Prerequisite: NS 225

Fundamental chemical, physical and biological properties of soils; their formation, fertitlity and management. Emphasis on plant nutrients, physical properties, classification, organic matter, soil water and soil testing. Class meets five hours per week.

NS 299 Independent Studies In Natural Sciences **1-3 Credits**

Opportunity for the student to pursue special interests through guided independent study in his chosen area. Class meets by arrangement.

PHYSICAL DEVELOPMENT

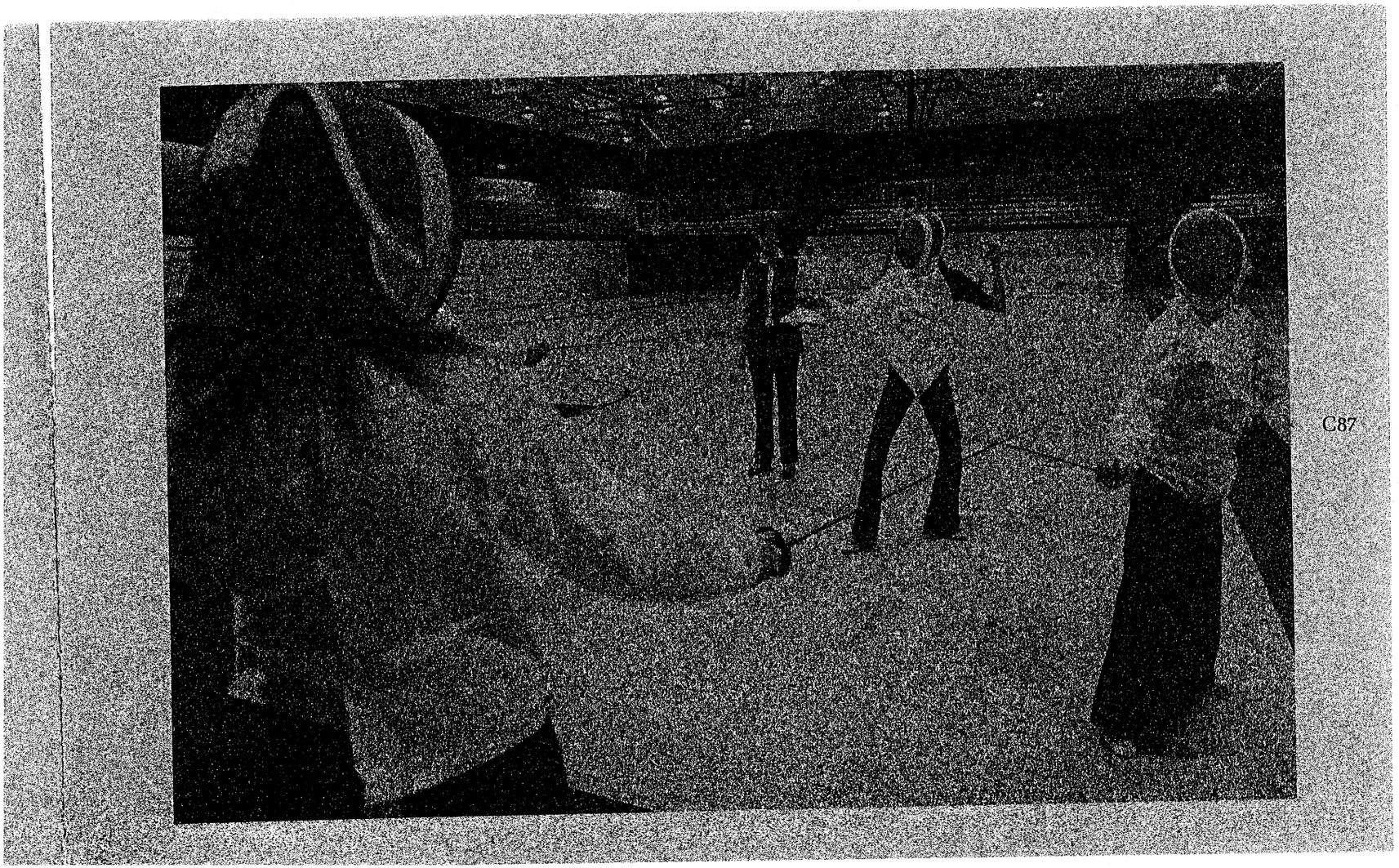
The area of Physical Development in the College curriculum is specifically designed to meet the needs of students who are interested in participation, theory, background, observation and/or officiating in a wide variety of athletic events. Individuals can enhance their own physical abilities, learn to participate in leisure time activities or prepare for a career. Career possibilities include teaching, coaching, community recreation, first aid supervisor, and recreation therapist.

JCCC offers life time sports such as golf, tennis, swimming, archery, which are 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 may plan to transfer to a four-year college or university in order to earn a baccalaureate degree.

Many special activities are offered in the area of sports and recreation through the Adult Continuing Education division of the College. Popular courses have included How to Watch a Football Game, Jogger's Club, Wilderness Backpacking and Physical Fitness and Fun which is designed for the whole family. Instructors from the Physical Development division also offer many clinics during the summer months to increase individual skills in various sports.

Facilities for handball, tennis, weightlifting, archery and other physical activities are available for use by both students at JCCC and residents of Johnson County.

Individuals who are interested in any aspect of Physical Development should visit with a JCCC counselor and develop an individualized program to suit his needs and abilities.



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PD 101 Physical Development **Co-ed 1 Credit**

Activities consist of softball, volleyball, badminton, tennis, soccer, marching, calistenics, bowling, films, lectures, and general discussion of physical development. Standard dress uniform is not required. Dress suited to the activity is stressed. Class meets two hours per week.

PD 102 Physical Development **Co-ed 1 Credit**

Activities consist of golf, tennis, archery, soccer, calisthenics, bowling, films, lectures, and general discussion of physical development. Standard dress uniform is not required. Dress suited to the activity is stressed. Class meets two hours per week.

PD 103.1 - 103.2 Tennis And Badminton **Co-ed 1 Credit**

Brief history of each sport including instruction and practice in the fundamentals of each sport. Class meets two hours per week.

PD 104.1 - 104.2 Handball and Paddle Ball **Co-ed 1 Credit**

Brief history followed by instruction and practice in basic fundamentals. Class meets two hours per week.

PD 105.1 - 105.2 Gymnastics And Tumbling **Co-ed 1 Credit**

Instruction and practice in tumbling, side horse, even and uneven parallel bars, balance beam and trampoline. For the inexperienced or limited experienced student. Class meets two hours per week.

PD 106.1 - 106.2 Wrestling **1 Credit**

Brief history of wrestling followed by instruction and practice in basic fundamentals. Class meets two hours per week.

PD 107.1 - 107.2 Soccer **Co-ed** **1 Credit**

Brief history of soccer followed by instruction and practice in basic fundamentals. Class meets two hours per week.

PD 108.1 - 108.2 Archery **Co-ed** **1 Credit**

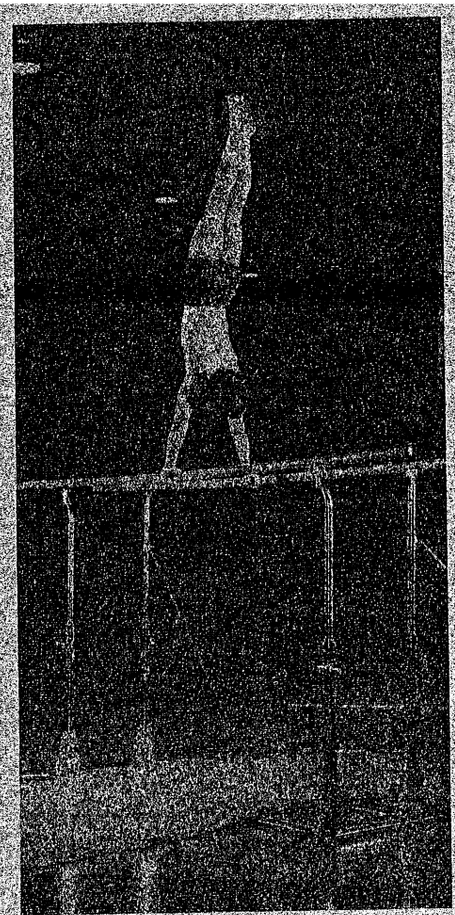
Brief history of archery. Selection and care of equipment and skill in shooting. Class meets two hours per week.

PD 110.1 - 110.2 Rules And Officiating **Co-ed** **2 Credits**

Knowledge and interpretation of the rules of football, basketball, track and field, and baseball is essential in preparing for coaching and/or officiating. Such knowledge and interpretive ability is also helpful to spectators of these sports. Class meets three hours per week.

PD 120 Personal Health And Community Hygiene **Co-ed** **3 Credits**

Insight into some of the 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.



PD 121.1 - 121.2 Physical Fitness And Weight Training Co-ed 1 Credit

Involves the development of various aspects of physical fitness. Units on postural status, body weight control, tension factors (causes and control) exercise tolerance and general body mechanics and control. Class meets two hours per week.

PD 130 Introduction To Physical Education Co-ed Spring 3 Credits

Study of the principles of health and physical education; its history philosophy, theory, and practice. Class meets three hours per week.

PD 131 Individual Life-Time Sports Co-ed Fall 2 Credits

Survey of the basic terminology, skills and rules of selected team sports, individual lifetime sports, and their use in recreation. Emphasis on knowledge and understanding of the organization, administration and promotion of sports rather than mastery of performance skills. Class meets three hours per week.

PD 135 Introduction To Recreation Services Co-ed 3 Credits

Introduces the basic fundamentals of the nature, scope and significance of organized recreation services. Includes study of factors involved in the operation of basic recreation units, major program areas, organizational patterns and the interrelationship of special agencies and institutions which serve the recreation needs of society. Class meets three hours per week.

PD 136 Outdoor Recreation **Co-ed** **Spring** **3 Credits**

Includes study of the history, development and trends of outdoor recreation, conservation and organized camping. Emphasis is on laboratory work, field trips and the development of outdoor skills. Class meets three hours per week.

PD 137 Social Recreation **Co-ed** **2 Credits**

Introduces methods and materials for planning, organizing and conducting social activities for groups of various sizes and ages in a variety of social situations. Emphasis is on the mechanics of planning and presenting a repertoire of activities for social recreation events. Major activities are discussed, played and/or demonstrated. Class meets three hours per week.

PD 140 Fundamentals of Athletics **Co-ed** **Fall** **2 Credits**

Theory of coaching and a study of coaching methods. Emphasis placed on sports currently in season and popular within the local high schools and college athletic programs. Class meets three hours per week.

PD 141 Fundamentals Of Basketball **Co-ed** **2 Credits**

Fundamentals of offensive and defensive basketball; individual and team play; strategy and rules. Class meets three hours per week.

PD 153 Folk, Square And Social Dancing **Co-ed** **2 Credits**

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 skills. Class meets three hours per week.

PD 154.1 - 154.4 Girl's Drill Team **1 Credit (each semester)**

To teach precision drill team techniques and to represent the College in community activities. Enrollment by audition. Class meets from October 1 to end of fall semester; from beginning of spring semester to March 1. Hours by arrangement.

PD 156.1 - 156.2 Cheerleading **Co-ed 1 Credit (each year)**

Basic instruction in the fundamentals of cheerleading. Class meets from October 1 to end of fall semester; from beginning of spring semester to March 1. Hours by arrangement.

PD 157.1 - 157.2 Horsemanship **Co-ed 1 Credit**

General care of horse and equipment. Mounted session includes riding on the flat and over fences. Class meets two hours per week.

PD 159.1 - 159.2 Golf **Co-ed 1 Credit**

Techniques and fundamentals of golf. Choice and use of club, posture, rules, and courtesies of the game. Class meets two hours per week.

PD 160 Fencing **Co-ed 1 Credit**

History, etiquette, and rules of fencing. Basic offensive and defensive tactics and combat strategy. Class meets two hours per week.

PD 170 Swimming/Life Saving **Co-ed** **1 Credit**

Advance work in all swimming strokes. Will prepare student for certification in American National Red Cross Life Saving. Class meets two hours per week.

PD 171 Synchronized Swimming **Co-ed** **Spring** **1 Credit**

Beginning and advanced water ballet and gymnastics. Water show performance and/or competition. Class meets two hours per week.

PD 172 Swimming/Water Safety Instructions **Co-ed** **1 Credit**

Prerequisite: Senior Life Saving

Advance 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.

PD 201 First Aid **Co-ed** **2 Credits**

Standard and/or advanced first aid with certification by the American Red Cross. Cause, prevention, and first aid care of common emergencies. Class meets three hours per week.

PD 209 Independent Studies In Physical Education **Co-ed** **1-3 Credits**

Opportunity for the student to pursue special interests through guided independent study in his chosen area. Class meets by arrangement.

SOCIAL SCIENCE

The social science area of the College curriculum includes sociology, political science, psychology, economics, history, government and law enforcement. Students at JCCC generally enroll in social science courses because they are designed to introduce basic concepts of individual and social behavior which are applicable to all aspects of life. Career possibilities include the areas of counseling and guidance, clinical psychology, testing and measurement, teaching, diplomacy, law and law enforcement.

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

The Law Enforcement career program at JCCC is designed to meet the educational needs of local law enforcement agencies. Law enforcement courses may be taken by students in all areas at the College. In addition, short courses, workshops and seminars are offered for those personnel presently in the field of law enforcement who wish to update or improve their skills and knowledge.

Through the division of Adult Continuing Education, many courses in the social science area are offered to interested individuals. Psychology, one of the most popular areas of intellectual inquiry, has inspired such Adult Continuing Education offerings as "The Psychology of Aging" and "Introduction to the World of ESP."

Information on all the many possibilities within the area of social science is available from the JCCC counseling staff. Each individual can have a specific program designed to meet his needs by making an appointment to see one of the JCCC counselors.

C95

SS 101 Social Science/Sociology **3 Credits**

An interdisciplinary sociology course that introduces the basic concepts and methods of sociology and their relationship to the other behavioral sciences. Concepts from sociology, as well as other disciplines, are used to explore various dimensions of social organizations. Class meets three hours per week.

SS 102 Social Science/Political Science **3 Credits**

An interdisciplinary political science course which introduces the basic concepts and methods from political science and their relationship to the behavioral sciences. Such topics as the city, the environment and international relations are examined. Class meets three hours per week.

SS 103 Social Science/Psychology **3 Credits**

An interdisciplinary psychology course which introduces the basic concept and methods of general psychology and their relationship to the behavioral sciences. The application of psychological principles to the understanding of behavior is stressed. Class meets three hours per week.

SS 150 Basic Police Training Course **4-7 Credits**

Prerequisite: Must be currently employed full-time by a participating law enforcement agency.

Basic patrol procedures: Traffic investigation and control, arrests, search and seizures. Fulfills and exceeds requirements of the Kansas Minimum Standards Training Act. May be applied as 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.

SS 151 Introduction To Law Enforcement **3 Credits**

Corequisite: SS 154 or by permission

Philosophical and historical background, organizations, purpose and functions of police agencies on the local, state, and federal levels and their respective roles in the administration of criminal justice in the United States. Class meets three hours per week.

SS 153 Juvenile Code And Procedures **3 Credits**

Prerequisites: SS 151 and SS 154

Origin and development of juvenile agencies, organization functions and jurisdiction of juvenile courts. Detention, procedure and disposition, and custody and treatment of juvenile offenders in Kansas is included. Class meets three hours per week.

SS 154 Study Of The Criminal Justice System **3 Credits**

Corequisite: SS 151 or by permission

Survey of the administration of criminal justice in the United States emphasizing the role of the police, the prosecution, judicial and correctional processes. Class meets three hours per week.

SS 155 Criminal Law **3 Credits**

Prerequisites: SS 151 and SS 154

Classification and analysis of crimes and criminal acts. Discussion of Kansas Criminal Statutes. Class meets three hours per week.

SS 156 Fundamentals Of Criminal Investigation **3 Credits**

Prerequisite: SS 155 or by permission

Study of the criminal act and its investigation, including specific crimes against the person and against property. Processes of fact gathering, testing of hypotheses, and problems of proof. Class meets three hours per week.

SS 159 Police And The Public **3 Credits**

Study of police community relations. Intensive examination of the many programs used throughout the United States with emphasis placed on the role of the individual police officer. Class meets three hours per week.

SS 201 Economics I **3 Credits**

Prerequisite: By permission

Study of the basic economic problems of resource allocation, national income determination, money and banking, fiscal policy, and international trade and finance. Class meets three hours per week.

SS 202 Economics II **3 Credits**

Prerequisite: SS 201 or by permission

Continuation of Economics 201 with emphasis on supply and demand, theory of the firm, and market structures. Class meets three hours per week.

SS 210 Child Development **3 Credits**

Prerequisite: SS 103 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. Class meets three hours per week.

SS 211 Educational Psychology **3 Credits**

Prerequisite: SS 103 or by permission

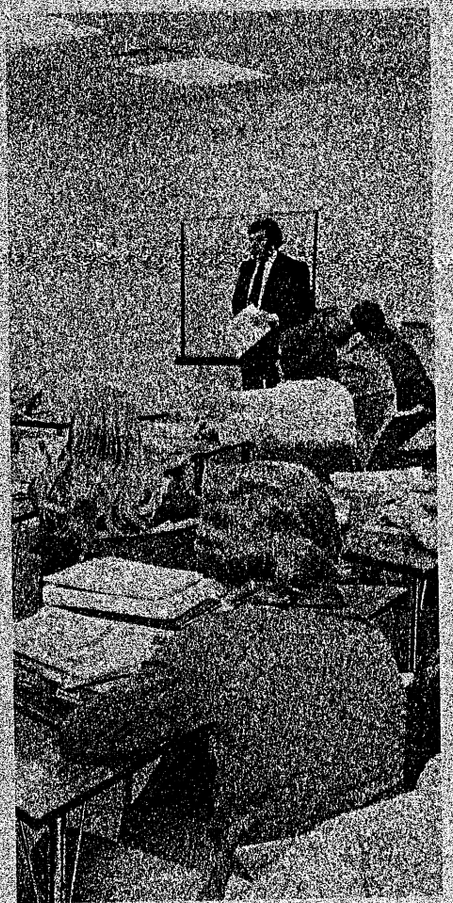
Concepts in human development related to problems in the school learning-teaching situations. Study of behavior, attitudes, values, skills, retention and transfer. Measurements of abilities and achievements of students. Class meets three hours per week.

SS 220 American History I **3 Credits**

Colonial period to Civil War. Survey course of American history in light of the growth of institutions, economic development, Westward expansion and cultural history. Emphasis also placed on the nature and methodology of history. Class meets three hours per week.

SS 221 American History II **3 Credits**

Civil War to present. Survey course in American history tracing the economic, political, social and cultural influences on contemporary society. Emphasis also placed on the nature and methodology of history. Class meets three hours per week.



SS 222 American National Government **3 Credits**

Prerequisite: By permission

General systems approach to the process of American national government. Emphasis on interaction and interrelationships among components of American Society which create the dynamics of our governmental system. Class meets three hours per week.

SS 230 Social Problems **3 Credits**

Prerequisite: By permission

Provides a meaningful sociological framework for the analysis of social problems and a consideration of the application of varying methods to the study of social problems. Class meets three hours per week.

SS 244 Supervisory Techniques For Policemen **3 Credits**

Prerequisite: SS 154

Elements of Police Supervision in theory and practice. Study of the supervisor's role in Police Service. Examines various dimensions of supervisory responsibility and other pragmatic guidelines for their fulfillment. Class meets three hours per week.

SS 250 Motor Vehicle Law **3 Credits**

Prerequisites: SS 151 and SS 154

Study of the standard traffic ordinances for cities in Kansas with a view to understanding the fundamentals of traffic regulation and control as they relate to the police service, motor vehicle administration, traffic courts, and other governmental functions. Class meets three hours per week.

SS 251 Introduction To Criminalistics **3 Credits**

Prerequisites: SS 156, SS 257, and SS 258

Physical evidence, collection, identification preservation, and transportation; crime laboratory capability and limitation; examination of physical evidence within resources of the investigator and demonstration of laboratory criminalistics to the extent supported by existing or available facilities. Class meets three hours per week.

SS 253 Police Organization And Management **3 Credits**

Prerequisite: SS 244

Study of latest methods and techniques used in the organization of a police department. Practical application of procedures used in management of people, money, and materials to achieve objectives of the department. Class meets three hours per week.

C101

SS 254 Criminology **3 Credits**

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.

SS 255 Traffic Safety And Accident Investigation **3 Credits**

Prerequisites: SS 151 and SS 154 or by permission

Study of the enforcement problems created by modern society with emphasis on control, engineering and accident investigation principles. Class meets three hours per week.

SS 256 Constitutional Case Law **3 Credits**

Prerequisite: By permission

In-depth analysis of important Supreme Court decisions dealing with questions of Constitutional Law that have significant impact on law enforcement techniques and procedures. Facts, issues, dissents and reasoning involved in decisions are studied. Students develop guidelines for use in practical application of Constitutional Case Law to Law Enforcement. Class meets three hours per week.

SS 257 Patrol Procedures **3 Credits**

Prerequisites: SS 153, SS 155, and SS 250

Skills development course in the mechanics of basic patrol techniques. Communications, report writing, answering calls, traffic enforcement, and courtroom procedures included. Class meets three hours per week.

SS 258 Defensive Tactics For Police **3 Credits**

Prerequisites: SS153, SS 155, and SS 250

Use of police firearms, defensive tactics, and emergency first aid. Includes qualification with the service revolver and use of the baton. Class meets three hours per week.

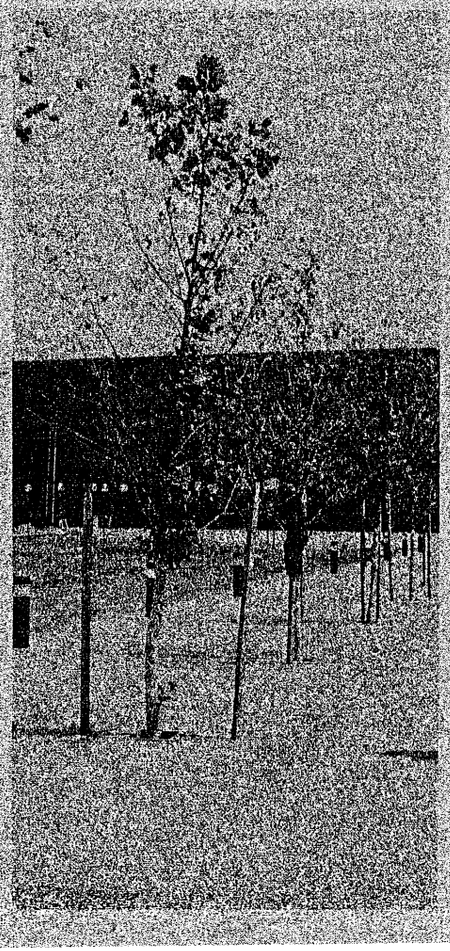
SS 259 Readings In Police Science **1-3 Credits**

Prerequisite: 15 hours credit in Law Enforcement

Selected readings in Police Science; e.g., Police Administration, Criminal Investigation, Criminology, Corrections, Juvenile Problems, Evidence. Course designed for independent study. Permission of instructor required.

SS 299 Independent Studies In Social Sciences **1-3 Credits**

Opportunity for the student to pursue special interests through guided independent study in his chosen area. Class meets by arrangement.



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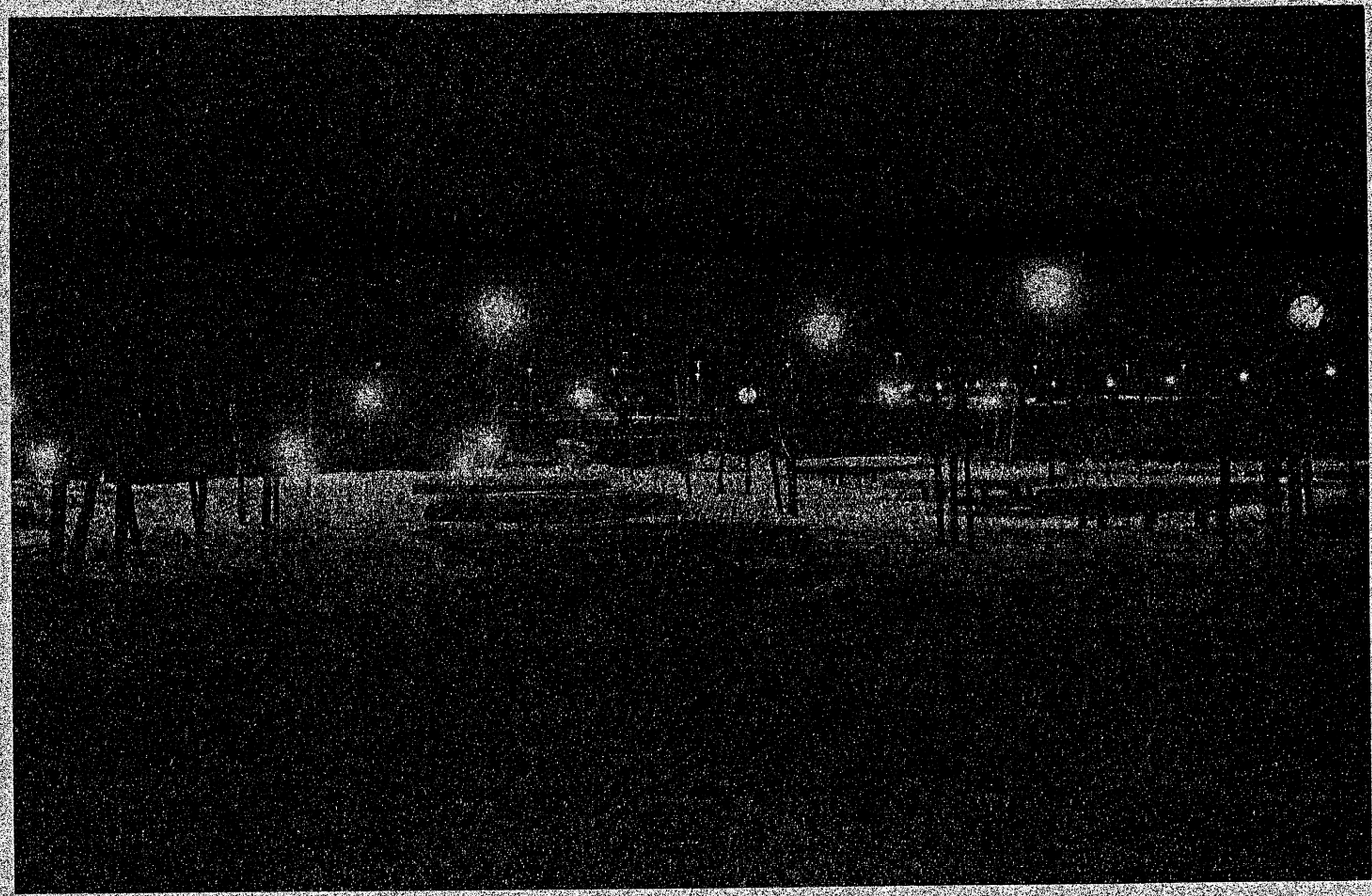
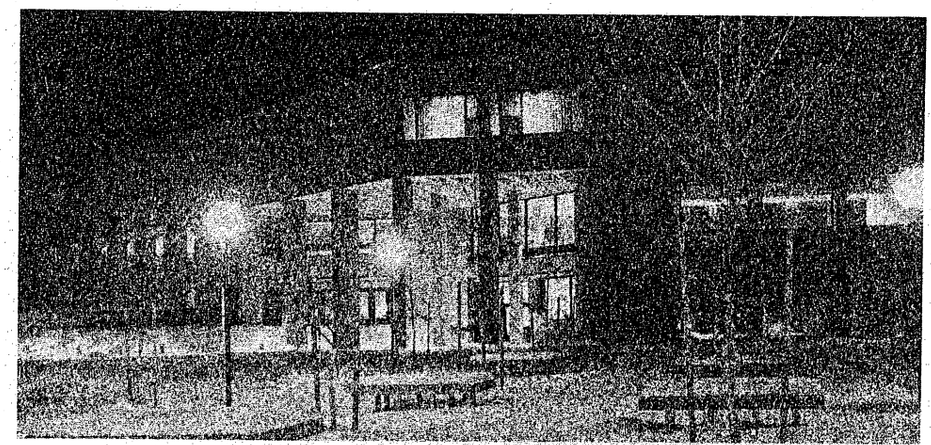


DIRECTORY

ADVISORY COMMITTEES

Advisory Committees at Johnson County Community College provide communication, advice and support from the community to those who develop and operate College programs. Members are individuals with experience and training in the various program fields being developed by the College. The Board of Trustees approves all appointments to the Advisory Committees. The assistance of these individuals is an essential part in the implementation of the College's philosophy of meeting the expressed needs of the community.



CAREERS AND SERVICES FOR THE HEARING IMPAIRED

Mr. Melvin Bruntzel
Director of Speech & Hearing
State Department of Education

Ms. Janis Grogan
Placement Specialist
Industrial Rehabilitation Center

Dr. Rollie Houchins
Associate Professor of Audiology
Department of Hearing and Speech
University of Kansas Medical Center

Mrs. Betty Hudgens
Counselor
Johnson County Manpower Center

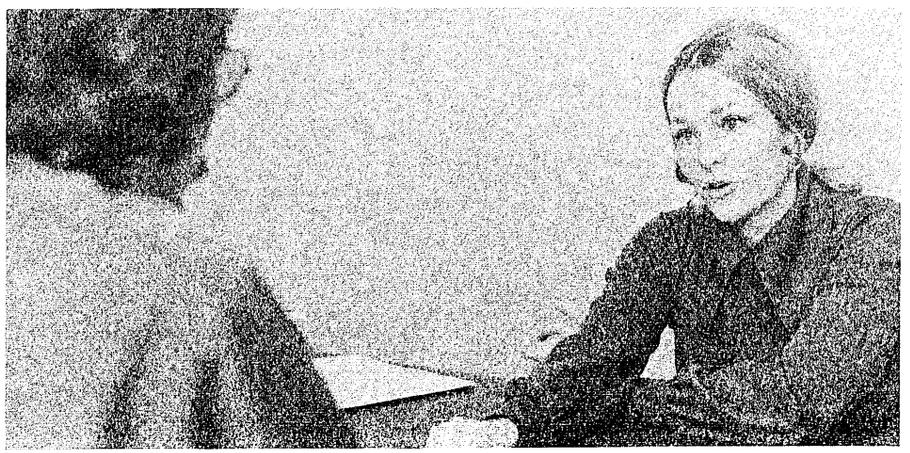
Mr. Jeffery Morrill
Executive Director, Greater Kansas City Hearing & Speech Center
General Hospital & Medical Center

Mr. Fred Murphy
Instructor
Kansas School for the Deaf

Mr. Lloyd Parks
Principal
Kansas School for the Deaf

Mr. Robert Rowlands
Supervisor
Vocational Rehabilitation Div.

Mrs. Suzanne Schrock
Hearing Clinician
Briarwood Elementary School



DATA PROCESSING

Mr. Gary Bietka
Programmer
KU Medical Center

Mr. J. R. (Bob) Dwyer
CDP, Senior Systems Programmer
Computer Services
Panhandle Eastern

Ms. Jo Ann Naylor
RH Enterprises, Inc.

Mr. Ron Paul
Director, Data Processing Dept.
Johnson County Courthouse

Mr. Evan Stewart
Butler Manufacturing

Mr. La Mon Thomson
Manager SR & D Dept.
United Computing Systems

Mr. Gerald Wheatley
Assistant Vice President
Yellow Freight Systems, Inc.

Mr. Paul Wolfe
Director KU Computation Center
University of Kansas

DENTAL HYGIENE

Mrs. Susan Brooks
Dental Hygienist

Duard W. Enoch, Jr., D.D.S.

Mrs. Barbara Lambert
Director of Dental Hygiene
University of Missouri -
Kansas City

T. J. Nidiffer, D.D.S.

Richard C. Porch, D.D.S.

Robert R. Rhyne, D.D.S.
Chief of Dental Services
K.C. Veterans Hospital

H. B. G. Robinson, Dean
School of Dentistry
University of Missouri -
Kansas City

Mrs. Frank X. Rothschild
Dental Hygienist

D6

DRAFTING TECHNOLOGY

Mr. John Birchler
Draftsman
U.S. Army Corp. of Engineers

Mr. Herb Mynatt
Section Supervisor Engineering Drafting
Bendix Corporation

Mr. Fred Pfeifer
Drafting Supervisor
King Radio Corporation

Mr. Howard L. Scott
Department Chief
Machine Design & Development
Western Electric Company

Mr. Jack Wilkus
Mechanical Engineer
Black & Veatch Engineering

ELECTRICAL - ELECTRONICS ENGINEERING AND SERVICE TECHNOLOGIES

Mr. Gene Grillot
Group Leader - Engineering Dept.
King Radio Corporation

Mr. David Hax
Chief Engineer
Product Engineering Services
Bendix Corporation

Mr. Bob Watts
Electrical Mechanic
Trans World Airlines

Dr. Edwin Martin
Staff Engineer
Wilcon

Mr. John W. Cain, Jr.
Test Engineer
Western Electric Co.

FASHION MERCHANDISING

Mrs. Louise R. Ayres
Personnel Manager
Harzfeld's

Mr. Wayne Christenson
Buyer
Jones Store

Mr. Vance Gosney
Department Manager
Sears Roebuck

Mr. Larry Haggard
Fashion Designer
H. D. Lee Co., Inc.

Dr. Juanita Kilbourne
Professor & Consultant (Fashion)
Kansas State University

Mr. Burton Lisman
Owner
Lisman's

Mrs. Jeanne Mathews
Fashion Coordinator
Jones Store Company

Mr. Thomas R. Saunders
Store Manager
Adler's

JOURNALISM

Mr. Bob Fiser
Editor
Johnson County Herald

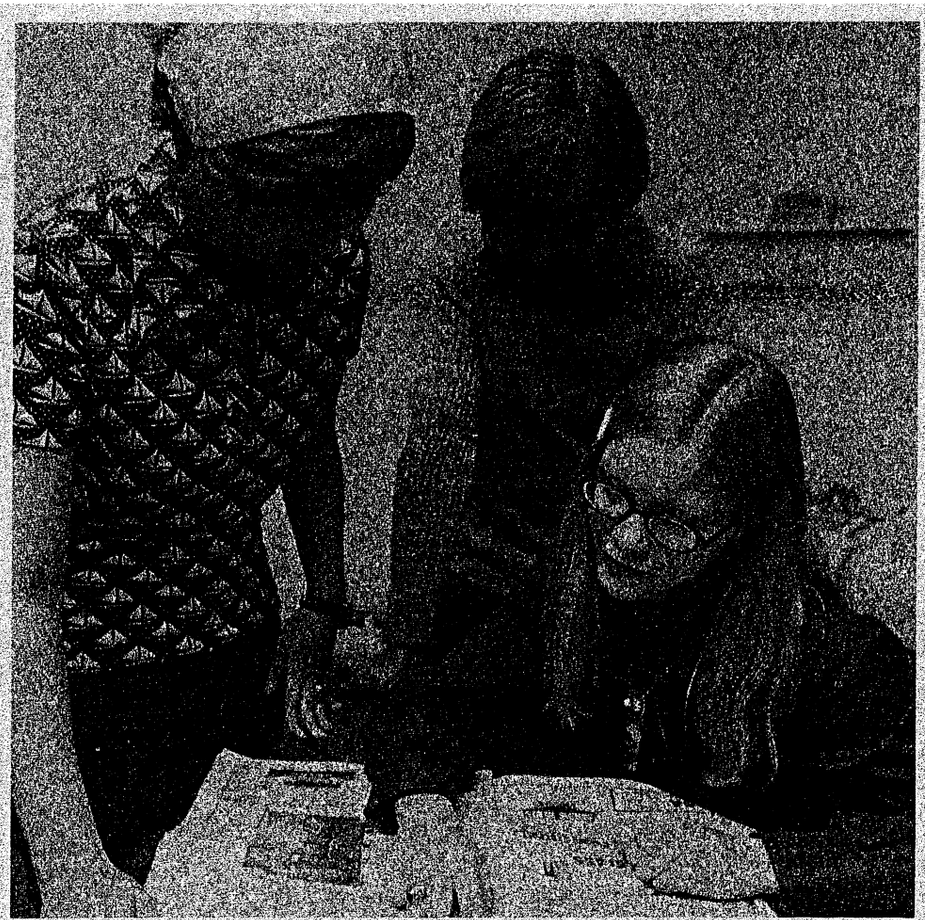
Mrs. Lynne Harmon
Account Executive
Bernstein Rein & Boasberg
Advertising Agency

Mr. William E. Miller
Metropolitan Editor
The Kansas City Star

Mr. Barry Robinson
Public Information Officer
Federal Reserve Bank

Mr. Jay Thomas
Journalism Student
University of Kansas

Mr. Edwin H. White
Associate Professor
School of Administration
University of Missouri -
Kansas City



LAW ENFORCEMENT (ACADEMIC)

Mr. Fred Allenbrand
Sheriff, Johnson County

LAW ENFORCEMENT (IN-SERVICE)

Mr. Richard Blume
Leawood Police Department

Mr. Douglas Haynes
Chief of Police
Merriam Police Department

LAW ENFORCEMENT (RECRUIT)

Mr. Fred Allenbrand
Sheriff, Johnson County

Mr. Maynard L. Brazeal
Director of Police Training
Kansas Law Enforcement Training Center

Dr. James Bridgens
Dept. of Pathology
Shawnee Mission Hospital

Mr. George Lueckenhoff
Special Agent
Federal Bureau of Investigation

Ms. Margaret Jordan
District Attorney of Johnson County

Mr. James G. Malson
Special Agent
Kansas Bureau of Investigation

Dr. William A. O'Connor
Corinth Square Medical Bldg.

Mr. John Foster
Chief of Police
Lenexa Police Dept.

Mr. R. J. Hundley
Chief of Police
Prairie Village Police Dept.

Mr. William Shepard
Chief of Police
Olathe Police Dept.

Mr. Jerry Pike
Chief of Police
Mission Police Dept.

Mr. Herbert Walton
Judge, Division #1, District Court
Johnson County Court House

Mr. Al Wrinkle
Chief of Police
Westwood Police Dept.

Mr. Charles Stump
Chief of Police
Shawnee Police Dept.

Mr. Albert Yonally
Chief of Police
Roeland Park Police Dept.

NURSING (R.N.)

Dr. Margery Duffey, R.N.
Assistant Chairman, Dept. of Nursing Education
Kansas University Medical Center

Mr. John C. Eisele
Attorney

Dr. Robert Fairchild
Director, Clinics
Childrens Mercy Hospital

Miss Marjorie Hansen, R.N.
Director of Nursing
Shawnee Mission Hospital

Miss Donna Hawley, R.N.
Director of Nursing
Kansas City, Kansas Community College

Mrs. Adeline Marshall, R.N.
Chairman, Dept. of Nursing Education
Penn Valley Community College

Dr. Samuel C. Petrie
Medical Staff - Shawnee Mission Hospital

Dr. Kenneth C. Wiebe
Medical Staff - Shawnee Mission Hospital

RETAIL MARKETING MANAGEMENT

Mr. Larry Booker
Owner
Larry Booker Builders Mart

Mr. Verne A. Bunn
Management Assistance Officer
Small Business Administration

Mr. Bruce Harper
Sales Manager
Gas Service Company

Mr. Jim Hennessey
Personnel Manager
The Jones Store Company

Mr. Walter Jacobs
Store Manager
J. C. Penney Company

Mr. William Lund
Training Manager
Macy's Department Store

Mr. E. H. Werner
Group Personnel Manager
Sears Roebuck & Company

SECRETARIAL CAREERS

Mrs. Hilda Anderson
Vice-President
Preferred Business Service Corp.

Mrs. Jackie Evans
Personnel Supervisor
H. D. Lee Co., Inc.

Ms. Eve Fisher
Director of Personnel
Crown Center Hotel

Mr. John R. Hayward
District Manager
Moore Business Forms, Inc.

Mr. Warren Huff
Personnel Director
Cutter Haver Lockhart

Miss Pat Jacobs
Secretary to the President
United Telecommunications, Inc.

Mr. Fred Johnson, Manager
Johnson County Manpower Center

Mr. Larry Pack
Personnel Manager
ECODYNE Corp.
Smith & Loveless Division

Miss Patricia A. Palmer, CPS, CLU
National Fidelity Life Ins. Co.

Mr. Jim Titmas
District Manager
Automated Business Systems -
Litton Industries

ADMINISTRATIVE STAFF

OFFICE OF THE PRESIDENT

President	Robert G. Harris
Personnel Assistant	Michael J. Broker

OFFICE OF COMMUNITY COOPERATION

Director of Community Cooperation	John Pearce

EXECUTIVE BRANCH

Executive Dean	Harold L. Finch
Director of Institutional Research	Elaine Tatham
Director of Institute for Community/College Development	Harold L. Finch

BUSINESS AND FACILITIES BRANCH

Dean of Business and Facilities	Al Cerne
Director of Business	Nick Roach
Director of Facilities	Gene Haun
Food Services Manager	Jerry Vincent
Bookstore Manager	Joe Hentzen

COLLEGE SERVICES BRANCH

Dean of College Services	Donald P. Meyer
Assistant Dean of College Services	William J. Hoffman
Director of Admissions and Registrar	Linda Dayton
Director of Guidance and Counseling	Don Dougherty
Director of Educational Media Center	William J. Hoffman
Coordinator of Media Production	Michael L. Felton
Director of Athletics	Orville Gregory
Coordinator of Student Activities	Patsie Staake
Director of Data Processing	Tom Elliott

INSTRUCTIONAL BRANCH

Dean of Instruction	William A. Lozano
Assistant Dean of Instruction	Richard A. Burns
Assistant Dean of Instruction	Dane W. Lonborg
Coordinator of Career Education	Norman H. Karl
Director of Adult Continuing Education	Michael G. Toler
Director of Business and Management Division	James P. Vomhof
Director of Engineering and Technology Division	Carl E. Lindsey
Director of Natural Sciences Division	Thomas M. Barnett
Director of Physical Development Division	Orville Gregory
Director of Social Sciences and Humanities Division	James W. Jackson

STAFF

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S.T.L., University of Munich, Germany
M.A., University of Kansas

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M.A., Central Missouri State University

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M.A., University of Missouri - Kansas City

BRUENING, Larry K. **Data Processing Programmer**

Certificate-Computer Programming
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M.A., University of Missouri, Kansas City

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B.A., William Jewell College
M.S.T., University of Missouri

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B.S., U.S. Naval Academy
M.A., Duke University

C **CAFFREY, Margaret N.** **Librarian**

B.A., St. Mary College
B.S./LS, Catholic University of America

CERNE, Al **Dean of Business and Facilities**

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D18 M.S., Kansas State College of Pittsburg

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B.S., University of Missouri - Kansas City
M.A., University of Missouri - Kansas City

CLARK, John **Instructor, Aviation**

B.A., Southwest Baptist College

COFFMAN, Bob **Supervisor, Word Production Section**

B.A., Bethany College

COLE, Norma L. **Instructor, Nursing**

B.A., University of Missouri - Kansas City

CRAWFORD, Sam **Instructor, Physical Sciences**

B.S., Kansas State Teachers College
M.S., Kansas State Teachers College

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J.D., Kansas University

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B.A., Chicago State College

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M.L., Kansas State Teachers College

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M.S., Kansas State Teachers College

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M.S., Kansas State Teachers College

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B.Mus., Bethany College
M.A., University of Denver

DOUGHERTY, Don **Director of Guidance and Counseling**

B.S., Kansas State Teachers College
M.S., Kansas State Teachers College

E **EDGEMON, Joan** **Instructor, Nursing**

B.S., Washington University

EFFINGHAM, Marie **Instructor, Nursing**

B.S., University of Chicago
M.A., University of Missouri

ELLIOTT, Tom A. **Director of Data Processing**

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

EVANS, David J. **Instructor, Business**

B.S.C., University of Iowa
M.Ed., University of Nebraska

EVANS, James **Instructor, Business**

B.S., Kansas State University
M.S., Kansas State Teachers College

EVESLAGE, Roberta **Instructor, Social Sciences**

B.F.A., Texas Christian University
M.A., University of Kansas
Ph.D., University of Kansas

F **FELTON, Mike** **Coordinator, Media Production**

B.S., Oklahoma State University
M.S., Oklahoma State University

FINCH, Harold L. **Executive Dean**

B.S., University of Kansas
M.S., Ohio State University
Ed.D., University of Kansas

FONG, Li Ren **Instructor, Mathematics**

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

G **GARTON, Mary Lou** **Instructor, Hearing Impaired**

B.A., Kansas State Teachers College

GEORGE, Dennis J. **Instructor, Life Sciences**

B.S., Rockhurst College
M.A., University of Missouri - Kansas City

D20 **GILBERT, Oliver T.** **Instructor, Mathematics**

B.S., University of Kansas
M.S., University of Utah

GILFORD, Charles B. **Instructor, Communications**

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

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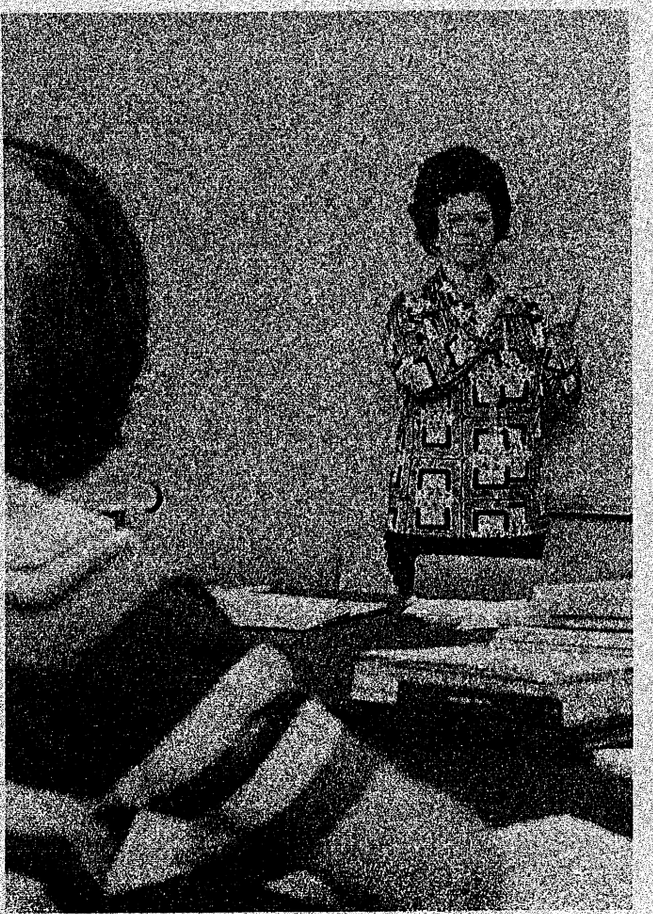

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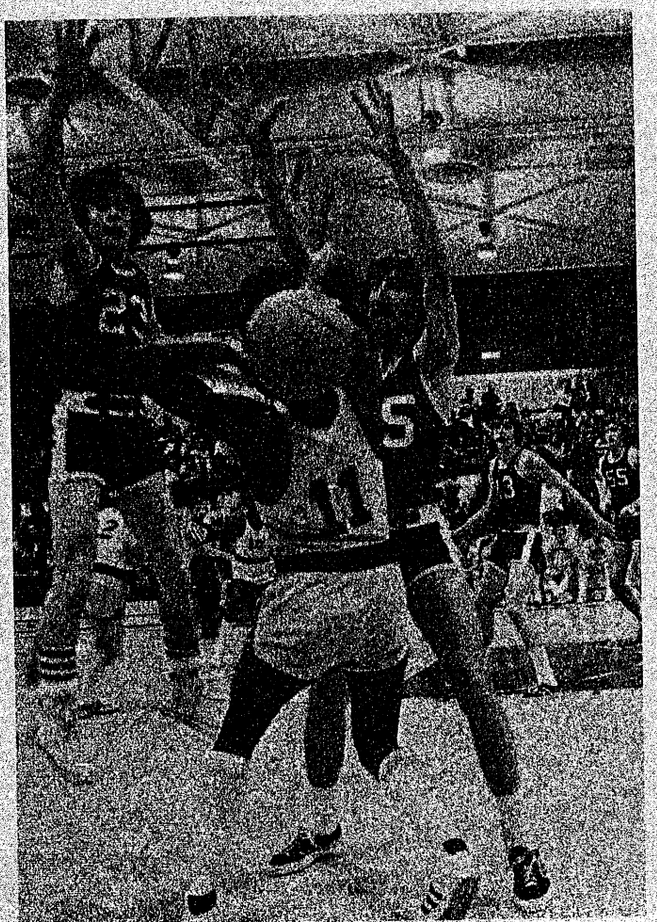

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