JOHNSON COUNTY COMMUNITY JUNIOR COLLEGE
1971-72 Volume One, Number Two

PERMANENT CAMPUS
111th & Quivira Road
Shawnee Mission, Kansas 66211
Scheduled for occupancy: fall, 1972

INTERIM CAMPUS
57th & Merriam Drive
Shawnee Mission, Kansas 66203
Area Code 913, 236-4500

Correspondent status accreditation 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.
CONTENTS

Presidents Message A6
Board of Trustees A8
Calendar A10

GENERAL INFORMATION
Functions B2
Objectives B5
Temporary Campus B8

MATRICULATION
Admissions Requirements B10
Admission B10
Registration Procedures B11
Orientation B12

ACADEMIC INFORMATION
Grading System B13
External Credit B15
Classification of Students B16
Graduation Requirements B17

STUDENT PERSONNEL SERVICES
Counseling B19
Reassessment of Student Progress B20
Repetition of Courses B20
Dropping a Course B20
Attendance B20
Suspension B21
Withdrawal B22
Readmission B22
Costs B23

FINANCIAL AIDS
Determining Financial Need B24
Loans B25
Grants B27
Scholarships B28
Application for Financial Aids B29
Placement B30
Student Activities B31
Student Government B31
Intercollegiate Athletics B31
Intramural Athletics B32
STUDENT WELFARE

B33  Student Health
B33  Civil Rights
B34  Housing
B34  Smoking, Gambling, Alcohol, Drug Abuse
B34  Personal Appearance
B35  EDUCATIONAL MEDIA CENTER
B37  ADULT CONTINUING EDUCATION

PROGRAMS

C2   Objectives
C3   Architecture and Urban Design
C4   Air Traffic Control
C5   Aviation Flight Program
C7   Business Administration
C9   Commercial Art
C10  Data Processing
C11  Drafting Technology
C12  Electrical-Electronic Engineering Technology
C13  Electrical-Electronic Service Technology
C15  Engineering
C15  Fashion Merchandising
C16  Health Occupations
C17  Law Enforcement
C18  Liberal Arts Program
C19  Nursing
C20  Retail Marketing
C21  Science
C23  Secretarial Careers

COURSE DESCRIPTIONS

D2   Aviation
D6   Business
D18  College Learning Center
D19  Communications
D25  Engineering
D33  Humanities
D40  Math
D43  Natural Science
D48  Physical Development
D51  Social Science

FACULTY DIRECTORY

E2   Administration
E3   Faculty
Johnson County Community College was planned from its inception to ultimately become a “first choice” institution of higher education. This dream became a reality during 1970-71, the second year of academic operation, when JCCC was selected by more new graduates of Johnson County high schools than any other college or university in the United States.

Public acceptance of the College cannot be described in terms any less dramatic than “dynamic” or “fantastic”. Enrollment grew from an initial student body of approximately 1,400 to almost 2,400 in its second year, making it the largest of the 19 public two-year colleges in the State of Kansas. JCCC ranks third in size among all the colleges and universities located throughout the Greater Kansas City area.

Response to non-credit adult continuing education courses and a variety of other community services has been equally dramatic.

Rapid expansion can also be described in numbers of facilities and geographic areas served, as well as by enrollment figures. The College currently leases seven buildings in Merriam, one in Shawnee and a facility in Olathe. Both credit and non-credit evening courses are offered in DeSoto, Olathe and several Shawnee Mission schools. Other facilities throughout the community are used when appropriate, and available.
Such rapid growth has necessitated the doubling of instructional faculty as many new courses and programs continue to be added or expanded. One of the most exciting programs last year, entitled “Creation of Change”, emphasized the constructive, positive aspects of our society. During 1971-72 this interdisciplinary program will explore a new theme and will be expanded to draw upon, as well as to contribute to every educational program in the College.

The completion of second year programs of the two-year College might suggest that all the “firsts” have already been experienced. Nothing could be further from the truth.

For the first time cable television is available to many residents of Johnson County. The potential for this new mass communications medium, for education as well as entertainment, is enormous. The College plans to originate programs of interest to the community in addition to those for the enrolled student, and is working closely with the cable television organization to ensure compatibility of equipment and facilities at the permanent campus.

The permanent campus is under construction and scheduled for occupancy in August, 1972. For the first time facilities specifically designed to provide for community college needs will be available.

Probably most important of all, the first Associate of Arts degree candidates graduated in May, 1971, are the first alumni of the Johnson County Community College. Some have elected to continue their studies at four-year institutions in various parts of the country. Others have decided to immediately enter the career field of their choice. In either case it is sincerely hoped that they remain, or return “home” in order to help build an even greater Johnson County . . . . and Community College.

Robert G. Harris
President
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>O. DALE SMITH, M.D.</td>
<td>Chairman</td>
<td>1967-75</td>
</tr>
<tr>
<td>DR. JOHN R. PRICE</td>
<td>Vice-Chairman</td>
<td>1969-73</td>
</tr>
<tr>
<td>MR. JOHN H. ROBINSON</td>
<td>Treasurer</td>
<td>1967-73</td>
</tr>
<tr>
<td>DR. JACK J. HOLDER, JR.</td>
<td>Clerk</td>
<td>1969-73</td>
</tr>
<tr>
<td>DR. WILBUR T. BILLINGTON</td>
<td>Trustee</td>
<td>1967-75</td>
</tr>
<tr>
<td>DR. HUGH W. SPEER</td>
<td>Trustee</td>
<td>1967-75</td>
</tr>
</tbody>
</table>

The six elected members serve four-year terms. Three trustees are elected every other year from the county-at-large.
PHILOSOPHY OF THE BOARD OF TRUSTEES AND STAFF

The Board of Trustees and the Staff of the Johnson County Community College firmly believe in the dignity and worth of every person by insuring an equal opportunity to all without regard to race, creed or sex. They also recognize that each individual is a part of a larger society, and that society has established a framework of laws, rules and regulations within which the individual lives and works. The Board and Staff wish to create a wholesome atmosphere for learning by keeping the rules and regulations in the educational community to a minimum and to seek the council of those who participate in the educational community in establishing these rules and regulations.

The Board of Trustees and the Staff believe that each individual should have the opportunity to reach 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 meet his goals and aspirations.
### SUMMER SESSION 1971

<table>
<thead>
<tr>
<th>June</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-4</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>8</td>
</tr>
<tr>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>July</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
</tr>
</tbody>
</table>

### SECOND MINI SESSION

<table>
<thead>
<tr>
<th>July</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>8</td>
</tr>
<tr>
<td>30</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>August</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
</tr>
</tbody>
</table>
FALL SEMESTER 1971

August
19  Registration and payment of fees for students with last names starting A through K
20  Registration and payment of fees for students with last names starting L through Z
23-24 Continued registration
26  Classes begin,
First day for schedule changes

September
1   Last day for late registration without Dean’s permission. Last day for adding courses without Dean’s permission. Last day for withdrawal from a course or from the College and receive a refund
6   Labor Day Holiday. Classes not in session. College offices closed
7-10 Adult continuing education registration
13-17 Adult continuing education classes begin

October
11  Columbus Day Holiday. Classes not in session. College offices closed
20  Low grade reports
25  Veterans’ Day Holiday. Classes not in session. College offices closed
November
25-28 Thanksgiving Holiday. Classes not in session. College offices closed

December
13-18 Last week of classes
19 Christmas holiday begins
20 Grades due in Admissions Office
24&31 All College offices closed

SPRING SEMESTER 1972

January
6 Registration and payment of fees for students with last names starting A through K
7 Registration and payment of fees for students with last names starting L through Z
10-11 Continued registration
13 Classes begin,
First day for schedule changes
19 Last day for late registration without Dean’s permission. Last day for adding courses without Dean’s permission. Last day for withdrawal from a course or from the College and receive a refund
17-21 Adult continuing education registration
24-28 Adult continuing education classes begin
February

21 Washington's Birthday Holiday. Classes not in session. College offices closed

March

8 Low grade reports
26 Spring recess begins. College offices open

April

5 Classes resume.

May

8-13 Last week of classes
15 Grades due in Admissions Office
17 Commencement
29 Memorial Day Holiday. All College offices closed
SUMMER SESSION 1972

June

1-2 Registration and payment of fees for first mini session and eight week regular session

5 Summer session begins

6 Last day for late registration without Dean’s permission. Last day for schedule changes

8 Last day for withdrawal from a course or from the College and receive a refund

30 First mini session ends

SECOND MINI SESSION

June

30 Registration and payment of fees for second mini session

July

3 Second mini session begins

4 Independence Day Holiday. Classes not in session. All College offices closed

5 Last day for late registration without Dean’s permission. Last day for schedule changes

6 Last day for withdrawal from a
course or from the College and receive a refund

31 Second mini session and eight week session ends

August

2 Grades due in Admissions Office
GENERAL INFORMATION

FUNCTIONS

The purpose of the College is to serve the community as a whole. This is done in many ways — through the instructional program that is offered during the day and evenings; through adult continuing education which is generally offered in the evenings and located throughout the county; and through community services which are guided by cooperation with all elements of the community in meeting their needs through activities such as workshops and institutes.

The Johnson County Community College is "need" oriented. It is first determined what the needs of the community are, both the community in general and the individuals within the community. Then, with available resources, programs are planned to meet these needs.

The College attracts a very diversified student body ranging from 18 to 80 years of age; people with varying backgrounds and with different motives and goals.

The Community College serves as a proving ground and self-finding agency for many of its students. Countless high school graduates are uncertain as to the direction their lives should take. The Community College provides programs, services, and personal counseling to students to assist them in making such decisions, in gaining maturity and self-confidence, and in strengthening the foundation for life-long direction.

The College offers a diversified program for late afternoon and evening students. Credit courses are offered by all divisions of the College.
The courses are designed to benefit those students who wish to obtain one or more of the following educational objectives:

- Attainment of a two-year Associate of Arts degree
- Improvement of present professional abilities
- Advancement in present occupational skills
- Achievement of personal satisfaction

Evening credit courses carry the same content, academic standards, and grading system as the day courses.

University Transfer

The Community College offers curriculums in liberal arts and sciences and in general pre-professional education comparable to those offered in the first and second years of four-year colleges and universities. Successful completion of these curriculums qualifies students for transfer with advanced standing to other institutions of higher education. Program options and course descriptions are provided in Section C.

Careers

The Community College recognizes its obligation to provide, within its capabilities and the needs of the community, education and training toward developing, maintaining and improving competence in the fields of industry, business, science, agriculture, service technology and skilled trades. These objectives may be achieved through specific curriculums, series of courses, and single courses which are usually related to the employment needs of the community served. Career programs and courses are fully described in Section C.

General College Exploratory Experience

Individuals having an interest in broadening their knowledge base for personal satisfaction or to become a more understanding and useful citizen in our society, or to
continue their education as a method of exploring a variety of fields in search of a career
may plan a series of learning experiences from the total college offerings that will fulfill
their expressed interests and desires.

Adult Continuing Education Program

The Adult Continuing Education office is concerned with meeting the needs, interests,
and requirements of adults for general or specialized education on a non-credit basis. It is
the product of an educational philosophy which asserts that the Johnson County
Community College shall serve not only the youth of the area, but that it shall provide a
variety of educational opportunities for its adult members as well.

Adult Continuing Education is one of the most rapidly growing areas of the American
educational enterprise. Changing technology has accelerated the need for our citizenry to
develop and improve occupational and social skills. As an integral part of the College, the
Adult Continuing Education office endeavors to provide educational services needed by
adults to provide them with the means for economic improvement and cultural
development, to enrich their personal and family lives and stimulate civic consciousness
and the exercise of effective citizenship responsibilities.

The Adult Continuing Education program is community-centered and coordinated with
business, industry, school districts and other interested agencies in the area.

More specific information on the Adult Continuing Education program is provided on
page B 37.

Community Services Program

The major purposes of the College are reflected in the commitment to comprehensive
educational programs, including education for transfer, education for employment,
general college exploratory experience, and continuing education for adults. Yet, the
emphasis on Adult Continuing Education may legitimately be viewed as only part of the
broader relationship in which the College becomes an integral part of the community. If
is the intent of the College to utilize the resources, talents, and opportunities in the community to the greatest possible extent, and in turn, offer to the community its facilities, faculty and stimulus. The program encompasses academic, social, cultural and recreational activities.

Summer Sessions

Summer sessions are offered by the College to provide an opportunity for:

- Students who wish to accelerate their progress.
- Students who carry only a partial course load during the regular semester.
- Students who have academic deficiencies they wish to correct.
- June high school graduates who wish to get an advanced start in their college studies.
- Adults who wish to continue their education for personal satisfaction, change in job status, or improvement of present occupational skills.
OBJECTIVES

With the philosophy and functions of the College in mind, the College faculty can best serve students through sound scholarship and training policies and:

- Contribute to good citizenship by helping students to understand democratic processes.
- Prepare the student to make a contribution to the economic life of his community.
- Expose the student to our cultural, social, scientific and spiritual heritage out of which he may construct a satisfying and consistent world view by which to guide his life.
- Foster self-reliance on the part of the student by encouraging him to think critically in solving problems.
- Encourage the student to participate in some form of satisfying creative activity and in appreciating the creativity of others.
- Develop within the student increased understanding of the political and socio-economic problems confronting our nation and the world by contributing to a sense of social responsibility.
- Help the student to understand his relationship to his biological and physical environment so that he may better adjust to and improve the environment.
- Develop within the student an attitude of "openness" toward contributions afforded by other ideas, races and religions.
- Develop within the student skills in writing, speaking, reading and listening which lead to improved self-expression and communication.
Accreditation

The Johnson County Community College was granted Correspondent status by the North Central Association of Colleges and Secondary Schools in March, 1969. The Correspondent status is the first step taken by the College toward full accreditation in the North Central Association. The College is working with neighboring colleges to insure the transferability of credits to these and other institutions.
TEMPORARY CAMPUS

The temporary campus facilities are located in the following cities:

Merriam

- Science Building, 5441 Merriam Drive. Houses the Office of the President; Community Cooperation and Adult Continuing Education offices; Natural Science laboratories and audio-visual tutorial laboratory and faculty offices.

- Service Building, 5538 Merriam Drive. Provides classrooms and storage space for College supplies.

- Merriam Campus Building, 57th and Merriam Drive. Houses the Instructional Branch; Business and Facilities Branch; Institute for Community College Development; and College Services Branch (Admissions, Counseling, and Financial Aids). Also includes Media Production and Word Production Centers, Library, College Center, College Learning Center, as well as general classrooms and faculty offices.

- Merriam Annex Building, 5853 Merriam Drive. Faculty offices.

- Data Processing Building, 9301 Johnson Drive. Data processing laboratory.

- College Bookstore, 9303 Johnson Drive. Books and other College supplies.

- Merriam Christian Church, 9401 Johnson Drive. Lecture hall and general classrooms.

Shawnee

- Shawnee Campus Building, 11310 Johnson Drive. Houses Physical Development, Art, Drafting and Music activities. Includes a College Center and general classrooms.

Olathe

- Johnson County Airport. College's Institute of Aviation.
In addition to these leased buildings, the College uses the facilities of the Olathe, DeSoto and Shawnee Mission schools and the Johnson County libraries for credit and non-credit evening courses, for the JCCC basketball games and special College events. Numerous business facilities are also used, when appropriate and available.

1. Science Building, 5441 Merriam Drive
2. Service Building, 5538 Merriam Drive
3. Merriam Campus Building, 57th and Merriam Drive
4. Merriam Annex Building, 5853 Merriam Drive
5. Data Processing Building, 9301 Johnson Drive
6. College Bookstore, 9303 Johnson Drive
7. Merriam Christian Church, 9401 Johnson Drive
8. Shawnee Campus Building, 11310 Johnson Drive
MATRICULATION

ADMISSION REQUIREMENTS

Any resident of Johnson County who is either a high school graduate or has attained eighteen years of age 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.

Full-time Students

All full-time students will be required to provide a high school transcript unless they have been out of high school for at least two years. College transcripts must be provided from each institution of higher learning the student has attended.

Part-time Students

A part-time student must provide a transcript from each institution of higher learning he has attended.

High school students who have approval of their high school principal may enroll in selected College courses. (Students may not use the same credit to apply to both high school graduation and to advanced standing in college.)

ADMISSION

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

- Complete and file an application form with the Office of Admissions. The complete social security number must be listed on the form.
- File an official transcript of high school work and a transcript from each college attended if transferring from another institution. Transcripts should be sent directly from the school to the Office of Admissions.
- Students having legal residence in another Kansas community junior college district
will be required to present a letter of permission from the chief executive officer of that community junior college district.

- It is recommended that each student filing an application for admission provide an American College Testing (ACT) test score. 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 information.

All records must be complete and on file in advance of the registration date. Deadlines may be established two weeks in advance of the registration date to facilitate completion of forms for registration.

**REGISTRATION PROCEDURES**

Registration takes place during the dates specified in the College Calendar. Certain procedures are established for registration of full-time students:

- Acceptance for admission to the College does not assure entrance into all courses or curricula. If a student lacks requirements for the program of his choice, he may become eligible by satisfactorily completing specified courses.

- Registration must be preceded by a conference with a College counselor for the purpose of selecting curriculum and courses.

**Veteran’s 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 veteran’s benefits should follow the procedure below:

- Establish their eligibility through the Veterans Administration prior to registration. (Johnson County veterans may contact Kansas Veterans Commission, Huron Building, Kansas City, Kansas.)
After processing the veteran's application, the V.A. will, if the applicant is eligible, issue a Certificate of Eligibility. The certificate is valid only at the institution named and only for the objective indicated.

The prospective student should bring the certificate of Eligibility (VA Form 21 E-1993) to the Admissions Office at the time of final registration.

Financial benefits to veterans are based on the following V.A. schedule:

- 14 or more semester hours - full time
- 10 to 13 semester hours - 3/4 time
- 9 to 11 semester hours - 1/2 time
- 1 to 5 semester hours - less than 1/2 time

**ORIENTATION**

To acquaint the new student with the College, its facilities, resources, services, activities, policies, and organizations.

To assist him in taking full advantage of the opportunities offered by the College.

To help him in developing effective approaches to the problems frequently encountered by the beginning college students.
The College has established 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 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 the university transfer program should use the regular grading system in all courses that satisfy the normal freshmen-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 the 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. This option can be used for courses required for the Associate of Arts Degree and Certificate requirements.

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 implies that credit will be granted for specific courses for which a
comprehensive course examination has been satisfactorily completed.

Advanced standing credit will 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 (C.L.E.P. exams).

Advanced Placement

Advanced placement means that specific courses may be by-passed but without credit.

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 Commission on Accreditation of Service Experiences of The American Council on Education. On-the-job experiences will be evaluated and college credit may be granted.

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. 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 (15) 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 which is held at the close of each spring semester.

Certificate of Graduation

Requirements for a Certificate will include the successful completion of the designated program and enrollment during the semester in which the student receives the Certificate of Graduation.

Honors

The Certificate will be granted “With Honors” if the recipient earns an overall grade point average of 3.5 in all courses applicable to the Certificate.
Intent to Graduate

A Notice of Intent to Graduate must be filed by each student who wishes to receive a Certificate from Johnson County Community College.

Graduation Exercises

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

Evaluation of Credits

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

Approved Programs

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.
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 progress toward a successful and meaningful life.

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, 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.

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.

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 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.
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, only the credit and grade earned in the repeated course 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.

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.
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:

<table>
<thead>
<tr>
<th>End of Semester</th>
<th>Minimum Grade Point Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.25</td>
</tr>
<tr>
<td>2</td>
<td>1.65</td>
</tr>
<tr>
<td>3</td>
<td>1.75</td>
</tr>
</tbody>
</table>

Behavioral

Students and faculty 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 or 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.

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 wishes 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 the Add-Drop date. In all cases requests for refunds must be initiated by the student through a College counselor.

READMISSION

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

Applications for admission after having been suspended 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.
COSTS

Student Activity Fee – $10
The student activity fee finances publications, most of the social events, a large part of the athletic program, and many of the College convocations.

Tuition – $10 per semester credit hour
The tuition for attending the College is ten dollars ($10) per semester hour for either full-time or part-time students.

Late Registration Fee – $10
Students who register after the final dates listed in the College calendar are charged a fee of ten dollars ($10).

Transcript Fee – $1 per transcript for more than two
The first two (2) transcripts requested by a student are issued without charge. A fee of one dollar ($1) will be assessed for each additional copy.

Textbooks – Estimated $25 to $40 per semester
Textbooks are purchased by the student. The estimated cost of textbooks is from $25 to $40 per semester. A bookstore, operated under contract with the College, is located near the College.

Parking Permits – $5 per semester
Charges for student parking permits are $5 per semester or any part thereof. A permit for a second vehicle may be purchased for an additional $5. (Refer to “Student Parking” in the Student Handbook for complete information).

Laboratory and/or Course Fees – Varies according to course requirements
Laboratory and/or course fees to defray the cost of breakage, the replacement of expendable supplies, and/or special course expenses are charged in some courses. A schedule of fees is available at the time of registration for courses.
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.

Financial aids available at the College, other than scholarships, are generally based on the extent of the student's need and the funds available.

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 should contribute to his own education, 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 Student Need Analysis Service of the American College Testing Program. This service provides a fair, objective assessment of a student's needs using a simplified form called Family Financial Statement. Students making application for financial aid, based on need, must submit a copy of this completed form and the required fee directly to the office designated on the form. Family Financial Statements are available at the College Office of Financial Aids.

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 at the College.

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 $1,500 per year. 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 Office of Financial Aids 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 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 discretion of the participating lender.

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 College Office of Financial Aids.

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 Office of Financial Aids. 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 Office of Financial Aids 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 College Office of Financial Aids.

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 College Office of Financial Aids 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 at the College Office of Financial Aids.
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 at the College Office of Financial AIDS.
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 Director.

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 Office of Financial Aids at the College.

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.
The College encourages the student to participate in those activities which supplement the instructional program by providing experiences which will add to the student's enjoyment of life and stimulate his personal growth and social development. Opportunities for development of constructive leadership, cooperative planning, and special interest will be fostered through participation in the various student activities.

STUDENT ACTIVITIES

Student-interest organizations, clubs, and activities have been created at the College to provide these opportunities and experiences. Typical activities include Student Government, Intramural Athletics, Clubs, Publications, Intercollegiate Athletics and Organizations.

STUDENT GOVERNMENT

The College encouraged the students to form a governing agency with the objective of formulating policies and regulations, with the cooperation of the College staff and Board of Trustees, concerning such areas as orientation, student rights and responsibilities, conduct and discipline, student publications and the calendaring of student events.

The College will also continue to encourage students to suggest by appropriate means to the College staff, and Board of Trustees, amendments pertaining to curriculum, college facilities, financial aids, community relations, library and educational resources, admission, placement, campus security and the quality of educational instruction.

The student government has representation by both full-time and part-time students carrying college work for credit.

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 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.

Participation in Activities

The College will review the medical examination forms and may advise students not to participate in physical activities.

Health and Accident Insurance

The College will provide an opportunity for students to obtain Health and Accident Insurance through a private agency. All student claims will be handled directly with the agency.

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 full-time employment upon leaving the College.
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. It 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.

Organization

The EMC has two sections: the Media Production Section and the Library. The division is a functional one and has little to do with the type of media involved. Once material has been produced it becomes the responsibility of the library to make provisions for its use.

Materials

A collection of over 10,000 books, 450 current periodicals, over 20,000 documents on microfiche, plus hundreds of slides, video and audio recordings and other media 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 EMC, as well as 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 on the recommendation of staff or students, and compile bibliographies for instructors. Other staff members arrange for film showings, video and audio recordings and other such activities.

When the EMC does not have needed materials, the library staff will secure books and photocopies of magazine articles from other libraries for students and staff.

Assistance to students in producing media associated with classroom projects is provided whenever staff time and facilities are available.
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

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 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 office staff includes instructors from the College day school faculty, from nearby colleges and schools, persons from business, industry, and other areas of specialization.

Branches and Extension 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 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, the Adult Continuing Education Office 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 Adult
Continuing Education Office. 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 Economics
- Office Skills
- Physical Education
- Creative Arts & Crafts
- Foreign Languages
- Health and Safety
- Language Arts
- Leisure Time Skills
- Homemaking Education
- High School Completion
- GED Preparation
- Adult Basic Education
- Trade and Industrial Education
- History, Math, Science
- Discussion Groups
- Special Interests
PROGRAM OBJECTIVES

Basic to the philosophy of the Johnson County Community College is the recognition that each individual has unique abilities, interests and goals; consequently a unique instructional program should be designed for each individual that best serves his needs in meeting these objectives.

The following programs in the various instructional areas are suggested as guidelines for each individual in tailoring his program to meet his specific needs. In consultation with his counselor, a student may develop a program of instruction for general improvement or preparation for a career of his choice. Depending upon the student's chosen career, it may require his continuation at a four-year college or university, or the requirements may be satisfied at Johnson County Community College in two years or less.
1st Semester
Introduction to Architecture 160 .... 3
Analytical Geometry—Calculus 121 .... 5
Communications 101 .... 3
Physics 150 .... 4
Credit Hours .... 15

2nd Semester
Environmental Design 161 .... 4
Physics 151 .... 5
Communications 102 .... 3
Electives .... 3
Credit Hours .... 15

3rd Semester
Architectural Design & Communication 260 .... 6
Design Methods 262 .... 2
Environmental Technology 264 .... 3
Engineering Statics 210 .... 3
Electives .... 3
Credit Hours .... 17

4th Semester
Architectural Design & Communication 261 .... 6
Building Technology 263 .... 3
History of Architecture 265 .... 3
Mechanics of Materials 220 .... 5
Credit Hours .... 15
### AIR TRAFFIC CONTROL

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>2nd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Algebra 100</td>
<td>Speech 114</td>
</tr>
<tr>
<td>* Private Pilot 101</td>
<td>** Flight Services 230</td>
</tr>
<tr>
<td>Private Pilot Ground School 105</td>
<td>Introduction to Data Processing 132</td>
</tr>
<tr>
<td>Introduction to Aviation 110</td>
<td>Electives</td>
</tr>
<tr>
<td>Electives</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>Credit Hours</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>4th Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Transportation 217</td>
<td>** Air Traffic Control Internship 233</td>
</tr>
<tr>
<td>* Instrument Pilot 202</td>
<td>** Terminal Air Traffic Control 231</td>
</tr>
<tr>
<td>** Enroute Air Traffic Control 232</td>
<td>Electives</td>
</tr>
<tr>
<td>Electives</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>Credit Hours</td>
<td></td>
</tr>
</tbody>
</table>

* Students wishing to secure their FAA pilot ratings are advised to take Private Pilot 101 and Instrument Pilot 202.

** These courses are conducted in part in FAA facilities.

This program is planned in cooperation with the Federal Aviation Administration and is viewed as preparatory to further training by the FAA.
## AVIATION FLIGHT PROGRAM

### 1st Semester
- Private Pilot 101 
  - **4**
- Introduction to Aviation 110 
  - **3**
- Communications 101 
  - **3**
- *Algebra 106 or 115 or Technical Math 101*  
  - **3**
- Humanities 101 
  - **3**
- Credit Hours 
  - **16**

### 2nd Semester
- Commercial Pilot 102 
  - **4**
- Introduction to Power Plants 112 
  - **3**
- Communications 102 
  - **3**
- Speech 114 
  - **2**
- Electives 
  - **3**
- Credit Hours 
  - **15**

### 3rd Semester
- Commercial Pilot 201 
  - **4**
- Introduction to Airframes 113 
  - **3**
- Electronics & Avionics 115 
  - **3**
- Electives 
  - **6**
- Credit Hours 
  - **15**

### 4th Semester
- Instrument Pilot 202 
  - **3**
- Multi-Engine Pilot 203 
  - **3**
- Airport Management 215 
  - **3**
- Aviation Seminar 216 
  - **3**
- Air Transportation 217 
  - **3**
- Electives 
  - **3**
- Credit Hours 
  - **17**

### Summer
- Instructor Pilot 206 
  - **3**
- Aviation Seminar 216 
  - **3**
- Ground Instructor’s Rating 219 
  - **3**
- Credit Hours 
  - **9**

*Mathematics: Math 106 or 115 and Math 117 should be taken by students wishing to transfer to a four-year institution.*

**Electives: Electives should be taken in the area of non-flying speciality the student has**
selected as his non-aviation major. These areas are in Social Science, Humanities, Business or Engineering.

Students are required to pass an FAA third or second class physical examination before flight training begins. All students in Professional Pilot Career Programs are required to pass the second class FAA physical examination.

NOTE: Students interested in other related Aviation programs should consult with their counselor.
### 1st Semester
- Communications 101: 3
- Introduction to Business 111: 3
- Social Science 101 (or 103): 3
- Electives: 6
- Credit Hours: 15

### 2nd Semester
- Communications 102: 3
- Introduction to Data Processing 132: 2
- Social Science 102 (or 103): 3
- Electives: 6
- Credit Hours: 15

### 3rd Semester
- Economics 201: 3
- Humanities 101: 2
- Natural Science 101: 4
- Electives: 5
- Credit Hours: 15

### 4th Semester
- Economics 202: 3
- Humanities 102: 3
- Natural Science 102: 4
- Electives: 5
- Credit Hours: 15

The above allows individualized programs to be designed for students selecting the
following types of options:


MARKETING: Students desiring a marketing emphasis should select as electives: Principles of Accounting 101, Salesmanship 177, Retail Advertising and Display 180, Marketing 214.

AVIATION ADMINISTRATION AND MANAGEMENT: Students wishing an emphasis in aviation administration and management should select as electives: Introduction to Aviation 110, Private Pilot Ground School 105, Air Transportation 217, Aviation Seminar 216, Airport Management 200.


All Business Administration students should also consider the following as electives: Principles of Accounting 101, Algebra 105, Trigonometry 117, Analytical Geometry-Calculus 121, Statistics 110.
## COMMERCIAL ART

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>2nd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art Fundamentals 144</td>
<td>Humanities 102</td>
</tr>
<tr>
<td>Design 131</td>
<td>Design 132</td>
</tr>
<tr>
<td>Drawing 137</td>
<td>Drawing 138</td>
</tr>
<tr>
<td>Art Elective</td>
<td>Art Elective</td>
</tr>
<tr>
<td>Electives</td>
<td>Electives</td>
</tr>
<tr>
<td><strong>Credit Hours</strong></td>
<td><strong>Credit Hours</strong></td>
</tr>
<tr>
<td>16</td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>4th Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lettering Techniques 263</td>
<td>Lettering Techniques 264</td>
</tr>
<tr>
<td>Commercial Art 260</td>
<td>Commercial Art 261</td>
</tr>
<tr>
<td>Technical Illustration 262</td>
<td>Display Techniques 266</td>
</tr>
<tr>
<td>Commercial Photography 265</td>
<td>Commercial Art Field Study 267</td>
</tr>
<tr>
<td>Art Elective</td>
<td>Art Elective</td>
</tr>
<tr>
<td>Electives</td>
<td>Electives</td>
</tr>
<tr>
<td><strong>Credit Hours</strong></td>
<td><strong>Credit Hours</strong></td>
</tr>
<tr>
<td>16</td>
<td>15</td>
</tr>
</tbody>
</table>

It is suggested that students select at least six credit hours in electives from Communications and the Social Sciences.

OPTIONS: Illustration, Industrial Design.
<table>
<thead>
<tr>
<th>Semester</th>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester</td>
<td>Introduction to Data Processing 132</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Programming 133</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Accounting 101</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Algebra 101</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Credit Hours</td>
<td>16</td>
</tr>
<tr>
<td>2nd Semester</td>
<td>Programming 143</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Accounting 102</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Statistics 110</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Credit Hours</td>
<td>16</td>
</tr>
<tr>
<td>Summer</td>
<td>Application Programming 245</td>
<td>3–6</td>
</tr>
<tr>
<td>4th Semester</td>
<td>Advanced Data Processing Concepts 247</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Data Processing Electives</td>
<td>2–3</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Credit Hours</td>
<td>15–16</td>
</tr>
</tbody>
</table>

It is suggested that students select at least six hours from the following areas: Speech, Communications, Math, Intermediate Cost Accounting or Cost Accounting.
DRAFTING TECHNOLOGY

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>2nd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drafting 101</td>
<td>Drafting 102</td>
</tr>
<tr>
<td>Algebra 100</td>
<td>Trigonometry 117</td>
</tr>
<tr>
<td>Electives</td>
<td>Electives</td>
</tr>
<tr>
<td>Credit Hours</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>16</td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>4th Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drafting 201</td>
<td>Drafting 202</td>
</tr>
<tr>
<td>Industrial Science 128</td>
<td>Industrial Science 129</td>
</tr>
<tr>
<td>Electives</td>
<td>Electives</td>
</tr>
<tr>
<td>Credit Hours</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

OPTIONS: Drafting and Mechanical/Manufacturing.

It is suggested that students select at least six total hours of electives from the following areas: Communications, Humanities and Social Sciences.
### ELECTRICAL-ELECTRONIC ENGINEERING TECHNOLOGY

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>2nd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algebra-Trigonometry 115</td>
<td>Analytical Geometry-Calculus 121</td>
</tr>
<tr>
<td>Introductory Electronics 140</td>
<td>Resistive Electronics 141</td>
</tr>
<tr>
<td>Engineering Graphics 106</td>
<td>Resistive Circuits 150</td>
</tr>
<tr>
<td><strong>Electives</strong></td>
<td>General Physics 150</td>
</tr>
<tr>
<td>Credit Hours</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>17</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>4th Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analytical Geometry-Calculus 122</td>
<td>Network Analysis 250</td>
</tr>
<tr>
<td>Single Time-Constant Circuits 151</td>
<td>Linear Electronic Circuits 241</td>
</tr>
<tr>
<td>Pulse Circuits 240</td>
<td>Systems Analysis 242</td>
</tr>
<tr>
<td>General Physics 151</td>
<td><strong>Technical Electives</strong></td>
</tr>
<tr>
<td><strong>Technical Electives</strong></td>
<td>Credit Hours</td>
</tr>
<tr>
<td>Credit Hours</td>
<td>18</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>18</td>
</tr>
</tbody>
</table>

*It is suggested that students select electives from the Humanities and Social Sciences.

** It is suggested that the student select electives that will provide skills in his area of interest.

ELECTRICAL-ELECTRONIC SERVICE TECHNOLOGY

1st Semester
- Introductory Electronics 140 ... 3
  Credit Hours ... 3

2nd Semester
- Service Theory and Applications 143 ... 3
- Service of Communication
  Equipment 144 or ... 3
  Micro-Precision Electronics 142 ... 3
  Credit Hours ... 6

3rd Semester
- Synchronization Techniques 146 ... 3
- Alignment Techniques 145 ... 3
- System Maintenance 147 ... 3
  Credit Hours ... 9

A non-math, non-science approach to Electrical-Electronic Technology which stresses practical applied methods.

The program provides considerable flexibility to permit the student to meet his individual needs. Graduates receive a Certificate of Proficiency in their area of specialization.

COMMUNICATIONS OPTION: The program outlined above prepares the student to be able to service electronic equipment, such as electronic communications or home entertainment systems.

"INDUSTRIAL CONTROL OPTION:" A basic two-course program (ENGR 140,142) to prepare the student to service electronic control equipment used in industry.
### 1st Semester
- Communications 101: 3 credits
- Analytical Geometry-Calculus 121: 5 credits
- Engineering Graphics 105: 3 credits
- General Chemistry 120: 5 credits
- **Credit Hours:** 16

### 2nd Semester
- Communications 102: 3 credits
- Analytical Geometry-Calculus 122: 5 credits
- Engineering Graphics 106: 3 credits
- Electives: 5 credits
- **Credit Hours:** 16

### 3rd Semester
- Analytical Geometry-Calculus 223: 5 credits
- Engineering Physics 250: 5 credits
- Statics 210: 3 credits
- Electives: 3 credits
- **Credit Hours:** 16

### 4th Semester
- Differential Equations 224: 3 credits
- Engineering Physics 251: 5 credits
- Dynamics 211: 3 credits
- Electives: 5 credits
- **Credit Hours:** 16

Chemistry requirements vary from five to ten credit hours in the various Engineering programs. It is recommended that General Chemistry 121 be taken by those students needing additional chemistry credits.

*It is suggested that students select electives from the Humanities and Social Sciences.*
<table>
<thead>
<tr>
<th>1st Semester</th>
<th>2nd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salesmanship 177</td>
<td>Retailing 176</td>
</tr>
<tr>
<td>Fashion Fundamentals 178</td>
<td>Retail Advertising and Display 180</td>
</tr>
<tr>
<td>Fashion Field Study 182</td>
<td>Textiles 181</td>
</tr>
<tr>
<td>Electives</td>
<td>Fashion Field Study 183</td>
</tr>
<tr>
<td>Credit Hours</td>
<td>Electives</td>
</tr>
<tr>
<td>15</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>4th Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing 214</td>
<td>Socio-Economic Aspects</td>
</tr>
<tr>
<td>Fashion Fundamentals 179</td>
<td>of Clothing 279</td>
</tr>
<tr>
<td>Fashion Field Study 281</td>
<td>Fashion Field Study 282</td>
</tr>
<tr>
<td>Electives</td>
<td>Electives</td>
</tr>
<tr>
<td>Credit Hours</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>15</td>
<td>16</td>
</tr>
</tbody>
</table>

It is suggested that students select at least twenty hours of electives from the following areas: Business and Marketing, Communications, Social Science, and Humanities.
HEALTH OCCUPATIONS

1st Semester

Communications 101 .................. 3
Social Science 101 .................. 4
Principles of Chemistry 125 ........ 5
Introduction to Health
Occupations 105 .................. 2
Electives .................. 3
Credit Hours .................. 17

2nd Semester

Communications 102 .................. 3
Social Science 102 .................. 4
General Physics 150 or
   Microbiology 115 .................. 4-5
   Human Anatomy-Physiology 116 .... 5
Credit Hours .................. 16-17

3rd and 4th Semesters

By arrangement up to 30 hours of College credit for clinical experience may be taken at institutions affiliated with Johnson County Community College.

PROBABLE OPTIONS

Cytotechnology .................. Medical Records Technician
Dental Assisting .................. Medical Secretary
Emergency Medical Technician .... Radiologic Technology
Inhalation Therapy

Supplemental information about the above programs may be obtained from the Director of Admissions.
LAW ENFORCEMENT

1st Semester

Communications 101 .......... 3
Social Science 101 .......... 3
Introduction to
Law Enforcement 151 .......... 3
Police Administration 152 .......... 3
Criminal Law 155 .......... 3
Credit Hours .......... 15

2nd Semester

Communications 102 .......... 3
Social Science 102 .......... 3
Speech 114 .......... 2
Fundamentals of Criminal
Investigation 156 .......... 3
Police and the Public 159 .......... 3
Credit Hours .......... 15

3rd Semester

Natural Science 101 or 102 .......... 4
Introduction to Criminalistics 251 .......... 3
Society and Law Enforcement 252 .......... 3
Electives .......... 5
Credit Hours .......... 15

4th Semester

Philosophy 151 or Logic 152 .......... 3
Police Seminar 259 .......... 3
Electives .......... 10
Credit Hours .......... 16
LIBERAL ARTS PROGRAM

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>2nd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications 101</td>
<td>Communications 102</td>
</tr>
<tr>
<td>Natural Science 101 or</td>
<td>Natural Science 102 or</td>
</tr>
<tr>
<td>Social Science 101 (or 103)</td>
<td>Social Science 102 (or 103)</td>
</tr>
<tr>
<td>Electives</td>
<td>Electives</td>
</tr>
<tr>
<td>Credit Hours</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>3rd Semester</td>
<td>4th Semester</td>
</tr>
<tr>
<td>Natural Science 101 or</td>
<td>Natural Science 102 or</td>
</tr>
<tr>
<td>Social Science 101 (or 103)</td>
<td>Social Science 102 (or 103)</td>
</tr>
<tr>
<td>Electives</td>
<td>Electives</td>
</tr>
<tr>
<td>Credit Hours</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

The above allows individualized programs to be designed for students selecting the following types of options: English, Fine Arts, Foreign Language, Law, Philosophy, Political Science, and Teacher Education.
The successful graduate will be eligible to take the state licensing examinations for registration (R.N.).


<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester</td>
<td>Marketing 214</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Salesmanship 177</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Retail Field Study 171</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Credit Hours</td>
<td>16</td>
</tr>
<tr>
<td>2nd Semester</td>
<td>Retailing 176</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Introduction to Data Processing 132</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Retail Advertising and Display 180</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Retail Field Study 172</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Credit Hours</td>
<td>16</td>
</tr>
<tr>
<td>Summer</td>
<td>Retail Field Study 273</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(Note: Requires full-time employment)</td>
<td></td>
</tr>
<tr>
<td>3rd Semester</td>
<td>Accounting 101</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Economics 201</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Business Law 212</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Retail Field Study 274</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Credit Hours</td>
<td>15</td>
</tr>
<tr>
<td>4th Semester</td>
<td>Principles of Management 251</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Personnel Management 200</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Retail Field Study 275</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Credit Hours</td>
<td>15</td>
</tr>
</tbody>
</table>
1st Semester

Communications 101 ........................................ 3
Humanities 101 or
Social Science 101 (or 103) ............................ 3
Electives .................................................. 9
Credit Hours ............................................. 15

2nd Semester

Communications 102 ........................................ 3
Humanities 102 or
Social Science 102 (or 103) ............................ 3
Electives .................................................. 9
Credit Hours ............................................. 15

3rd Semester

Humanities 101 or
Social Science 101 (or 103) ............................ 3
Electives .................................................. 12
Credit Hours ............................................. 15

4th Semester

Humanities 102 or
Social Science 102 (or 103) ............................ 3
Electives .................................................. 12
Credit Hours ............................................. 15

The above allows individualized programs to be designed for students selecting the following types of options:
BIOLOGY OPTIONS: Biology students should take: Biology of Animals 110; Biology of Plants 111; General Chemistry 120, 121; Organic Chemistry 220, 221; and College Algebra 116.

CHEMISTRY OPTION: Chemistry students should take: General Chemistry 120, 121; Organic Chemistry 220, 221; and Analytical Geometry-Calculus 121, 122, 223.

DENTAL OPTION: Pre-dental students should take: Biology of Animals 110; General Chemistry 120, 121; Principles of Organic Chemistry 223; General Physics 150, 151; Human Anatomy-Physiology 116; and Introduction to Health Occupations 105.

MATHEMATICS OPTION: Mathematics students should take: Analytical Geometry-Calculus 121, 122, 223; and Differential Equations 224.

MEDICAL OPTION: Pre-medical students should take: Biology of Animals 110; General Chemistry 120, 121; Organic Chemistry 220, 221; Trigonometry 117; General Physics 150, 151; Human Anatomy-Physiology 116; and Introduction to Health Occupations 105.

PHARMACY OPTION: Pre-pharmacy students should take: Biology of Animals 110; Biology of Plants 111; General Chemistry 120, 121; Trigonometry 117; General Physics 150, 151; and Introduction to Health Occupations 105.

PHYSICS OPTION: Physics students should take: Analytical Geometry-Calculus 121, 122, 223; Differential Equations 224; and Engineering Physics 250, 251.

VETERINARY OPTION: Pre-veterinary students should take: Biology of Animals 110; General Chemistry 120, 121; Organic Chemistry 220, 221; Algebra-Trigonometry 115, 117; General Physics 150, 151; Human Anatomy-Physiology 116; and Introduction to Health Occupations 105.
SECRETARIAL CAREERS

1st Semester
- Shorthand 151 .................................. 3
- Intermediate Typing 156 .................. 3
- Records Management 161 ............... 2
- Electives ....................................... 7
- Credit Hours .................................. 15

2nd Semester
- Dictation and Transcription 152 ....... 3
- Production Typing 157 .................... 3
- Electives ....................................... 9
- Credit Hours .................................. 15

3rd Semester
- Secretarial Procedures 262 ............. 3
- Secretarial Field Study 264 ............. 3
- Electives ....................................... 9
- Credit Hours .................................. 15

4th Semester
- Secretarial Procedures 263 ............. 3
- Secretarial Field Study 265 ............. 3
- Electives ....................................... 9
- Credit Hours .................................. 15

It is suggested that students select electives from the following: Business and Management, Communications, Social Sciences and Humanities.

Those seeking programs of less than two years in the Secretarial Careers should contact the counseling office.
COURSE DESCRIPTIONS

AVIATION

PRIVATE PILOT (AV 101) 1 Credit

Prerequisite: Third class medical certificate.

This course combines both ground and flight instruction necessary to prepare the student to qualify to take the FAA examination for a private pilot rating. Hours by arrangement.

COMMERCIAL PILOT I (AV 102) 1 Credit

Prerequisite: AV 101 and second class medical certificate.

This course is the first half of a two phase ground and flight instruction in preparation for the FAA examination for commercial pilot rating. Hours by arrangement.

PRIVATE PILOT GROUND SCHOOL (AV 105) 3 Credits

This course is similar to Private Pilot 101; however, it does not include the necessary flight instructions to qualify for the FAA private pilot rating. Class meets three hours per week.

COMMERCIAL GROUND SCHOOL (AV 106) 3 Credits

Prerequisite: AV 105

In-depth study of meteorology, radio navigation, instruments, Federal Aviation Regulations, flight information publications, charts, aircraft weight and balance, aircraft performance characteristics, airplane and engine operation and flight planning to prepare the student to take the FAA Commercial Pilot written examination.

INTRODUCTION TO AVIATION (AV 110) 3 Credits

General 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.
INTRODUCTION TO POWERPLANTS (AV 112)  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.

INTRODUCTION TO AIRFRAMES (AV 113)  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.

ELECTRONICS & AVIONICS (AV 115)  3 Credits
Introduction to electronics and its application to radio and navigational equipment used in aircraft. An understanding of the principles and function of airborne avionics equipment. Class meets three hours per week.

COMMERCIAL PILOT II (AV 201)  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.

INSTRUMENT PILOT (AV 202)  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 arrangements.
MULTI-ENGINE PILOT (AV 203) 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.

INSTRUCTOR PILOT (AV 206) 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.

AIRPORT MANAGEMENT (AV 215) 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.

AVIATION SEMINAR (AV 216) 3 Credits

Prerequisite: AV 201 or by permission

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.

AIR TRANSPORTATION (AV 217) 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.
GROUND INSTRUCTION TECHNIQUES (AV 219) 3 Credits
Investigation of teaching techniques and supervised practice in the teaching of ground school aviation subjects. Class meets three hours per week.

FLIGHT SERVICES (AV 230) 3 Credits
Prerequisite: AV 101 & AV 105
Basic study of control procedures and phraseology utilized in providing flight assistance and communications service to pilots and air traffic. Study includes monitoring, pilot briefing, emergency procedures, flight handling, search and rescue, airport advisory service, and introduction to teletype procedures and services. Class meets three hours per week.

TERMINAL AIR TRAFFIC CONTROL (AV 231) 3 Credits
Prerequisite: AV 230
Basic study of procedures and phraseology utilized in the control of air traffic on and around airports. Study includes general control, airport traffic control, instrument flight operations, emergencies and special notification, special flight operations, and introduction to terminal radar procedures. Class meets three hours per week.

ENROUTE AIR TRAFFIC CONTROL (AV 232) 3 Credits
Prerequisite: AV 230 & AV 231
Basic study of air traffic procedures and phraseology utilized in the control, instrument flight operations, radar operations, emergency procedures, special flight operations, and military procedures. Class meets three hours per week.

AIR TRAFFIC CONTROL INTERNSHIP (AV 233) 3 Credits
Prerequisite: AV 230, AV 231 & AV 232
Students enrolled in the Air Traffic Control program are offered an opportunity to work in an air traffic control facility. Students selected must meet requirements for the FAA Civil Service Commission and the Institute of Aviation. Class meets three hours per week.
ACCOUNTING I (BUS 101) 3 Credits
Introduction to accounting fundamentals. Emphasis on the recording of transactions. Use of journals, ledgers and financial statements. Class meets three hours per week.

ACCOUNTING II (BUS 102) 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.

PRINCIPLES OF JOURNALISM (BUS 103) 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 in newswriting. Class meets two hours per week; laboratory by arrangement.

FUNDAMENTALS OF ADVERTISING (BUS 105) 3 Credits
The role of advertising in today's business world. A study of the various forms of advertising and the media involved. Class meets four hours per week.

JOURNALISM FIELD STUDY (BUS 208) 3 Credits
Prerequisite: By permission.
Work experience at an approved training center under faculty supervision. Class members apply practical journalism and/or advertising experience and theory. Class meets for one hour and a minimum of 15 hours of on-the-job training per week by arrangement. Input and output are learned as well as elementary machine language programming techniques. Class meets two hours per week.
PROGRAMMING I (BUS 133)  
Prerequisite: BUS 132 or by permission  
Introduction to computer programming techniques using a procedure-oriented language. Introduces problem organizations, fundamentals of input and output operations and properties of business programming. Class meets three hours per week.

PROGRAMMING II (BUS 143)  
Prerequisite: BUS 132 or concurrent enrollment by permission  
Basic concepts of programming using a formula-oriented procedure language (FORTRAN). Introduces problem organization, fundamentals of input and output operations, uses of system subroutines and properties of scientific, mathematical, engineering and statistical programming. Concentrates on the history of computers, the logical organization of computers, the analysis of binary, octal and hexadecimal numbering systems, the internal methods for data representation and a breakdown of control units and instruction sequencing. Class meets five hours per week.

SHORTHAND (BUS 151)  
Prerequisite: BUS 155 or concurrent enrollment or by permission  
Theory of Gregg shorthand, word building and phrasing, with emphasis on dictation and reading. (No credit given to students with one unit of high school shorthand with a grade of C or better.) Class meets five hours per week.

DICTATION AND TRANSCRIPTION (BUS 152)  
Prerequisites: BUS 151 and BUS 155 or by permission  
Includes a review of shorthand theory by using drills on speed building. Production of mailable transcripts is required with emphasis on speed, efficient transcription techniques, spelling, punctuation, and grammar. Class meets five hours per week.
BEGINNING TYPING (BUS 155) 3 Credits
Mastery of the keyboard and machine techniques. Instruction in personal and business letters, outlines, manuscripts, tabulation and centering. (No credit given to students with one or more units of high school typewriting.) Individualized instruction with a minimum of five hours per week in the Audio-Visual-Tutorial (AVT) laboratory required. Hours by arrangement.

INTERMEDIATE TYPING (BUS 156) 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 with a minimum of five hours per week in the Audio-Visual-Tutorial (AVT) laboratory required. Hours by arrangement.

PRODUCTION TYPING (BUS 157) 3 Credits
Prerequisite: BUS 156 or equivalent
Development of high degree of proficiency in production typing. Emphasis is placed on efficient methods and proper organization of work and materials. One unit of instruction will be in the College's Word Production Center using automatic typewriters. Class meets five hours per week.

PROFESSIONAL LEGAL SECRETARIES (BUS 158) 2 Credits
Provides legal secretaries and potential legal secretaries with professional knowledge concerning all phases of the law office. Course includes all topics recommended by National Association of Legal Secretaries. Students wishing to prepare for the PLS examination should consult with instructor prior to enrollment. Class meets two hours per week. Eligibility for examination:
1. 5 yrs. of work experience
2. 60 or 75 TPR
3. Membership in K.C., M.O. or Johnson County Legal Sec'y Assn.
OFFICE MACHINES (BUS 160) 2 Credits

Laboratory course in the operation of ten-key and full-bank adding machines, comptometers, key driven, rotary, and electronic calculators. Emphasis on using machines as an aid to solving the variety of mathematical problems encountered in business. Class meets three hours per week.

RECORDS MANAGEMENT (BUS 161) 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.

SECRETARIAL FIELD STUDY (BUS 164) 3 Credits

Student experience in secretarial or related work at an approved training center under faculty supervision. Emphasizes legal aspects of secretarial work. (Corresponds to Part II of the CPS examination.) Weekly class discussions will focus on relating course content to work experience. Class meets for two hours per week and a minimum of 15 hours of on-the-job training per week by arrangement.

SECRETARIAL FIELD STUDY (BUS 165) 3 Credits

Student experience in secretarial or related work at an approved training center under faculty supervision. Emphasizes internal and external forces affecting the operation of business in our society. (Corresponds to Part III of the CPS examination.) Weekly class discussions focus on relating course content to work experience. Class meets for two hours per week and a minimum of 15 hours of on-the-job training per week by arrangement.
SECRETARIAL FIELD STUDY (BUS 166) 3 Credits
Student experience in secretarial or related work at an approved training center under faculty supervision. Emphasizes accounting aspects of secretarial work. (Corresponds to Part IV of the CPS examination.) Weekly class discussions focus on relating course content to work experience. Class meets for two hours per week and a minimum of 15 hours of on-the-job training per week by arrangement.

RETAIL FIELD STUDY (BUS 171) 3 Credits
Course designed to give the student actual work experience at an approved training center under faculty supervision. Emphasis on successful selling experience. Class meets two hours per week and a minimum of 15 hours of on-the-job training per week by arrangement.

RETAIL FIELD STUDY (BUS 172) 3 Credits
Course designed to give the student actual work experience at an approved training center under faculty supervision. Emphasis on retailing principles and practices. Class meets two hours per week and a minimum of 15 hours of on-the-job training per week by arrangement.

RETAILING (BUS 176) 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.

SALESMANSHIP (BUS 177) 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.
FASHION FUNDAMENTALS (BUS 178) 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.

FASHION FUNDAMENTALS (BUS 179) 3 Credits
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.

RETAIL ADVERTISING AND DISPLAY (BUS 180) 3 Credits
Course deals with modern techniques of advertising and display. Topics covered include media use, show-card writing, script writing, display techniques and sales promotion scheduling. Class meets three hours per week.

TEXTILES (BUS 181) 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 meets two hours per week.

FASHION FIELD STUDY (BUS 182) 3 Credits
Student experience in an approved fashion merchandising training station under faculty supervision. Emphasis on beginning work experience orientation and adaptation to the job. Class meets two hours per week and a minimum of 15 hours of on-the-job training per week by arrangement.
FASHION FIELD STUDY (BUS 183) 3 Credits
Student experience in an approved fashion merchandising training station under faculty supervision. Emphasis on merchandising techniques and fashion research (current) as applies to each individual job situation. Class meets for two hours per week and a minimum of 15 hours of on-the-job training per week by arrangement.

FASHION FIELD STUDY (BUS 184) 3 Credits
Student experience in an approved fashion merchandising training station under faculty supervision. Emphasis on the study of fashion publicity and fashion media. Students may receive credit for work experience or participating in an organized fashion study tour. Class meets for two hours per week and a minimum of 15 hours of on-the-job training per week by arrangement.

PERSONNEL MANAGEMENT (BUS 200) 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.

APPLIED ECONOMICS (BUS 201) 3 Credits
Course covers the fundamental principles underlying the organization of modern industrial society with applications to the outstanding economic problems of the present-day. The development of modern economic society, the distribution of income, credit, and banking are studied. Class meets three hours per week.

ECONOMICS I (BUS 201) 3 Credits
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.
ECONOMICS II (BUS 202) 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.

COST ACCOUNTING (BUS 210) 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.

INTERMEDIATE ACCOUNTING (BUS 211) 3 Credits

Prerequisite: BUS 102

Application of accounting theory to the valuation of balance sheet accounts, with emphasis on cash, inventories and fixed assets. Class meets three hours per week.

BUSINESS LAW (BUS 212) 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.

BUSINESS LAW (BUS 213) 3 Credits

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.
MARKETING (BUS 214) 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.

SYSTEMS ANALYSIS (BUS 234) 3 Credits

Prerequisites: BUS 132, BUS 133, BUS 143 and by permission

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.

DATA PROCESSING MANAGEMENT (BUS 235) 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.

CONCEPTS FOR PROGRAMMING (BUS 244) 5 Credits

Prerequisite: BUS 143 or by permission

Basic concepts of using an assembler language for solving system problems. Use of disk and macro instructions are incorporated. Use of a procedure-oriented language (PL/1) for business and scientific problems, and the concepts necessary for its use in problem solving and documentation. Class meets five hours per week.

APPLICATION PROGRAMMING (BUS 245) 3-6 Credits

Prerequisite: BUS 143 and by permission

Course offers on-the-job training for related areas of data processing in business or industry. Hours by arrangement.
ADVANCED COBOL (BUS 246)  
3 Credits

Prerequisite: BUS 133 or by permission

Advanced course in COBOL programming techniques which requires the student to have the ability to solve basic COBOL problems. Business oriented problems will be analyzed and programmed on an IBM S/360. Class meets three hours per week.

ADVANCED DATA PROCESSING CONCEPTS (BUS 247)  
5 Credits

Prerequisite: By permission

Introductory study of the software required for the operation of digital computer systems: the study of batch compilers, assemblers, operating systems, time-sharing systems, batch remote systems, data communication and file management. Class meets four hours per week.

TELEPROCESSING DEVELOPMENT (BUS 248)  
2 Credits

Prerequisite: By permission

Concentration on methods of communications in the data processing industry. Teleprocessing is a time sharing or remote batch system. Class meets two hours per week.

DATA FILE MANAGEMENT (BUS 249)  
2 Credits

Prerequisite: By permission

Study concepts of developing an inquiry data base file system, techniques, equipment used, and its potential use in industry and business. Class meets two hours per week.

SYSTEMS PROJECT (BUS 250)  
2 Credits

Prerequisite: By permission

Design and development of software for either compilers (syntax directed and table driving techniques) or operating system software. Class meets by arrangement.
SECRETARIAL PROCEDURES I (BUS 262)  3 Credits

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

Individual and group projects. Content areas: office layout, furnishings, equipment, telephone and telegraph services, mailing and shipping, financial activities and records, filing, organization of time and work, improvement of stenographic skills. Class meets three hours per week.

SECRETARIAL PROCEDURES II (BUS 263)  3 Credits

Prerequisite: BUS 262

Simulated office experience and project method. Content areas: meetings and conferences, travel arrangements, letter writing, supervision of others, reproduction equipment and services, seeking and terminating employment. Class meets three hours per week.

SECRETARIAL FIELD STUDY (BUS 264)  3 Credits

Student experience in secretarial or related work at an approved training center under faculty supervision. Emphasizes personal adjustment, human relations, communications, and decision-making. (Corresponds to Parts I and V of the CPS examination.) Weekly class discussions will focus on relating course content to work experience. Class meets for two hours per week and a minimum of 15 hours of on-the-job training per week by arrangement.

SECRETARIAL FIELD STUDY (BUS 265)  3 Credits

Student experience in secretarial or related work at an approved training center under faculty supervision. Emphasizes office management, communications media, outside services such as business libraries and travel agencies. (Corresponds to Part VI of CPS examination.) Weekly class discussions will focus on relating course content to work experience. Class meets for two hours per week and a minimum of 15 hours of on-the-job training per week by arrangement.
RETAIL FIELD STUDY (BUS 272) 3 Credits
Course designed to give the student actual work experience on a full-time basis during the summer following the freshman year. Experience is at an approved training center under faculty supervision. Emphasis on retail advertising and sales promotion. Students spend one hour a week in class or on an individual conference basis with the instructor of the course and a minimum of 240 hours of on-the-job training during the summer by arrangement.

RETAIL FIELD STUDY (BUS 273) 3 Credits
Course designed to give the student actual work experience at an approved training center under faculty supervision. Emphasis on an individual creative marketing project to be arranged with the instructor. Class meets two hours per week and a minimum of 15 hours of on-the-job training per week by arrangement.

RETAIL FIELD STUDY (BUS 274) 3 Credits
Course designed to give the student actual work experience at an approved training center under faculty supervision. Emphasis on retail store organization and management problems. Class meets two hours per week and a minimum of 15 hours of on-the-job training per week by arrangement.

SOCIO-ECONOMIC ASPECTS OF CLOTHING (BUS 279) 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.

FASHION FIELD STUDY (BUS 281) 3 Credits
Student experience in an approved fashion merchandising training station under faculty supervision. Emphasis on individual study and preparation to achieve career objectives in fashion. (Role playing, case studies, some research). Class meets for two hours per week and a minimum of 15 hours of on-the-job training per week by arrangement.
FASHION FIELD STUDY (BUS 282) 3 Credits

Student experience in an approved fashion merchandising training station under faculty supervision. Emphasis on fashion promotion. Student develops a promotional program for a hypothetical store situation. Class meets for two hours per week and a minimum of 15 hours of on-the-job training per week by arrangement.

SEMINAR IN RETAIL DISTRIBUTION (BUS 299) 3 Credits

Prerequisite: BUS 175

Students select and research areas relating to the retail field. Problems arising from off-campus field experiences are discussed using the conference method of problem solving. Resource personnel present management concepts relating to this field. Class meets three hours per week.

COLLEGE LEARNING CENTER (LC 101-104) 1-4 Credits

Individualized instruction in areas of special needs and interests prescribed on basis of diagnostic tests. Reading rate and comprehension, study skills, communications, mathematics, spelling, listening and note-taking, vocabulary and phonics. Students meet for contracted number of hours: one to four hours credit. May also be taken on a non-credit basis.
COMMUNICATIONS I (COM 101)  3 Credits

Expository and argumentative writing. Emphasis on learning to write concisely, moving from the oral to the written word, and coordinating the needs of the student with the craft of writing. Class meets three hours per week.

COMMUNICATIONS II (COM 102)  3 Credits

Prerequisite: COM 101

Review of principles of essay organization and other rhetorical principles. Major focus of course is expository and subjective writing based on exploration into selected readings in poetry and novel. Class meets three hours per week.

BASIC SPEECH (COM 114)  2 Credits

This course deals with the communication process through the study of the practical principles of effective oral communication, and the opportunity to apply these principles in a variety of communicative situations. Class meets two hours per week.

PUBLIC SPEAKING (COM 115)  3 Credits

Prerequisite: COM 114

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

ARGUMENTATION AND DEBATE (COM 116)  3 Credits

Prerequisite: High school debate or COM 114

A study of the theories and principles of argumentation and debate, with an emphasis on tournament debating. Class meets three hours per week.
ORAL INTERPRETATION (COM 117)  3 Credits
A study of literature through oral communication. Emphasis is to analyze and interpret prose, poetry and drama. Class meets three hours per week.

PRACTICE IN PUBLIC SPEAKING (COM 118)  1 Credit
Students approved by the faculty director will work in play productions, debate, television and/or radio. Credit will be given for a minimum of 45 clock hours by arrangement.

FRENCH I (COM 121)  5 Credits
Basic course in language includes grammar study, conversation, composition and an introduction to the culture and history of French-speaking countries. Two general information periods, two discussion periods and one period of audio-visual study. Class meets five hours per week.

FRENCH II (COM 122)  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.

SPANISH I (COM 130)  5 Credits
Basic course in language includes grammar study, conversation, composition and an introduction to the culture and history of Spanish-speaking countries. Two general information periods, two discussion periods and one period of audio-visual study. Class meets five hours per week.
SPANISH II (COM 131) 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.

GERMAN I (COM 140) 5 Credits

Introduction to the German language and culture. Primary emphasis on listening and speaking idiomatic German, although the fundamentals of reading and writing are taught. Class meets five hours per week.

GERMAN II (COM 141) 5 Credits

Prerequisite: COM 140 or two years of high school German

Study of the German language and culture. Listening and speaking is stressed, and added emphasis placed on reading and writing idiomatic German. Class meets five hours per week.

JOURNALISM (COM 201) 3 Credits

Basic introduction to the current practices and responsibilities of communicating public information through the various mass media. Advertising, industrial journalism, motion pictures, newspapers, photojournalism, public relations, radio and television are surveyed. Course supplemented with practical experience: suburban publications, local radio and television stations, film studios, advertising and public relations organizations, student publications. Class meets three hours per week.

BASIC REPORTING (COM 202) 3 Credits

Practical training in reporting for newspapers, plus exercises in radio and television news writing. Instruction in fundamentals of the news: press freedom, ethics and responsibilities of the press, laws related to reporting. Class meets five hours per week.
FUNDAMENTALS OF ADVERTISING (COM 203) 3 Credits

Basic techniques of preparing advertising for use in newspapers, radio, television, and billboards. Fundamentals of planning advertising campaigns, with emphasis on determining sales appeal, copy and layout, using teamwork approach in developing actual campaign visuals. Class meets five hours per week.

SHORT STORY AND THE NOVEL (COM 210) 3 Credits

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

POETRY AND DRAMA (COM 211) 3 Credits

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 are read. Occasional performances of both literary forms, when available and appropriate, will be attended. Class meets three hours per week.

CREATIVE WRITING (COM 212) 3 Credits

Principles and practice in writing the short story, the essay, the sketch and the play. 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.

FRENCH III (COM 223) 3 Credits

Prerequisite: COM 122 or by permission

Intermediate reading course to build vocabulary and comprehension ability. The reading of novels, plus numerous short excerpts from prominent contemporary writers, are integrated with a grammar review. Conversation and composition in French. Class meets three hours per week.
FRENCH IV (COM 224) 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.

CONVERSATIONAL FRENCH (COM 225) 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.

SPANISH III (COM 232) 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.

SPANISH IV (COM 233) 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.

CONVERSATIONAL SPANISH (COM 234) 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.
GERMAN III (COM 242)  
3 Credits

Prerequisite: COM 140 and COM 141

Survey of German literature from the beginning of the Modern High German period through the present day. Reading selections to be taken from short prose works, poetry, magazines and newspapers. Additional study of the structure of the language is featured. Class meets three hours per week.

GERMAN IV (COM 243)  
3 Credits

Prerequisites: COM 140, COM 141 and COM 242

Study of the classical period of German literature. Reading selections from the works of Goethe and Schiller. Class meets three hours per week.

CONVERSATIONAL GERMAN (COM 244)  
2 Credits

Prerequisites: COM 140 and COM 141

Class discussions based on articles read in German magazines and newspapers. Vocabulary and word study emphasized. Class meets two hours per week.
DRAFTING I (ENGR 101) 7 Credits

Prerequisite: By permission

Provides theory and application in descriptive and applied geometry, orthographic projection, sketching, lettering, use of instruments and basic conventions. Emphasis on visualization. Two hours of class and fifteen hours of laboratory per week.

DRAFTING II (ENGR 102) 7 Credits

Prerequisite: ENGR 101

Covers detail and assembly drawings, auxiliary views, sections, developments, and reproduction with emphasis on dimensioning and specifications. Two hours of class and fifteen hours of laboratory per week.

ENGINEERING GRAPHICS (ENGR 105) 3 Credits

Theory and application in the principles of graphics and conceptual 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.

ENGINEERING GRAPHICS (ENGR 106) 3 Credits

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.

TECHNICAL ILLUSTRATION (ENGR 107) 3 Credits

Prerequisite: High school drafting or by permission

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

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

INDUSTRIAL SCIENCE I (ENGR 128) 5 Credits
Prerequisite: MATH 101
Introduction to principles of metallurgy, material science, physics, chemistry, and mensuration most applicable to drafting. Class meets five hours per week.

INDUSTRIAL SCIENCE II (ENGR 129) 5 Credits
Prerequisite: ENGR 128
Continuation of Industrial Science 128 with emphasis on engineering applications. Class meets five hours per week.

INTRODUCTORY ELECTRONICS (ENGR 140) 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.

RESISTIVE ELECTRONIC CIRCUITS (ENGR 141) 3 Credits
Prerequisite: ENGR 140 and MATH 101 or its equivalent
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.
MICRO-PRECISION ELECTRONICS (ENGR 142) 3 Credits

Prerequisite: ENGR 140

Theory and application of electromagnetic, electromechanical, piezoelectric, and photovoltaic transducers and associated circuitry. Emphasis is on application of circuitry required for control of transducer functions. Two hours of class and three hours of laboratory per week.

SERVICE THEORY AND APPLICATIONS (ENGR 143) 3 Credits

Construction and analysis of basic communications circuits, including R.F. and A.F. amplifiers and oscillators, blocking oscillators and power supplies. Two hours of class and three hours of laboratory per week.

SERVICE OF COMMUNICATIONS EQUIPMENT (ENGR 144) 3 Credits

Prerequisite: ENGR 140

Principles of amplitude, frequency, phase and pulse modulation and related circuitry—INCLUDING modulators, demodulators, oscillators, mixers, converters, detectors, R.F. and I.F. amplifiers. Two hours of class and six hours of laboratory per week.

ALIGNMENT TECHNIQUES (ENGR 145) 3 Credits

Prerequisite: ENGR 144

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.

SYNCHRONIZATION TECHNIQUES (ENGR 146) 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.
SYSTEMS MAINTENANCE (ENGR 147) 3 Credits

Prerequisite: ENGR 144

Service and maintenance of electronic communications systems, including black and white and color television, radio receivers and transmitters. One hour of class and six hours of laboratory per week.

RESISTIVE CIRCUITS (ENGR 150) 3 Credits

Prerequisites: ENGR 140 and MATH 115

Study of resistive electrical circuits with both time-varying and constant power sources. Study of the physics of electricity, units, definitions, symbols and notations for electrical quantities. Class meets three hours per week.

SINGLE TIME–CONSTANT CIRCUITS (ENGR 151) 3 Credits

Prerequisites: ENGR 150 and MATH 121

Study of R–C and R–L circuits. Includes reactance, resonance and sinusoidal and exponential responses. One hour of class and three hours of laboratory per week.

INTRODUCTION TO ARCHITECTURE (ENGR 160) 3 Credits

Introduction to architecture as a profession so as to be able to understand the dimensions of the architectural totality and of the role of the profession in its creation. Class meets three hours per week.

ENVIRONMENTAL DESIGN (ENGR 161) 4 Credits

Exploration into the structure of the natural and man-made environment so that a student’s awareness of his environment is heightened and his critical faculties for understanding and appreciating that environment are sharpened. Two hours of class and six hours of laboratory per week.
DRAFTING III (ENGR 201) 7 Credits

Prerequisite: ENGR 102

Provides theory and application in axonometrics, obliques, and perspective drawings, conventions and symbols. Problems typical of industry. Two hours of class and fifteen hours of laboratory per week.

DRAFTING IV (ENGR 202) 7 Credits

Prerequisite: ENGR 201

Emphasis on industrially oriented topics and problems. Team activities provided. Two hours of class and fifteen hours of laboratory per week.

STATICS (ENGR 210) 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.

DYNAMICS (ENGR 211) 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.

MECHANICS OF MATERIALS (ENGR 220) 3 Credits

Prerequisite: ENGR 210

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

MECHANISMS (ENGR 225) 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.
TOOL DESIGN (ENGR 230)  3 Credits
Prerequisite: ENGR 105, ENGR 106, ENGR 220 and ENGR 225
Problems in the design, construction, and operation of dies, jigs, and fixtures. Six hours of laboratory per week.

PULSE CIRCUITS (ENGR 240)  3 Credits
Prerequisites: ENGR 141 and MATH 121
Study of electronic switching circuits: clippers, clamplers, pulse formers, multivibrators, blocking oscillators, logic circuits and sweep circuits. Two hours of class and three hours of laboratory per week.

LINEAR ELECTRONICS CIRCUITS (ENGR 241)  3 Credits
Prerequisite: ENGR 240
Study of electronic circuits in which vacuum tubes and transistors are operated in the linear region of their volt-ampere characteristics. Covers amplifiers, tuned amplifiers, DC and differential amplifiers. Two hours of class and three hours of laboratory per week.

SYSTEMS ANALYSIS (ENGR 242)  3 Credits
Prerequisite: ENGR 240
Project-type course devoted to the study of complete electronic systems used in industrial applications. Covers numerical control, telemetering, scientific data processing, coding and decoding techniques, control of manufacturing processes and applications as they apply to specific industries. Two hours of class and three hours of laboratory per week.

COMMUNICATIONS SYSTEMS (ENGR 244)  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.
MEASUREMENTS AND INSTRUMENTATION (ENGR 245) 3 Credits

*Prerequisite: ENGR 240*

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

NETWORK ANALYSIS (ENGR 250) 3 Credits

*Prerequisite: ENGR 151*

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

ARCHITECTURAL DESIGN AND COMMUNICATION I (ENGR 260) 6 Credits

Introduction to systems of two and three dimensional form. Understanding of the design process that relates the building task, the form and the technique. Use of drawings, graphs and other visual media. The course is designed so that a student is able to construct a structure that is both functional and load-bearing. Five hours of class and three hours of laboratory per week.

ARCHITECTURAL DESIGN AND COMMUNICATION II (ENGR 261) 6 Credits

*Prerequisite: ENGR 260*

Continuation of Architectural Design and Communication 260 with emphasis on the development of the building task areas of functional frame and physical controls and with emphasis on elementory constructional techniques. Five hours of class and three hours of laboratory per week.

DESIGN METHODS (ENGR 262) 2 Credits

Systematic study comparison and testing of the various design methods available for application in the architectural design process with a special emphasis on problem-solving techniques. Introduction to methodology as part of the creative design process. Six hours of laboratory per week.
BUILDING TECHNOLOGY (ENGR 263)  3 Credits
Introduction to systems of construction, including codes, ordinances, sub-surface investigation, foundations, waterproofing, paving, wall bearing and skeleton frame systems, reinforced concrete, steel, wood, fireproofing, masonry, roofing and flashing. The course will enable a student to be able to demonstrate an understanding of elementary systems of construction and be prepared to relate this understanding to the architectural totality. Class meets three hours per week.

ENVIRONMENTAL TECHNOLOGY (ENGR 264)  3 Credits
Study of the theories and principles of heating, cooling, air distributions and control, and of acoustics. Class meets three hours per week.

HISTORY OF ARCHITECTURE, ANCIENT AND MEDIEVAL (ENGR 265)  3 Credits
Historical study of architecture in the Near East and Europe from prehistoric to the sixteenth century A.D. Man's attempt to order his environment in the Mesopotamian, Egyptian, Greek, Roman and Medieval European cultures are examined so as to demonstrate an understanding of the architectural totality in a historical period: the development of the architecture and the continuity of architectural principles throughout this development. Class meets three hours per week.
HUMANITIES (HUM 101)  
3 Credits
Interdisciplinary study of art, music, philosophy and literature through examination of the major recurring or persistent concerns of mankind, and of the nature of creativity. Class meets three hours per week.

HUMANITIES (HUM 102)  
3 Credits
Interdisciplinary study of man's search for meaning through his creativity. Various dualisms common to all historical periods is the vehicle for study. Class meets three hours per week.

SIGHT-SINGING AND EAR-TRAINING I (HUM 111)  
1 Credit
A course presenting the melodic, harmonic, and rhythmic elements of music by integrating aural and sight reading skills. Class meets one hour per week.

CHAMBER CHOIR (HUM 117)  
1 Credit (each semester)
Small choir. Enrollment by audition. Performances at various student and community activities. Class meets three hours per week.

CHORUS (HUM 121)  
1 Credit (each semester)
Open to all students without audition. The chorus performs at least one major choral work each semester. Class meets three hours per week.

ORCHESTRA (HUM 122)  
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.
MUSIC THEORY: HARMONY I (HUM 123) 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.

MUSIC THEORY: HARMONY II (HUM 124) 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.

APPLIED MUSIC PRIVATE LESSONS (HUM 128) 1 Credit

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.

DESIGN I (HUM 131) 3 Credits

Introductory study of the basic art elements and principles common to all the visual arts and of their application in two and three-dimensional forms. Class meets six hours per week.

DESIGN II (HUM 132) 3 Credits

Prerequisite: HUM 131 or approval of portfolio

Continuation of Design 131. Class meets six hours per week.

SCULPTURE I (HUM 133) 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.
SCULPTURE II (HUM 134)  
3 Credits

Prerequisite: HUM 133 or approval of portfolio

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

PAINTING I (HUM 135)  
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.

PAINTING II (HUM 136)  
3 Credits

Prerequisite: HUM 135 or approval of portfolio

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

DRAWING I (HUM 137)  
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.

DRAWING II (HUM 138)  
3 Credits

Prerequisite: HUM 137 or approval of portfolio

Fundamentals of figure drawing. Working 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.
CERAMICS I (HUM 139) 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.

CERAMICS II (HUM 140) 3 Credits
Prerequisite: HUM 139 or approval of portfolio
Continuation of Ceramics 139. More advanced methods and techniques. Specific problems explored in greater depth. Class meets for six hours per week.

PRINTMAKING I (HUM 141) 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.

PRINTMAKING II (HUM 142) 3 Credits
Introduction to the traditional and contemporary intaglio processes of etching and engraving, and a variety of silk screen and mixed media techniques. Class meets six hours per week.

SILVERSMITHING (HUM 143) 3 Credits
Structural course for the beginning student involving tools and techniques in silversmithing. Emphasis on developing and understanding silversmithing design and processes. Class meets six hours per week.

ART FUNDAMENTALS (HUM 144) 3 Credits
Examination of the major art forms: sculpture, printmaking and drawing. Tracing their historical development focusing on 20th century forms and philosophies. Class meets six hours per week.
PHILOSOPHY (HUM 151) 3 Credits

Study of the basic questions of philosophical inquiry, such as God, being, knowledge, love, and society. Attention is given to understanding philosophical method and to developing a critical approach to reading philosophy. Class meets three hours per week.

LOGIC (HUM 152) 3 Credits

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

INDEPENDENT STUDIES IN HUMANITIES (HUM 200) 3 Credits

Opportunity for the student to pursue his special interests in the humanities, through guided independent study in his chosen area. Class meets three hours per week.

PHILOSOPHY OF RELIGION (HUM 210) 3 Credits

Study of the phenomena of religion as dealt with by the various world religions and by philosophers. Emphasis on such modern schools of religious inquiry as existentialism, humanism, and God is dead theory. Class meets three hours per week.

ETHICS (HUM 253) 3 Credits

Course covers the history of ethical thought in the Western world, with emphasis upon the classical Greek philosophers, the Hebraic-Christian teachers, German rationalism, and English empiricism. Also includes a consideration of the great problems of ethics, such as free will and determinism, the relationship between the individual conscience and social custom, and the problem of responsibility. Class meets three hours per week.
COMMERCIAL ART I (HUM 260)  
Prerequisite: HUM 132 and HUM 138  
Introduction to principles of layout and design as applied to advertising. Projects include work designed specifically for newspapers, magazines, packaging, direct mail, posters, brochures and TV. Paste-up, color separation and other techniques relating to the preparation of work for reproduction is emphasized as well as development of a professional portfolio. Class meets eight hours per week.

COMMERCIAL ART II (HUM 261)  
Prerequisite: HUM 260  
Continuation of Commercial Art 260. Class meets eight hours per week.

TECHNICAL ILLUSTRATION (HUM 262)  
Prerequisite: HUM 260  
Provides a basic understanding of problems that must be solved for the production of technically correct renderings. Includes the study of perspective and isometric, dimetric and trimetric methods of projecting lines and planes. Class meets six hours per week.

LETTERING TECHNIQUES I (HUM 263)  
Prerequisite: HUM 132 and HUM 138  
Specialized study of commercial lettering techniques that include hand and press-on lettering, layout, production and typography. Class meets two hours per week.

LETTERING TECHNIQUES II (HUM 264)  
Prerequisite: HUM 263  
Continuation of Lettering Techniques 263. Class meets two hours per week.

COMMERCIAL PHOTOGRAPHY (HUM 265)  
Prerequisite: HUM 263  
Introduction to the elementary principles of photography as they relate to commercial art and advertising display. Class meets four hours per week.
DISPLAY TECHNIQUES (HUM 266)  
1 Credit

Prerequisite: HUM 132

Introduction to the materials and methods of three-dimensional advertising design stressing the commercial use of papier-mache, paper sculpture and other techniques related to window display and other promotional advertising. Class meets two hours per week.

COMMERCIAL ART FIELD STUDY (HUM 267)  
3 Credits

Course designed to provide actual work experience at an approved training center under instructors supervision. Emphasis on an individual creative project to be arranged with the instructor. Class meets two hours per week and a minimum of 15 hours of on-the-job training per week by arrangement.

INDEPENDENT STUDY (HUM 268)  
3 Credits

Prerequisite: By permission

Individual study for the advanced student who is capable of independent research in a specified area: sculpture, painting, drawing, ceramics or printmaking. For planning purposes, a student should expect to spend about six hours per week on course projects.
INTRODUCTION TO ALGEBRA (MATH 100)  
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.

TECHNICAL MATHEMATICS I (MATH 101)  
3 Credits
An introduction to applied mathematics for the engineering-related professions. Contains selected topics from algebra, geometry, and trigonometry with emphasis on engineering applications. Students with two years of high school algebra should consider Trigonometry 117 instead. Class meets three hours per week.

TECHNICAL MATHEMATICS II (MATH 102)  
3 Credits
Prerequisite: MATH 101
Continuation of Mathematics 101. Plane and solid analytical geometry. Class meets three hours per week.

FINITE MATHEMATICS (MATH 103)  
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.

ALGEBRA (MATH 106)  
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, polynomials and polynomial functions, logarithms, and series. Class meets five hours per week.
STATISTICS (MATH 110) 3 Credits

*Prerequisite: Math 106 or equivalent*

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

ALGEBRA-TRIGONOMETRY (MATH 115) 5 Credits

*Prerequisite: MATH 106 or two years of high school math*

Designed for science and engineering majors not requiring more advanced mathematics or for those who feel the need for more background before attempting analytical geometry and calculus. Class meets five hours per week.

COLLEGE ALGEBRA (MATH 116) 3 Credits

*Prerequisite: Two and one half years of college preparatory math*

An intensive course designed for the science or engineering major who needs additional background before attempting calculus. Class meets three hours per week.

TRIGONOMETRY (MATH 117) 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.

ANALYTIC GEOMETRY-CALCULUS I (MATH 121) 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.
ANALYTIC GEOMETRY-CALCULUS II (MATH 122) 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.

ANALYTIC GEOMETRY-CALCULUS III (MATH 223) 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.

DIFFERENTIAL EQUATIONS (MATH 224) 3 Credits

*Prerequisite: MATH 223 or equivalent*

Standard types of ordinary equations of first and second order, linear equations, solutions by series, and application to geometry and physical science. Class meets three hours per week.
NATURAL SCIENCE (NS 101) 4 Credits

Designed to explain 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. The Audio-Visual-Tutorial presentation employs a variety of media as an aid to understanding. Two hours of class and four hours of AVT laboratory per week.

NATURAL SCIENCE (NS 102) 4 Credits

Introduces the fundamental laws, theories and principles of chemistry and physics, and to meet laboratory science requirements for the non-science major. Such topics as atomic and molecular theory, the periodic system, the laws of chemical combinations, and gas laws are covered. Applications of mechanics, electronics, sound, heat, and light are studied. The Audio-Visual-Tutorial presentation employs a variety of media as an aid to understanding. Two hours of class and four hours of AVT laboratory per week.

INTRODUCTION TO HEALTH OCCUPATIONS (NS 105) 2 Credits

Survey of allied health and medical professions with some emphasis on medical terminology. Class meets two hours per week.

BIOLOGY OF ANIMALS (NS 110) 4 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 six hours per week.

BIOLOGY OF PLANTS (NS 111) 4 Credits

Introduction to plant structure and function. Plant divisions with emphasis on life cycles and evolutionary relationships from the simplest to the most complex of plants. Three hours of class and three hours of laboratory per week.
MICROBIOLOGY (NS 115)

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. Three hours of class and four hours of laboratory per week.

5 Credits

HUMAN ANATOMY-PHYSIOLOGY (NS116)

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. Three hours of class and four hours of laboratory per week.

5 Credits

HUMAN ANATOMY (NS 117)

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. Three hours of class and three hours of laboratory per week.

4 Credits

HUMAN PHYSIOLOGY (NS 118)

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. Three hours of class and three hours of laboratory per week.

4 Credits

GENERAL CHEMISTRY I (NS 120)

Prerequisite: MATH 115 or by permission

Basic introduction to inorganic chemistry with emphasis upon atomic structure, the periodic table, bonding, solutions and chemical calculations. Four hours of class and three hours of laboratory per week.

5 Credits
GENERAL CHEMISTRY II (NS 121)  
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 later portion devoted to an introduction to qualitative analysis. Four hours of class and three hours of laboratory per week.

PRINCIPLES OF CHEMISTRY (NS 125)  
5 Credits

Introduces the student to the fundamental concepts of inorganic, organic, and biochemistry. Four hours of class and two hours of laboratory per week.

NURSING AND THE INDIVIDUAL (NS 131)  
6 Credits

Prerequisite: Admission to 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 good interpersonal relationships and utilization of communication skills are included. Clinical laboratory practice is an integral part of the course. Three hours of class and nine hours of clinical laboratory per week.

NURSING: FAMILY AND THE COMMUNITY (NS 132)  
6 Credits

Prerequisite: NS 131

Continued study of the maintenance and promotion of health with special emphasis on the family, the community and society. Introduction to community health agencies 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.
GENERAL PHYSICS I (NS 150) 4 Credits

*Prerequisite: MATH 117 or concurrent enrollment*

Introduction to physics. The student is introduced to properties of matter, heat, sound and classic physics through lectures and supportive laboratory exercises. Three hours of class and three hours of laboratory per week.

GENERAL PHYSICS II (NS 151) 4 Credits

*Prerequisite: NS 150*

Continuation of General Physics 150 with further study of classical physics and an introduction to modern physics. Three hours of class and three hours of laboratory per week.

ORGANIC CHEMISTRY I (NS 220) 5 Credits

*Prerequisite: NS 121*

The lectures develop 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 preparation of representative compounds. Three hours of class and six hours of laboratory per week.

ORGANIC CHEMISTRY II (NS 221) 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.

PRINCIPLES OF ORGANIC CHEMISTRY (NS 225) 5 Credits

*Prerequisite: NS 125*

Introduction to adiphalic and simple aromatic compounds with an emphasis on nomenclature, principles, and basic theories of organic chemistry. Four hours of class and three hours of laboratory per week.
NURSING: PATIENT CARE (NS 231) 10 Credits

Prerequisite: NS 132

Introduction to the care of patients with minor illnesses. Special emphasis placed on nursing intervention when there is a threat to homeostasis. Pathophysiology and the application of basic scientific principles of care stressed. Clinical laboratory experience in hospitals and other health agencies is an important part of the course. Five hours of class and 15 hours of clinical laboratory per week.

NURSING: ACUTE PATIENT CARE (NS 232) 10 Credits

Prerequisite: NS 231

Continued study of illness with emphasis on acute health problems, stress and crisis intervention in patients of all age groups. Observational experiences in areas such as intensive care units is included. Extensive development and utilization of patient care plans are a course requirement. Adjustment to the role of the graduate nurse is discussed. Five hours of class and 15 hours of clinical laboratory per week.

ENGINEERING PHYSICS I (NS 250) 5 Credits

Prerequisite: MATH 122 or concurrent enrollment

Introduction to physics for students of science and engineering which stresses mathematical approaches to the study of mechanics, heat and sound. Four hours of class and three hours of laboratory per week.

ENGINEERING PHYSICS II (NS 251) 5 Credits

Prerequisite: NS 250

Continuation of Engineering Physics 250 with emphasis on electricity and magnetism, light and modern physics. Four hours of class and three hours of laboratory per week.
PHYSICAL DEVELOPMENT

CO-ED PHYSICAL DEVELOPMENT (PD 101) 1 Credit
Activities consist of softball, volleyball, badminton, tennis, soccer, marching, 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.

CO-ED PHYSICAL DEVELOPMENT (PD 102) 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.

RULES AND OFFICIATING (PD 110) 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.

PERSONAL HEALTH AND COMMUNITY HYGIENE (PD 120) 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.

INTRODUCTION TO PHYSICAL EDUCATION (PD 130) 3 Credits
Study of the principles of health and physical education; its history, philosophy, theory, and practice. Class meets three hours per week.
**FUNDAMENTALS OF ATHLETICS (PD 140)** 2 Credits

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

**CO-ED SWIMMING (PD 150)** 1 Credit

Instruction and practice in water skills and safety. Covers basic techniques in learning to be a better swimmer and skills in senior lifesaving. Class meets two hours per week.

**COMPETITIVE SWIMMING (PD 151)** 1 Credit

Co-Ed course for competitive swimmers. Material emphasizes competitive swimming skills, techniques, coaching methods and officiating water workouts. Class meets two hours per week.

**SWIMMING POOL MANAGEMENT (PD 152)** 1 Credit

Course involves the role of a swimming pool manager as a pool technician, employer and recreation director. Also covers maintenance of the swimming pool, aspects of pool supervision and public relations, and recreation functions of the swimming pool. Class meets two hours per week.

**GIRL'S DRILL TEAM (PD 154)** 1 Credit (each semester)

To teach precision drill team techniques and to represent the College in community activities. Enrollment by audition. Class meets two hours per week.

**MODERN DANCE (PD 155)** 1 Credit

Co-Ed course with emphasis on motor control and skill in executing the fundamentals of dance. Basic techniques. Class meets two hours per week.
CHEERLEADING (PD 156) 1 Credit
Co-Ed basic instruction in the fundamentals of cheerleading. Hours by arrangement. Class meets two hours per week.

HORSEMANSHIP (PD 157) 1 Credit
General care of horse and equipment. Mounted session includes riding on the flat and over fences. Class meets two hours per week.

LIFE SAVING AND WATER SAFETY (PD 158) 1 Credit
Advanced work in all swimming strokes, as well as instruction for certification in American National Red Cross Life Saving and Water Safety. Class meets two hours per week.

GOLF (PD 159) 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.

FENCING (PD 160) 1 Credit
History, etiquette, and rules of fencing. Basic offensive and defensive tactics and combat strategy. Class meets two hours per week.

FIRST AID (PD 201) 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.
SOCIAL SCIENCE (SS 101)  3 Credits
Interdisciplinary sociology course that is concerned with the concepts and methods of sociology and its 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.

SOCIAL SCIENCE (SS 102)  3 Credits
An interdisciplinary political science course which introduces the basic concepts and methods from political science and its relationship to the behavioral sciences. Such topics as the city, the environment and international relations are probed by the class. Class meets three hours per week.

SOCIAL SCIENCE (SS 103)  3 Credits
An interdisciplinary psychology course which introduces the basic concepts and methods of general psychology and its relationship to the other behavioral sciences. Contemporary social problems are examined. Class meets three hours per week.

BASIC POLICE TRAINING COURSE (SS 150)  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 240 clock hours. Class meets five days a week, eight hours a day for nine weeks.
INTRODUCTION TO LAW ENFORCEMENT (SS 151)  3 Credits
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.

POLICE ADMINISTRATION (SS 152)  3 Credits
Prerequisite: SS 151
Study of the contemporary law enforcement agency, its functions, structures, and operational techniques. Class meets three hours per week.

CRIMINAL LAW (SS 155)  3 Credits
Classification and analysis of crimes and criminal acts. Discussion of Kansas Criminal Statutes. Class meets three hours per week.

FUNDAMENTALS OF CRIMINAL INVESTIGATION (SS 156)  3 Credits
Prerequisite: Criminal Law 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.

POLICE AND THE PUBLIC (SS 159)  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.

ECONOMICS I (SS 201)  3 Credits
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.
ECONOMICS II (SS 202) 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.

CHILD DEVELOPMENT (SS 210) 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.

EDUCATIONAL PSYCHOLOGY (SS 211) 3 Credits

Prerequisite: Sophomore standing and SS 103

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.

AMERICAN HISTORY (SS 220) 3 Credits

Corequisite: By permission

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.

AMERICAN HISTORY (SS 221) 3 Credits

Prerequisite: By permission

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.
AMERICAN NATIONAL GOVERNMENT (SS 222) 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.

SOCIAL PROBLEMS (SS 230) 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.

INTRODUCTION TO CRIMINALISTICS (SS 251) 3 Credits

**Prerequisite: SS 155**

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.

CRIMINOLOGY (SS 254) 3 Credits


TRAFFIC SAFETY AND ACCIDENT INVESTIGATION (SS 255) 3 Credits

**Prerequisite: SS 151 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.
READINGS IN POLICE SCIENCE (SS 259)  
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.
ADMINISTRATION

OFFICE OF THE PRESIDENT
President
Robert G. Harris

OFFICE OF COMMUNITY COOPERATION
Director of Community Cooperation
John Pearce

OFFICE OF ADULT CONTINUING EDUCATION
Director of Adult Continuing Education
Dane W. Lonborg

INSTITUTE FOR COMMUNITY COLLEGE DEVELOPMENT
Dean of Institute for Community College Development
Harold L. Finch
Director of Institutional Planning
Michael C. Noland

BUSINESS AND FACILITIES BRANCH
Dean of Business and Facilities
Ali Cerne
Director of Business
Nick Roach
Director of Facilities
Gene Haun

COLLEGE SERVICES BRANCH
Dean of College Services
Donald P. Meyer
Director of Admissions and Registrar
Walter L. Cooper
Director of Financial Aids
Orville Gregory
Director of Guidance and Counseling
Don Dougherty
Director of Educational Media Center
William J. Hoffman
Director of Athletics
Orville Gregory

INSTRUCTIONAL BRANCH
Dean of Instruction
William A. Lozano
Assistant Dean of Instruction
Richard A. Burns
Coordinator of Career Education
Norman H. Karl
Director of Institute of Aviation
James C. Sandilos
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
ALVERS, Jack H.
B. S., University of Illinois
Instructor, Aviation

ALVERS, Jean
B. S., Eastern Michigan University
M. A., University of Michigan
Instructor, Social Sciences

AXON, David E.
B. A., Park College
M. Ed., Pennsylvania State University
Instructor, Communications

AMADI, Lawrence E.
B. A., Southwest Baptist College
M. A., University of Missouri at Kansas City
Instructor, Social Sciences

ASCANIO, Darlene J.
Instructor, Data Processing

B

BAGGERLY, Larry C.
B. A., University of Missouri at Kansas City
M. A., University of Missouri at Kansas City
Instructor, Foreign Languages

BALLARD, Judith A.
B. A., William Jewell College
M. A., University of Missouri at Kansas City
Instructor, Reading Specialist

BARNETT, Thomas M.
B. S., Eastern New Mexico University
M. S., Eastern New Mexico University
Ed. D., North Texas State University
Director of Natural Sciences
BEHBEHANI, Zohreh Saeed
LL. B., University of Tehran
LL. M., University of Missouri at Kansas City

Instructor, Social Sciences

BRUEGGING, Joseph C.

Instructor, Aviation

BURNS, Mary Jane
B. A., Mt. St. Scholastica College
M. A., University of Missouri at Kansas City

Instructor, Communications

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

Assistant Dean of Instruction

C

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

Dean of Business and Facilities

COFFMAN, Bob
B. A., Bethany College

Supervisor, Word Production Center

COLE, Norma L.
B.A., University of Missouri at Kansas City

Instructor, Nursing

COOPER, Walter L.
B. S., Central Missouri State College
M. A., University of Missouri
Ed. D., University of Missouri

Director of Admissions and Registrar

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

Instructor, Physical Sciences
CROTCHETT, M. Jay
B. A., University of Kansas
J. D., University of Kansas
Instructor, Social Sciences

CUNNINGHAM, Melvin C.
B. S., University of Nebraska at Omaha
M. L., Kansas State Teachers College
Assistant Librarian

D

DALSING, Max V.
B. S., Kansas State Teachers College
M. S., Kansas State Teachers College
Instructor, Life Sciences

DAYTON, Linda L.
B. S., Kansas State Teachers College
M. S., Kansas State Teachers College
Counselor

DIETRICH, Irma
B. Mus., Bethany College
M. A., University of Denver
Assistant Librarian

DOUGHERTY, Don
B. S., Kansas State Teachers College
M. S., Kansas State Teachers College
Director of Guidance

E

ELLIOTT, Tom A.
B. S., Kansas State College of Pittsburg
M. S., Kansas State College of Pittsburg
Systems Analyst and Programmer

EVANS, David J.
B. S. C., University of Iowa
M. Ed., University of Nebraska
Instructor, Business
FINCH, Harold L.  
Dean of Institute for Community College Development  
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

FONG, Pao-Shu  
Instructor, Communications  
B. A., Tam Kang College of Arts and Sciences  
M. A., Fort Hays State College

G

GATLIN, Gerri G.  
Instructor, Fashion Merchandising  
B. S., Southwestern State College  
M. S., Oklahoma State University

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

GERDEL, John P.  
Instructor, Drafting Technology

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

GREGORY, Orville  
Director of Physical Development  
B. S., Northeast Missouri State College  
M. A., Kansas State Teachers College

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

HARRIS, Robert G.  
President  
B. A., Michigan State University  
M. S. E. E., U.S. Naval Post Graduate School  
Ph. D., Michigan State University

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

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

HERSHEY, Robert W.  
Assistant to the Director of Admissions  
B. A., National College  
M. R. E., St. Paul’s School of Theology
HICKS, Ronald D.
B. S., Kansas State College of Pittsburg
M. S., Kansas State College of Pittsburg

HILL, David E.
B. S., Kansas State Teachers College
M. S., Kansas State Teachers College

HOWARD, Jean M.
B. F. A., University of Kansas
M. F. A., University of Kansas

HOFFMAN, William J.
B. S., Lakeland College
M. S., University of Wisconsin
M. A., University of Denver

IMBEAU, Harvey B.
B. M. E., Oklahoma State University
M. M. E., North Texas State University

JACK, Eugene H.
B. S., Kansas State College of Pittsburg
M. S., Kansas State College of Pittsburg

JACKSON, James W.
B. A., Arkansas Polytechnic College
M. Ed., University of Arkansas

Instructor, Art
Instructor, Drafting Technology
Instructor, Art
Director of the Educational Media Center
Instructor, Instrumental Music
Instructor, Physical Sciences
Director of Social Sciences and Humanities
JOHNSON, Robert T.
B. S., Central Missouri State College
M. A., Central Missouri State College

K

KALMAN, Nancy A.
B. A., University of Iowa
M. S., University of Iowa
Ph. D., University of Kansas

KARL, Norman H.
B. A., Wartburg College
M.A., University of Northern Colorado

KARNAZE, William C., Jr.
B. A., University of Kansas
M. A., University of Kansas

KINDERMANN, Maurice E.
B. A., University of Missouri at Kansas City
M. A., University of Missouri at Kansas City

KLARNER, Walter E., Jr.
B. A., College of Emporia
M. S., Kansas State Teachers College

KREBS, Frederick A.
B. A., University of Kansas

KREBS, Virginia
B. S., University of Denver

Instructor, Business
Instructor, Life Sciences
Coordinator, Career Education
Instructor, Physical Sciences
Instructor, Physical Sciences
Instructor, Communications
Instructor, Humanities
Coordinator, Community Services
L

LINDSEY, Carl E.  Director of Engineering and Technology
B. S., University of Kansas

LONBORG, W. Dane  Director of Adult Continuing Education
B. S., University of Kansas
M. A., University of Northern Colorado

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

M

MACKEY, Wayne  Instructor, Mathematics
B. A., University of Arkansas
M. S., University of Arkansas

MARSHALL, Vincent B.  Coordinator, Media Production
B. S., Kansas State Teachers College
M. S., Kansas State University

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

McKINZIE, Kathleen H.  Instructor, Social Sciences
B. A., St. Mary's College
M. A., Indiana University
Ph. D., Indiana University

METTENBURG, Alfred J.  Instructor, Law Enforcement
B. S., University of Missouri
MEYER, Donald P.  Dean of College Services
B. S., Central Michigan University
M. A., University of Michigan
Ed. D., Michigan State University

MILLER, Margaret K.  Counselor
B. A., Central Methodist College
M. A., University of Missouri at Kansas City

NERNEY, Patricia K.  Instructor, Communications
B. A., Mt. St. Scholastica College
M. A., University of Missouri at Kansas City

NOLAND, Michael C.  Director of Institutional Planning
B. S., University of Kansas
M. S., University of Kansas
Ph. D., Georgia Institute of Technology

OETTING, Ronald H.  Instructor, Mathematics
B. S., Central Missouri State College
M. A., Louisiana State University

PARKER, Donna  Coordinator, Publications

PEARCE, John  Director of Community Cooperation
B. S., University of Kansas
M. S., University of Kansas
PITTS, Patricia M.  
B. A., University of Kansas  
M. A. T., University of Kansas  
Instructor, Foreign Languages

PURINTON, Dorothy  
B. A., Baker University  
Supervisor, Graphics

RAMSEY, Robert W.  
B. S., University of Missouri  
M. A., Central Missouri State College  
Instructor, Mathematics

RANDOLPH, Richard J.  
B. S., University of Kansas  
M. A., George Washington University  
Instructor, Business

RANKIN, M. Elaine  
B. S., Kansas State Teachers College  
M. S., Kansas State Teachers College  
Instructor, Secretarial Careers

ROACH, Nick  
B. B. A., Washburn University  
Director of Business

ROSENSHIELD, Liliane Nadine  
Licence in English “La Sorbonne”  
M. A., University of Paris  
Instructor, Foreign Languages

S

SANDILOS, James C.  
B. S., Temple University  
M. S., Temple University  
Director of Aviation Institute

SCHELOSKI, Peggy Y.  
B. S., Kansas State College  
Audio Visual Tutorial Specialist
SCHMITZ, Eugene R.
B. A., St. Benedict's College
Instructor, Data Processing

SKINNER, Izora J.
B. A., University of Texas
M. S., University of Texas
Instructor, Communications

SNEAD, Carl
B. S., University of Kansas
Coordinator, Public Information

STEPHENSON, Pat M.
B. A., University of Florida
M. Ed., University of Florida
Ph. D., Florida State University
Counselor

STITES, Glenna L.
B. S., Columbia University
M. A., University of Missouri
Instructor, Secretarial Careers

STOUS, Kathleen E.
B. S., Central Missouri State College
M. S., Central Missouri State College
Instructor, Physical Development

STRATE, James W.
B. S., Central Missouri State College
M. S., Central Missouri State College
Instructor, Retail Marketing Management

STRICKLAND, David
B. S., Northwest Missouri State College
M. A., University of Missouri at Kansas City
Counselor

SUTTON, Hugh C.
B. S., Texas A & M University
M. S., Louisiana Polytechnic Institute
Instructor, Mathematics
T

TAYLOR, Mary Lou, R. N.  Coordinator, Nursing Education
B. S., Drury College
M. A., University of Missouri at Kansas City

TEEL, Marion E.  Instructor, Life Sciences
B. A., Nebraska State College
M. S., Kansas State Teachers College

V

VOMHOF, James P.  Director of Business and Management
B. S., University of Minnesota
M. A., University of Minnesota

W

WADSWORTH, Dorothy  Instructor, Art
B. F. A., Wichita State University
B. A. E., University of Kansas
M. F. A., Wichita State University

WEGMAN, Phillip J.  Counselor
B. A., St. Benedict's College
M. A., Kansas State University

WELCH, Anne F.  Instructor, Communications
B. A., Fontbonne College
M. A., Loyola University

X

XIDIS, Robert D.  Instructor, Communications
B. A., University of Kansas
M. A., Indiana University