## MISSOURI WESTERN

## STATE COLLEGE CATALOG 1977-78



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## MEMO

TD: All Faculty, Staff and Administrators
FRCM: Frank Smith
DATE: 4/7/77


FE: Mistake Number 1 in 1977-78 catalog
C.

There is an error on page 30 in the Pass-Fail section of the new catalog. The third indented paragraph, last sentence should read "The attempted hours are included in the GPA."

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On page 16 under Schedule of fees, the cost per credit hour for less than 9 hours does NOT include the SGA fee for either residents of Missouri or non-residents.

The exact fee schedule is included in the fall class schedule.

# GENERAL CATALOG 

1977-1978

## MISSOURI WESTERN STATE COLLEGE

4525 Downs Drive St. Joseph, Missouri 64507 (816) 233-7192

Missouri Western State College actively follows a policy of non-discrimination on the basis of race, color, religion, sex, or national origin in regard to all employment practices and to the awarding of student financial aid as well as the recruitment, admission, housing and retention of students as required by Title IX of the Education Amendments Act of 1972.
Information in this catalog is subject to change and thus does not constitute an agreement or contract. This catalog reflects college policy as of December $1,1976$.

The general catalog of Missouri Western State College serves as a guide to the academic programs of the College and is intended to assist students in the selection of their programs of study. The catalog contains general information on requirements for admission, regulations, student affairs, degree programs, facilities and administration. It includes a de-
scription of all courses offered in the College and lists faculty members and administrators. Missouri Western State College is accredited by the North Central Association of Colleges and Secondary Schools and the National Council for Accreditation of Teacher Education.
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With the opening of the 1969-70 academic year, Missouri Western State College began its existence as a four-year college offering baccalaureate degrees. The College evolved from the earlier St. Joseph Junior College, organized by the St. Joseph Board of Education in 1915. In 1964, interested citizens in eleven school districts joined in petitioning the Missouri State Board of Education for the formation of a junior college district. At a district election in 1965, the voters approved the establishment of the Missouri Western Junior

College District. Subsequently, the Missouri State Legislature authorized the addition of junior-year and senior-year instructional programs.
Missouri Western State College will become a fully funded state college July 1, 1977.
The College offers a comprehensive academic program designed to provide a vital center of learning and culture for the Missouri Western State region.

## GOALS OF THE COLLEGE

Cognizant of its obligations to the district and the state, to the student as a person as well as a seeker of knowledge, and to itself as a community involved in the perpetuation and increase of knowledge, Missouri Western State College, through its Boards of Control, undertakes to:
I. provide educational opportunities suited to the needs of its student body by developing;
bachelor degree programs in selected disciplines in the arts and sciences, education, technology, and business administration;
one year certificate and associate degree programs in selected vocational and technical fields;
pre-professional and transfer programs in designated fields; general education
components in all degree and certificate programs;
continuing and adult education courses, workshops, seminars and programs suited to the capabilities of the college and the needs of the community.
II. provide an appropriate learning environment for its students through the development of proper facilities and a strong and committed faculty, and by supplying requisite auxiliary services and recreational and cultural opportunities.
III. promote, within limits defined by the prior claim of regularly enrolled students, the welfare of the community, not only through work in continuing education but also through the provision of cultural and recreational opportunities and appropriate services.


FROM KANSAS CITY
North on I-29 to Cameron exit
Take Highway 36 east tó Riverside Interchange
Turn left to Mitchell Avenue
Turn left on Mitchell to College Entrance


MITCHELL AVENUE

## Main Campus

1. Frank Popplewell ClassroomAdministration Building
2. Dr. Thompson E. Potter Fine Arts Center
3. Health, Physical Education and Recreation Building
4. Engineering Technology Building
5. Evan R. Agenstein Science and Mathematics Building
6. Nelle Blum College Center
7. Warren E. Hearnes Learning Resources Center
8. Student Services/Classroom Building
9. Campus Residence Complex
10. President's Home

A-G Parking Lots

## Summer Session 1977

| June 3 (Fri.) | Registration (8 week \& both 4 week sessions) |
| :--- | :--- |
| June 4 (Sat.) | Saturday Classes begin |
| June 6 (Mon. 7:00 a.m.) | Weekday Classes begin |
| July 1 (Fri. 10:00 p.m.) | First 4 week session ends |
| July 4 (Mon.) | Holiday (Independence Day) |
| July 5 (Tues. 7:00 a.m.) | Second 4 week session begins |
| July 30 (Sat. 12:00 Noon) | Summer Session ends |
| Aug. 2 (Tues. 4:30 p.m.) | Final Grades Due |

## Fall Semester 1977-78

Aug. 18, 19
Aug. 22, 23
Aug. 24 (Wed. 7:00 a.m.)
Sept. 5 (Mon.)
Oct. 14 (Fri.)
Nov. 23 (Wed. 12 Noon)
Nov. 28 (Mon. 7:00 a.m.)
Dec. 10 (Sat. 12 Noon)
Dec. 12 (Mon. 7:00 a.m.)
Dec. 17 (Sat. 12 Noon)
Dec. 20 (Tues. 4:30 p.m.)

Faculty Plan Days
Registration
Classes begin
Holiday (Labor Day)
Student Activity Day (No Classes)
Thanksgiving Vacation begins
Classes resume
Classwork ends
Final Exams begin
Fall Semester closes
Final Grades Due

## Spring Semester 1978

Jan. 16, 17
Jan. 18 (Wed. 7:00 a.m.)
Mar. 18 (Sat. 12 Noon)
Mar. 27 (Mon. 7:00 a.m.)
May 9 (Tues. 10:00 p.m.)
May 11 (Thurs. 7:00 a.m.)
May 17 (Wed. 10:00 p.m.)
May 18 (Thurs.)
May 19 (Fri. 4:30 p.m.)

Registration
Classes begin
Spring recess
Classes resume
Classwork ends
Final Exams begin
Spring Semester closes
Commencement
Final Grades Due

Freshman orientation will be heid on the foilowing dates:
July 18-19, August 6, and August 15 in 1977.

## Summer Session 1978

| June 2 (Fri.) | Registration |
| :--- | :--- |
| June 3 (Sat.) | Saturday Classes begin |
| June 5 (Mon.) | Weekday Classes begin |
| June 30 (Fri. 10:00 p.m.) | First 4 week session ends |
| July 4 (Tues.) | Holiday |
| July 29. (Sat 12:00 noon) | Summer session ends |
| Aug. 1 (Tues. 4:30 p.m.) | Final Grades due |

## Fall Semester 1978

Aug. 17, 18
Aug. 21, 22
Aug. 23 (Wed. 7:00 a.m.)
Sept. 4 (Mon.)
Oct. 27 (Fri.)
Nov. 22 (Wed, 12:00 noon)
Nov. 27 (Mon. 7:00 a.m.)
Dec. 9 (Sat. 12:00 noon)
10
Dec. 11 (Mon. 7:00 a.m.)
Dec. 16 (Sat. 12:00 noon)
Dec. 19 (Tues. 4:30 p.m.)

Faculty Plan Days
Registration
Classes begin
Holiday
Student Activity Day (No Classes)
Thanksgiving Vacation begins
Classes resume
Classwork ends
Final exams begin
Fall Semester closes
Final Grades due

## Spring Semester 1979

| Jan. 15, 16 | Registration |
| :--- | :--- |
| Jan. 17. (Wed. 7:00 a.m) | Classes begin |
| Mar. 17 (Sat. 12:00 noon) | Spring recess |
| Mar. 26 (Mon. 7:00 a.m.) | Classes resume |
| April 13 (Fri) | Holiday (Good Friday) |
| May 8 (Tues. 10:00 p.m.) | Classwork ends |
| May 10 (Thurs. 7:00 a.m.) | Final Exams begin |
| May 16 (Wed. 10:00 p.m.) | Spring Semester closes |
| May 17 (Thurs.) | Commencement |
| May 18 (Fri. 4:30 p.m.) | Final Grades due |

## MATRICULATION



## ADMISSION

Missouri Western State College maintains an open-door admission policy and adheres to the requirements of Title IX of the Educational Amendment Act of 1972. National origin, race, color, religion or sex are not factors used in determining the admissibility of students.
In cooperation with the Articulation Agreement among post-secondary schools in Missouri, the college will accept the holder of an Associate of Arts degree from an accredited Missouri public institution as having completed the general studies requirements.

## First Time in College

A person who has not previously attended a college or university must provide
an application for admission, a $\$ 5.00$ matriculation fee,
results of the American College Test (ACT), and a high school transcript with eight semesters of work, or a high school transcript with seven semesters of work and confirmation of high school graduation, or an equivalency certificate awarded upon successful completion of the General Education Development Test (GED),
A foreign student must provide an application for admission,
a $\$ 5.00$ matriculation fee,
results of the test of English as a Foreign Language (TOEFL) with a minimum score of 500,
a statement of financial independence, and proof of completion of high school or its equivalent.
Freshman orientation will be held on the following dates; July 18-19, August 6 and August 15, 1977.

Graduates of accredited high schools from both Missouri and other states will be admitted to Missouri Western State College under the same policies. However, if it ever becomes necessary to limit admissions, instate students will be given first priority.
A person who desires to take credit courses at Missouri Western State College must be admitted to the institution through one of the following categories.

## College Transfer

A person who has previously attended a college or university must provide an application for admission, a $\$ 5.00$ matriculation fee, and an official transcript from each college and university attended, or evidence of bachelor's or higher degree.
A minimum of 60 semester hours of senior college credit must be included within the 124 semester hour credit requirement of the bachelor's degree.
College grades earned at accredited institutions will be treated as if earned at Missouri Western State College.
Transfer students seeking a bachelor's degree must complete at least 30 of their last 45 credits at Missouri Western State College (exclusive of credit by examination). A minimum of nine credit hours of the residence requirement must be in the major field. Education majors must also include student teaching in the residence requirement.
Transfer students seeking the associate degree must complete the last fifteen hours at this institution (exclusive of credit by examination). A minimum of six credit hours of the residence requirement must be in the major field.
courses. A student under suspension from
Missouri Western is NOT eligible to be admitted under this category.
To be admitted, the student must provide an application for admission and a $\$ 5.00$ matriculation fee.
A high school student is eligible to attend Missouri Western State College as a special student upon the high school principal's certification that the student is academically capable of pursuing college level course work. The student must provide
an application for admission,
a $\$ 5.00$ matriculation fee, and
certification from the high school principal.
A person who is admitted under this category who later decides to seek a degree must reapply for admission under the appropriate admissions category. (Consult the Admissions and Records Office).
Missouri Western State College may accept a total of 30 credit hours work (maximum) obtained by a student in the following ways:

## Non-resident credit

United States Armed Forces Institute and other armed service schools.
Credits earned through the United States Armed Forces Institute (USAFI) are generally recognized in accordance with the recommendation of the Commission on Accreditation of Service Experiences of the American Council of Education.
Extension work from regionally accredited institutions of higher education.
Correspondence work from regionally accredited institutions of higher education.
The foregoing work must be documented by written records from the United States Government and/or other institutions of higher education.

## Credit by Examination

A student whose travel, employment, extensive reading or other unique educational experience, which appears to have given proficiency in courses required in the curriculum equivalent to that ordinarily attained by that taken in the traditional classroom manner, may be granted permission to attempt college credit through examination. College
tion. Credit for major field courses may be obtained by taking the CLEP Subject Matter Exam or a comprehensive test designed by the department. The department determines which courses are appropriate for "Credit by Examination" and the test instrument to be used.
If a student should take subject exams which are not normally employed for the test-out program, the results will be reviewed by the appropriate department and credit may or may not be awarded.
A student is eligible to receive credit by examination only if meeting the following requirement;
the student must have applied for admission to MWSC and paid the matriculation fee, the student must be enrolled in MWSC before credit obtained through examination is awarded,
the student must not be enrolled in a course for which an exam is being requested,
the student must be granted written permission by all appropriate college authorities prior to taking the exam unless it is the CLEP General for a first-time college student, and
transfer students must have complete transcripts of previous college credit in the Records Office before written permission for the test out will be granted.
A student is ineligible to take a test for "credit by examination" if the credit which the student would earn on that test makes the student eligible for graduation at the end of that semester.
A student is not eligible to receive credit by examination if he/she has;
earned prior credit in the course, audited the course,
attempted the course and received a grade assessment of WF or F, or
taken a college course or courses which contain the same basic material.
Normally, students request credit by examination early in their college career to avoid ineligibility at a later date. The student must earn a minumum of 30 credit hours of resident credit excluding any credit by examination.
The College-Level Examination Program (CLEP) General Examinations are adminis-
should be completed and returned to the Extension Office four weeks prior to test dates which are available in SS/C 112.
The test fees are; $\$ 20.00$ for one, $\$ 30.00$ for two, and $\$ 40.00$ for three or more.
To obtain credit in an area of the CLEP General Examination a minimum of a 500 scaled score must be attained on the test in that area. High school seniors should take the CLEP General Examination before the end of April. The following table lists the five CLEP General test areas and indicates how credit earned through the CLEP General Examination is awarded in the general studies program at Missouri Western State College.

Credit by examination may be obtained in specific subjects. A list of courses for which subject tests are available may be obtained in the office of the Director of Testing. Successful performance on a subject test is determined by the academic department in which that course is lodged. Applications for subject examinations may be acquired from the office of the Director of Testing. The test dates are November 12, 1977 and April 22, 1978. The application deadlines are October 14, 1977 and March 24, 1978.
CLEP Subject Examinations are accepted by some departments. For many courses, however, they are not available or may be considered inappropriate. In such cases, a college examination is used. The student should contact the office of the Director of Testing prior to taking a CLEP Subject Examination to determine whether or not that particular examination is acceptable for obtaining credit.
Student requests for permission to take examinations for credit at times other than the regularly scheduled test dates will be granted only in exceptional cases. Such requests should be initiated in the office of the Director of Testing. The following procedure will be observed:
the student must present a written request in
which he states his reasons for asking for the special date,
the department chairman will decide whether or not the petition is justified and may ask for verification, and
if the circumstances warrant it, the department may set up a special test time.
II. Itie test ree is \$40.00 if the test used tor that course is CLEP, and $\$ 15.00$ if the exam used for test out is a departmental college test.
Multi-level Subject Matter tests; In the case of sequence courses, an academic department may use a single test in determining the proficiency of the student in the skills/knowledge demanded by the courses in said sequence. If a student desires credit by examination in two or more courses in a sequence covered by such a test then a test fee of $\$ 25.00$ is applicable and the student will be given credit for each course in the sequence for which he demonstrates the minimum standards of proficiency as designated by the academic department.

## CLEP GENERAL TESTS

CR. HRS.

| ENGLISH |  |
| :---: | :---: |
| General Studies Requirement Met |  |
| ENG 100 \& | 3 cr . hrs. |
| ENG 104 | $3 \mathrm{cr} . \mathrm{hrs}$. |
| HUMANITIES |  |
| Subscores |  |
| High in Fine Arts |  |
| Low in Literature |  |
| General Studies Requirement Met |  |
| Art/Music/Theatre \& | $3 \mathrm{cr} . \mathrm{hrs}$. |
| Humanities elective |  |
| Subscores |  |
| Relatively equal subscores or |  |
| High in Literature |  |
| Low in Fine Arts |  |
| General Studies Requirement Met |  |
| Humanities elective ENG 210 | 3 cr hrs. <br> 3 cr . hrs. |
| MATHEMATICS |  |
| General Studies Requirement Met |  |
| MAT 101 \& | $3 \mathrm{cr} . \mathrm{hrs}$. |
| MAT 105 | $3 \mathrm{cr} . \mathrm{hrs}$. |
| NATURAL SCIENCE |  |
| Subscores |  |
| Higher in Biological |  |
| Lower in Physical |  |
| General Studies Requirement Met BIO 101 | 6 cr . hrs. |

CHE 101 or

## PHY 101

6 cr . hrs. 6 cr . hrs.

SOCIAL SCIENCE AND HISTORY
General Studies Requirement Met
Two of the following:
HIS 140 or
HIS 150 or
PSC 101
3 cr . hrs. 3 cr . hrs. 3 cr . hrs.
ors Composition and Rhetoric, and, upon its successful completion, are also awarded 3 hours credit in 104 Composition and Rhetoric. For the student, this process fulfills written composition requirements in general studies. The English major who successfully completes this program enters 224 Advanced Composition and Literature, a course required of all English majors.

In case a student should decide not to take a test after the petition for test out has been processed, a refund request may be initiated in the office of the Director of Testing. (However, $\$ 5.00$ of the original fee paid will be retained for processing).

# REGISTRATION 

Missouri Western State College complies with the Family Educational Rights and Privacy Act of 1974.

## Residence

It is the responsibility of each student to register under the proper residence and pay proper fees. Rules of residency are available in the Admissions and Records Office. Any student claiming residency in the State of Missouri may be required to furnish evidence in support of the claim.
The Admissions and Records Office will rule on all questions regarding residency, but the student has the right to appeal the decision to the Admissions and Graduation Committee.
If, after enrollment, the student is eligible for a different residency classification, a petition form for this purpose is available in the Admissions and Records Office.

## Schedule of Fees-

Effective August, 1977
Fees include a S.G.A. fee of $\$ 10.00$ for full time students and $\$ 5.00$ plus 50 cents per credit hour for part time students.

## Fall \& Spring Semesters

9 or more hours less than 9 hours
Residents of Missouri
$\$ 201.00 \quad \$ 21.50$ per credit hour
Non-Residents (outside the State of Missouri)
$\$ 391.00 \quad \$ 42.50$ per credit hour

## Summer Semester <br> 5 or more hours less than $\mathbf{5}$ hours

Residents of Missouri
$\$ 95.50 \quad \$ 21.50$ per credit hour
Non-Residents (outside the state of Missouri)
$\$ 190.50 \quad \$ 42.50$ per credit hour

## Veterans

The College is approved by the Veterans Administration to offer programs for Veterans, for those attending under the War Orphans Act, Veterans Tutorial Program, and the Veterans Work-Study Program. Veterans application forms and general information are available in the Office of Veteran Affairs.
Students who have completed a minimum of one year of active military service may be granted 4 hours of physical education credit and 2 hours of hygiene credit. The general education credit will be granted upon presentation of the DD 214 or NGB 55 form to the Admissions and Records Office.

## Other Fees

| ) | \$ 5.00 |
| :---: | :---: |
| Applied Music Fee (per credit hour) | \$ 20.00 |
| Audit Fee Regular | Regular Amount |
| College Credit by Examination (single level) (per test) | \$ 15.00 |
| College Credit by Examination (multi-level) (per sequence) | \$ 25.00 |
| Dormitory Fee (Room \& Board) (per semester) | \$465.00 |
| Dormitory Security Deposit (subject to refund) | \$ 50.00 |
| Graduation Fee (all candidates) | \$ 15.00 |
| Laboratory Materials and/or Breakage | Cost |
| Physical Education Facility Fee | \$ 3.00 |
| Transcript Fee | \$ 1.00 |
| (The college reserves the right to without notice.) | fees |

Withdrawal after third week of classes No Refund

## Refund of Fees

Refunds are given only to students who drop out of college entirely; no refund is given to students who drop individual classes or make schedule changes that result in a reduced semester hour class load.

Fall, Spring and Eight-Week Summer Semesters

## Four-week Summer Sessions

Withdrawal during first week of classes $80 \%$ of Fee

## Withdrawal after first

week of classes
No Refund


The college's financial aid program is designed to assist qualified students who would not otherwise to be able to attend Missouri Western State College. Scholarships, fee
waivers, or financial aid, are not applicable for courses numbered under 100 or for courses taken without regular college credit.

Financial aid is awarded on the basis of evidence of financial need. The college requires parents, step-parents, or guardians of financial aid candidates to submit the American College Testing Program's Family Financial Statement. (The C.C.S. Parents' Confidential Statement will also be accepted.) This statement provides the college with the information needed to determine to what extent financial assistance might be needed to enroll.
Students are expected to assist themselves by using previous savings, earnings from summer employment, and, if it should be necessary, a part-time job opportunity in conjunction with other financial aid at Missouri Western. Parents are expected to contribute funds from their income and assets. The amount expected from the parents is that sum which represents the difference between the total expenses and the amount represented by anticipated student earnings and college aid. In reviewing the savings and annual income of the family, consideration is granted for normal commitments of the income and unusual expenditures such as: additional children in college, extensive medical costs, and curtailment of earning power. The cost of transportation will vary with each student but an appropriate allowance is made for this in the aid computation.
Since the amount of aid awarded to a student is a reflection of the financial position of the family, it is regarded as confidential between the student and his family and the college. The amount awarded is determined on the basis of need, and any additional prizes or
awards received by the student from outside agencies must be reported to the Financial Aid Office.

## Application Procedure for Financial Assistance

A student who applies for admission and who wishes to be considered for financial aid opportunities must have a copy of the Family Financial Statement forwarded to Missouri Western State College by the American Testing Program. An institutional data sheet must also be submitted. The Family Financial Statement may be secured from the high school guidance office or the Student Financial Aid Office at Missouri Western. The Family Financial Statement should be completed in the early spring before the school year in which financial aid is requested and mailed to ACT, as instructed on the form. Allow four weeks for processing.
The above procedure is required each year by returning students who desire financial assistance.

## Awarding Of Financial Aid

May 1, of each year is the deadline date when the completed application must be in the Office of Student Financial Aids at Missouri Western State College. At that time applications will be considered, awards made, and students notified. Applications will be accepted after June 15, but chances of receiving financial assistance will be much less since most aid will already have been awarded.
parent contribution which is not to exceed one-half of the cost of college. To be eligible to receive the Basic Educational Opportunity Grant the student must demonstrate need and could not have begun post-secondary education before April 1, 1973.

MISSOURI STUDENT GRANT PROGRAM: The Missouri Student Grant Program, under Senate Bill 613, established a financial assistance program to enable qualified, full-time students to receive non-religious educational services in a public or private institution of higher education of their choice. The grant will not exceed one-half of the tuition and fees or $\$ 900$, whichever is the lesser of the two amounts.

EDUCATIONAL OPPORTUNITY GRANTS: Students who qualify on the basis of exceptional financial need may apply for an Educational Opportunity Grant, made available under Title IV of the Higher Education Act of 1965. These grants may range from $\$ 200$ to $\$ 1000$. Grants must be matched by an equal amount from some other qualifying source such as College Work-Study, National Direct Student Loans, etc.

COLLEGE WORK-STUDY PROGRAM: Under Title 1, Part C, of the Economic: Opportunity Act of 1964, a student may be employed parttime while attending college. Part-time employment means working a maximum of 20 hours per week while classes are in session. Prospective students who qualify under the guidelines of the College Work-Study Program may be employed 40 hours per week in the summer months preceding the academic year.

NATIONAL DIRECT STUDENT LOANS: The National Direct Loan Program, established under Title II of the National Defense Education Act of 1958, is a long-term program from which eligible and deserving students may be granted substantial loans to supplement other income for educational purposes.

FEDERALLY INSURED STUDENT LOANS: The College participates in the Federally Insured Student Loan program. This is a loan program whereby students are loaned necessary funds from their local banks. Applicants should contact their local bank or the Office of Student Financial Aids for more information.
1968. LEEP is a program intended to develop professional law enforcement officers through higher education. LEEP provides educational opportunity through financial aid and is directed to students having the ability and desire to provide professional performance in the criminal justice system. Both loans and grants may be obtained through this program.
NURSING STUDENT LOAN PROGRAM: This program is intended to assist fulltime students to achieve careers in nursing by providing long-term low interest loans to help meet costs of education.
INSTITUTIONAL LOAN: The College has various student loan funds available to its students and prospective students. These funds are used to loan worthy and needy individuals the money necessary for their enrollment at this institution. The interest charge for the use of these funds is nominal. Liberal repayment schedules are available. Any interested individual is encouraged to visit or write the Financial Aid Office.
DR. WILLIAM L. AND MILDRED T. LANDFATHER LOAN: Landfather funds provide interest free loans for 5 students each semester. The loans are awarded by the Student Financial Aid Office to freshmen, sophomore, juniors, or seniors, whose major field is Science or Mathematics. The loan may be renewed each semester, provided the recipient makes satisfactory academic progress. Repayment of loan after graduation is arranged for the convenience of the student.
PART-TIME EMPLOYMENT: Each year there are opportunities for students to find parttime employment on the campus or in the community.

Information concerning job opportunities may be secured from the Financial Aid Office.

## Scholarships

Scholarships are available to Missouri Western State College students who qualify. Applications for scholarships may be picked up in the Office of Financial Aid, and should be returned to that office on or before April 1. At this point copies of the applications will be distributed to all members of the Scholarship Committee, for review. The Scholarship Committee shall meet on or before April 15, and
quirements, and those win no specific requirements. They shall be broken down into these two categories in the catalog.

## Tuition and Fee Waiver Scholarships

BANKING AND FINANCE SCHOLARSHIP: Missouri Western State College offers to eligible non-resident students enrolled in courses leading to a major in banking and finance fee waiver scholarships. To be eligible a student must be a full time employee of a banking institution and a member of the American Institution of Banking, living outside the State of Missouri.

The scholarship will include a waiver of the difference between in-state and out-of-state tuition and may be used only during the semester when the individual is enrolled in at least one course included in the banking and finance major.
An official of the banking institution in which a prospective student is employed should write a letter of nomination to the Vice President for Administrative Affairs and Special Programs no later than ten days prior to class registration.
Scholarships must be renewed each semester with a letter of nomination.
REGENTS AND TRUSTEES HONOR SCHOLARSHIP: Awarded by the College annually to all Missouri students who rank in the top $20 \%$ of their high school graduating class. The award is a partial waiver of tuition and fees. This award is renewable if the student attains a 2.5 grade point average the first semester and a 3.0 for each semester thereafter. The Regents and Trustees Honor Scholarship, with the above qualification, can be used by students entering Missouri Western State College for the first time beginning the fall semester of 1976 or thereafter.
ACADEMIC SCHOLARSHIP: Awarded by the College annually to all Missouri students who rank in the top $33 \%$ of their high school graduating class. The award is a partial waiver of tuition and fees. This award is renewable for one semester only if the student has attained a 2.5 grade point average the first semester. The Academic Scholarship, with the above qualification, can be used by stu-
annuany to tne stuquent selected oy each Missouri high school with 75 or less graduating seniors. Additional scholarships are available to the high school on the basis of one for each 75 graduating seniors. The Special Award can be used only by student(s) entering for the first time beginning the fall semester of 1976 or thereafter.
FINE ARTS SCHOLARSHIPS: The Governing Boards offer a number of scholarships each year in the amount of incidental fees to students who show particular ability in art or music. Selections are made by the Scholarship Committee with recommendations from the Fine Arts faculty.
SPEECH AND/OR THEATRE SCHOLARSHIPS: The Governing Boards offer a number of scholarships each year in the amount of incidental fees to students who actively participate in the Speech and/or Theatre programs. Recipients of this scholarship must maintain a 2.0 grade point average as freshmen and 2.5 thereafter. Selections are made by the Scholarship Committee with recommendations from the Speech and Theatre faculty.
ROTC FEE WAIVER: Fee waiver scholarship. See Department Chairman.

## Scholarships Having Specific Requirements for Eligibility

AGRICULTURE SCHOLARSHIPS: Applications for these scholarships are obtained through the Agriculture Department.
OUTSTANDING FRESHMAN AWARD: Production Credit Association has given a scholarship of $\$ 200$ to be awarded to a freshman student majoring in agriculture. The recipient selected by the Agriculture Scholarship Committee must be an outstanding freshman student.
This scholarship will be awarded to a student upon completion of the first year in the agriculture department, shows need, and be from one of the following counties in Missouri: Andrew, Atchison, Buchanan, Caldwell, Clay, Clinton, DeKalb, Holt, Nodaway, Platte, or Ray.
OUTSTANDING SOPHOMORE AWARD: Rushville State Bank has given a scholarship of $\$ 200$ to be awarded to a sophomore student
agriculture who has demonstrated leadership abilities, academic excellence and financial need.
OUTSTANDING JUNIOR AWARD: Ed Lawrence, Jr. has given a scholarship of $\$ 200$ to be awarded to a junior majoring in agriculture. The recipient selected by the Agriculture Scholarship Committee must be an outstanding junior student.
This scholarship will be awarded to a student upon completion of the junior year in agriculture who has demonstrated leadership abilities, academic excellence and financial need.

THE HOME BANK AWARD: The Home Bank has given a scholarship of $\$ 200$ to be awarded to a student, majoring in agriculture, selected by the Agriculture Scholarship Committee.
This student must be an agriculture major, from Andrew County, who has demonstrated leadership ability, academic excellence and financial need.
AMERICAN NATIONAL BANK SCHOLARSHIP: American National Bank, St. Joseph, Missouri, has given $\$ 400$ to make one to two scholarships available for a student(s) majoring in agriculture. The recipient(s) shall demonstrate leadership ability, academic excellence and financial need.
ALTRUSA CLUB SCHOLARSHIP: The recipient shall be a woman selected by the Scholarship Committee on the basis of need and personal commitment.
AMERICAN ASSOCIATION OF UNIVERSITY WOMEN, ST. JOSEPH BRANCH SCHOLARSHIP: The St. Joseph Branch of the A.A.U.W. offers a scholarship to a high ranking sophomore girl. Application for this scholarship is made through the Student Financial Aids office.
ARMY ROTC SCHOLARSHIP: One, two, three, and four-year scholarships are awarded each year to selected students who are enrolled or will enroll in the Army ROTC Program. The scholarships provide payment of all tuition, fees, textbooks, and a monthly stipend of $\$ 100$ for the duration of the scholarship, not to exceed ten months for each year of the scholarship.
ROTC SUBSISTENCE: Students enrolled in the junior and senior Military Science courses automatically receive a tax-free stipend of
enulanamir: itios cinorarsmp nas oeen established by the college for a deserving freshman or sophomore who is enrolled in the ROTC program as a cadet. One scholarship will be given in each of the fall and spring semesters based on availability of funds. The recipient will receive $\$ 100$ towards payment of registration fees. Further qualifications for receipt of this award include a minimum of 2.3 high school or school GPA, and not receiving another scholarship from any other source. Application should be made to the scholarship committee.
athletic scholarships: The Governing Boards have agreed to give a number of athletic scholarships to students who plan to participate in athletics. These athletic scholarships are awarded at the recommendation of the Director of Athletics and with the approval of the Scholarship Committee. The scholarship is a waiver of all or part of the fees incurred.
BUCHANAN COUNTY MEDICAL SOCIETY NURSING SCHOILARSHIP: A $\$ 6,000$ scholarship endowment fund was established by the Buchanan County Medical Society to provide one or more scholarships for Missouri Western State College students enrolled in a nurses training program. Application should be made to the Scholarship Committee.
CAROLYN B. ULIMAN TEACHER EDUCATION SCHOLARSHIP: The Missouri Congress of Parents and Teachers, aware of the shortage of teachers in the elementary field, offers a scholarship to students wishing to prepare to teach in the public elementary schools of the State of Missouri. The awards are based on (1) character, (2) scholastic record, (3) aptitude for teaching, (4) sound health. Application forms may be secured from the Financial Aids office.
THE CULVER-GETTYS MEMORIAL SCHOLARSHIIP: This Scholarship is given in memory of Lt. Col. Charles M. Culver and Captain Hugh M. Gettys. The scholarship is awarded to a young man or woman who has completed a minimum of 28 college hours. The student must have a cumulative grade point average of 2.75 or better and show evidence of need of financial assistance. The scholarship shall be in the amount of the incidental fees for the first semester; and, if the student continues to achieve a cumulative grade point average of 2.75 , it may be continued for the
ship has been established to fund one \$su0.Uu Scholarship to a student who; demonstrates financial need through the ACT's Family Financial Statement analysis, is a graduate from the St. Joseph, Missouri School District, (All other things being equal-preferably a graduate of Lafayette High School) and is reasonably capable of completing college level work to a baccalaureate degree.
The scholarship will be awarded for one semester at a time and the recipient is to be selected by the Missouri Western State College Scholarship Committee.

DR. WAYNE TOOTHAKER SCHOLARSHIP: By the will of the late Dr. Wayne Toothaker, a sum of $\$ 5,000$ was invested, the interest from which is to be awarded to a student who expects to enter the medical profession and is taking the pre-medical course. Application is made to the Scholarship Committee.
EAST HILLS MERCHANTS ASSOCIATION SCHOLARSHIPS: Awarded annually to athletes in any major sports field. Application should be made to the Athletic Director of Missouri Western State College, no later than May 1, of each year.

## FEENEY CONSTRUCTION COMPANY

SCHOLARSHIP: This scholarship was established in November 1961, and first awarded to a member of the 1962 graduating class. It is expected to be made available to former graduates of one of the five St. Joseph high schools, in accordance with provisions established by the donor. Students may apply to the Scholarship Committee.
FIRST NATIONAL BANK MERIT SCHOLARSHIPS: These scholarships were established in 1961 by the First National Bank of St. Joseph as an expression of its interest in the importance of higher education and in appreciation of the contribution Missouri Western State College is making for the betterment of St. Joseph and the surrounding area. The scholarships cover fees and the cost of necessary textbooks. Ordinarily, the scholarships are for one year only and new recipients are named each year. However, should conditions warrant, a student may be awarded the scholarship for a second year. Application is made to the Scholarship Committee. From the applicants the Committee selects the two students who are best qualified from the standpoint of scholarship and financial need.
the first semester to remain eligible to receive the full scholarship. The recipient will be named by a department selection committee.
THE MR. AND MRS. CLARK C. GLAZE SCHOLARSHIP: A $\$ 7,500$ scholarship fund has been established by Mr. and Mrs. Clark C. Glaze, the interest from which is to be awarded. If used by a student taking a pre-medical course, the scholarship is to be known as the Emily B. Glaze Scholarship. If used by a student taking pre-engineering, the scholarship will be known as the Clark C. Glaze Scholarship. Application is to be made to the Scholarship Committee.

## J.C. BENSYL MEMORIAL FUND SCHOLAR-

 SHIP: The family of J.C. Bensyl established this fund in his memory. The interest on contributions made by relatives and friends is used to provide assistance to a young man or woman pursuing a degree in education. To be eligible, the student must have completed a minimum of 28 college hours, show evidence of financial need and be in good academic standing.MIDLAND-MOOREHEAD SCHOLARSHIP: The Midland-Moorehead Company established a trust fund in 1967. The interest from the investment of the fund is awarded each year by the Scholarship Committee to a student whose major area of study is engineering or technology.

## MISSOURI SOCIETY OF PROFESSIONAL

 ENGINEERING: Northwest Chapter Award: Sophomore pre-engineering students are invited to apply for this award. Application is made through the Scholarship Committee, with final selection being made by a committee of members of the Society.NATIONAL ASSOCIATION OF POWER ENGINEERS, MISSOURI CHAPTER NO. 1, ST. JOSEPH SCHOLARSHIP: This organization has made a scholarship available to a preengineering student who is in his freshman year and who expects to complete his second year here. Application blanks are obtained from instructors who teach pre-engineering subjects. A committee made up of members of the Society makes the final selection.

THE NEWS-PRESS-GAZETTE ENGLISH SCHOLARSHIP: The News-Press-Gazette Corporation offers each year an award of $\$ 100$ to the student completing the sophomore year with
to apply for one of these awards. Application blanks may be picked up in the Social Science Department Office.

## SOCIETY FOR THE PRESERVATION AND ENCOURAGEMENT OF BARBERSHOP QUARTET SINGING IN AMERICA, INC:

 Annual scholarships will be offered to male students majoring in vocal music. Missouri Western State College Scholarship Committee will ask the vocal music department for assistance in naming these individual awards.ST. JOSEPH DRIVE-IN, INC: Henry's Drive-In, 600 South 28 Street makes available a scholarship that will cover tuition and fees for two (2) semesters to an incoming freshman who is a graduate of Central High School in St. Joseph, Missouri. Applications shall be made to the Missouri Western State College Scholarship Committee. Selection will be made by the committee, based on the student's financial need. The student should be reasonably capable of completing college level work.
NATIONAL GUARD SCHOLARSHIP PROGRAM: This program is offered to members of the Missouri National Guard, by Missouri Western State College, which includes 25 partial fee waivers. Fee waivers are renewable each semester for a total of 124 semester hours.
To qualify for the free educational benefits, you must: Meet MWSC's admission requirements, and have a composite score of 18 or better on the ACT examination,
Qualify and be an active member in the Missouri National Guard (Air or Army). Students must maintain membership and satisfactory participation in a Missouri National Guard unit during the semester in which they have the scholarship,
Maintain a minimum full time enrollment of 12 semester hours and a 2.3 grade point average on a 4.0 scale to qualify for a continuous fee waiver,
Accept only one scholarship and/or fee waiver to MWSC. Students under advisement of the director of financial aid can select the scholarship and/or fee waiver that will be of greatest benefit,
Provide the college, at the beginning of each semester, a certification letter of enlistment status with the Guard.
Information about the scholarships may be

## Specific Requirements

ALMA PLETCHER ENDOWMENT TRUST SCHOLARSHIP: Two (2) $\$ 300$ scholarships a year for upperclassmen. The applicant must be a full time student ( 12 hours) and be in good standing.

## AMERICAN BUSINESS WOMEN'S ASSOCIA-

 TION AWARD: Officers of the organization select the recipient. The award ordinarily amounts to the incidental fee. These awards are made on the basis on scholastic achievement and financial need. Information concerning applicants is forwarded to officers of the organizations who make the final selection and inform the student well in advance of the time for final registration at the college.ANNE LOWELL WELLS FUND: This fund was created by the International Relations Club and furthered by the Cheshire Cheese Club in memory of Miss Anne Lowell Wells, a deceased member of the faculty. The interest from this fund is available to a deserving student.
B'NAI B'RITH WOMEN'S DIVISION AWARD: Selection is made from a list of eligible students by a committee from the organization. Two are selected. It usually amounts to onehalf of the incidental fees. This award has been made for many years.
C.R. BRAY ANNUAL ARTS AWARD: Established in 1959 by the Bray studio, this award is an expression of interest in the future leadership of our community and country. The aim of this award is to encourage interest in higher education among students participating on high school and college yearbook staffs. Several awards are presented each year in the amount of $\$ 50$ or $\$ 100$ to worthy students in recognition of their outstanding achievements and services. Applications should be submitted to the Scholarship Committee.
DR. THOMPSON E. POTTER MEMORIAL SCHOLARSHIP: Friends and relatives of Dr. Thompson E. Potter have established a trust fund to be used for scholarship purposes. Dr. Potter served as President of both the Board of Regents and Board of Trustees of Missouri Western State College. The earnings from the trust fund are used each year to award a student a scholarship. Application is made through the Scholarship Committee.
ing with the college. Application may be obtained through Mr. Dale Maudlin, Vice-President, First National Bank, St. Joseph, Missouri.
FIRST TRUST BANK SCHOLARSHIP: This scholarship was established in 1969 by the First Trust Bank of St. Joseph to express recognition for the contribution the College is making to Northwest Missouri. The scholarship is awarded by the Scholarship Committee to the applicant best qualified and who has financial need.

HARRY MONSON MEMORIAL FUND: The Harry Monson estate, through the Downtown Rotary Club of St. Joseph, donated $\$ 2,500$ to be used for scholarship purposes. Two thousand dollars of this total is invested
showing exceptional financial need while attending Missouri Western State College, desiring that these students contribute to the betterment of St. Joseph and surrounding community, as well as to the College. Students may apply through the Office of the Superintendent of the St. Joseph Public School District.
PROFESSIONAL FOOD-SERVICE MANAGEMENT: Four (4) $\$ 250$ scholarships each year. Applications should be submitted to the Scholarship Committee.
SOUTHSIDE ROTARY CLUB: The Southside Rotary Club awards a scholarship to a student selected by their organization. Applications should be submitted to their chairman.


## STUDENT AFFAIRS

## Academic Advisement

Academic advisement is an important function. Good advisement can prevent many errors in the choice of a major or of courses which a student may choose to take.
Academic advisement is available to students at Missouri Western State College in the following manner. During each registration period ( $\mathrm{F}-\mathrm{S}-\mathrm{SS}$ ) information will be collected on the orange update card from all students indicating (1) degree objective, (2) major area of study and (3) student classification. Baccalaureate degree seekers must declare a degree and major objective at or before 55 credit hours. Associate degree seekers must declare a degree and major objective at or before 20 credit hours. Cerificate seekers must declare a major upon entry to the institution (Non-degree seeker). Computer printouts will show degree, major and classification of all currently enrolled students by academic departments. Undeclared majors will be advised by the Counseling Center and declared majors will be advised by the academic department using whatever procedure it desires. The flexibility would exist to (1) group advise, (2) assign students to individual professors, (3) let students choose advisor, (4) let anyone in the department advise, (5) assign a professor with a light teaching load more advisees,

> etc.

Student records-each department will receive a computer printout showing its currently enrolled advisees. Any student who makes a change in his degree or major during registration will be responsible for notifying his former major department or Counseling Center and requesting them to forward his advisory records to the new major department by campus mail. (In some instances, records can only be obtained from the Record's Office as certain students have never consulted a counselor or an advisor). This would permit each department to dis-
cuss the student's objective, potential, chance of success, etc. Each department would receive grade mailers by department for all advisees from the Computer Center to update its records.
In the final analysis, the student is responsible for the requirements of his educational program and should work closely with an advisor.

## Counseling and Testing

## COUNSELING

Counselors assist students in becoming oriented to the college, selecting courses, making a career choice, and understanding and attempting to resolve their personal prob-

All new students are offered the opportunity to attend a two or a one-day orientation session which attempts to familiarize students with the college and provide assistance with academic advisement and schedule planning. Students may arrange future interviews with a counselor whenever they desire. Counselors attempt to help the student reach a state of self-reliance through a clearer understanding of oneself and individual potentials.

## TESTING

The College serves as a testing center for the American College Test. Other tests are available to students on an individual basis. Many students have found it helpful to take the Career Planning Profile (CPP), the Strong Vocational Interest Blank, and other tests. The General Educational Development (GED) test is administered on a monthly basis. The Graduate Record Examination (GRE) is administered to all graduating seniors.
Students may test out of as much as thirty hours of college work either through credit obtained by earning a prescribed score on the College Level Examination Program (CLEP) or by taking departmental tests in specific subjects.
ment tor learning: to act responsiny accor-
dance with good taste, to observe college regulations and the city, state and federal laws, and to respect fully the right of others. The Student Handbook contains more specific information concerning student conduct and related disciplinary action which may include dismissal in case of serious infraction.

## Housing

The Campus Residence Complex is contemporary in design. Each suite includes a large living room with two adjoining bedrooms on either side so that a total of eight students may occupy a suite. Each suite also has its own outside entrance, a patio and self contained airconditioning and heating units. For additional information concerning occupancy, contact the Housing Coordinator.
The Dean of Students maintains a list of approved off-campus housing. The college does not make individual rental agreements. It is advisable for the students to arrive in St. Joseph prior to the beginning of the academic year in order to locate suitable housing.

## College Center

The College Center houses the Bookstore, Cafeteria, Snack Bar, Health Services, Placement Center, the Dean of Students, Student Government Association, College Center Board, and Security. Recreational equipment is also available in the basement area commonly known as the Rathskeller.

## Bookstore

The college bookstore is located on the first floor of the College Center. It sells all college texbooks and supplies as well as a full line of accessories.

## Health Services

Health Services are under the charge of a parttime medical doctor and a full-time registered nurse. Registered nurses are on duty during class hours. The nurses provide firstaid, administer authorized medication, counsel in health related problems, and assist the student when referrals are made to a doctor, dentist, or public health offices. The physician prescribes treatment for students who seek medical attention.

Services Center and of the care given to them, are filed in the Health Services office.
As a service to students, a health insurance plan is made available to students each year. It is strictly voluntary. After a plan is submitted to several insurance companies, the lowest bid is accepted. From that point on, the college ceases responsibility for the insurance program. This is in accordance with a recent ruling by the Attorney General of Missouri. The Student Health Service strongly recommends that students not covered by a family health insurance plan obtain this coverage. It is extremely important for those students who are living away from home.

## Library

In the pleasant atmosphere of the Hearnes Learning Resources Center students may study and relax. The building houses over 100,000 volumes, periodicals for research and recreation, micro-format, films, records, filmstrips, tapes and a variety of other print and non-print material, making information available, in the most suitable media.
Using a computerized system, for interlibrary loan, the LRC also makes available to students 2 million items in libraries across the United States. Professional librarians are available to give individual guidance and suggestions in locating resource materials. Individual study carrels allow for private study, while the student lounge offers a quiet relaxation area. Students also have seminar rooms for group study available to them.

## Placement And Off-Campus Services

The Director of Placement and Off-Campus Services interprets the college to high school and junior college students, administrators, counselors, and other publics as assigned.
In this capacity, the Director works in close harmony with Division Deans, Department Chairmen, and with the offices of admissions and records, counseling, financial aids, housing, testing, and public relations.
The office schedules school assemblies and staff visitations off campus, arranges luncheons and meetings for area educators, supervises informational centers, and consults with

It assists students and alumni by making available information concerning job openings, by compiling credentials of registrants and by arranging for interviews with prospective employers.
It assists employers by notifying them of qualified applicants by furnishing credentials and by arranging for interviews.
Students are urged to avail themselves of the services by registering with the Placement Service in the first semester of their senior year. Alumni are urged to keep their records up-todate.

## Alumni Association

The Alumni office serves as liaison between the college and former students. Through its bulletin it keeps alumni abreast of the College's academic and physical progress. It also encourages interest among the former students.

The Association elects a President, Vice President, Secretary, and Treasurer annually. Also, a twenty-four member board of directors serves the Association, of which eight are elected annually for a period of three years.

## Activities

The student activities program is a necessary part of the educational philosophy at Missouri Western State College. While it is readily recognized that the information gained in the academic classroom is important in shaping the future of the student, it is becoming more and more apparent on today's college campus, that the information and experience gained in participating as a citizen in an academic community is equally important.

## Student Government

The Student Government Assembly (SGA) is the primary student governing body on the campus and is composed of elected representatives from the student body. Because it represents the students, all student committees, activities, regulations and student oriented decisions in general are to be formed or acted upon by the Student Government Assembly.

Competition will begin in other sports as they can be staffed and facilities are provided.
An athletic program is an important unifying factor in campus life. Student organizations, the general student body and the staff of the college are vital supporters of the college athletic program. Only through their interest will the athletic program grow and continue to provide exciting activities enjoyed on campuses today. The Athletic Department urges each student to BACK THE GRIFFONS!

The "MW" Club is for varsity intercollegiate award winners. The purpose of this group is to foster the sportsmanship, citizenship, and general wholesomeness acquired in intercollegiate athletics. The club is governed by elected officers under the supervision of the Athletic Department.

## Intramurals

A full intramural sports program is offered to college personnel. The program of activities includes individual, dual, and team sports for the enjoyment and competitive need of students and faculty members.
The intramural program encourages the development of mental, physical, emotional, and social instruction. Through the intramural program the college hopes to help the student maintain better health through exercise. In general, Missouri Western provides the opportunity for every individual, regardless of his ability, to realize the fun of participation in his favorite sport against good competition.

## Dramatics

At least two major productions, sponsored by the Department of Speech, Theatre, and Humanities are scheduled each year. Reader's theater, oral interpretation, and debate activities are also available to interested students.

## Music

Music activities include participation in the marching band, stage band, various instrumental ensembles, the concert choir, and vocal ensembles. Although these activities are sponsored by the Department of Music, any student may participate.
nity. Some of the traditional events are: The Icebreaker Dance at the beginning of the year, The Homecoming Dance, The Christmas Classic Dance and The Spring Formal. Other types of social events include rock concerts, well known speakers and movies. Additional social events are developed and sponsored by the various organizations and interest groups on the campus.

## Organizations

The following organizations are currently active on the campus. More detailed information regarding all campus organizations listed will be found in the current issue of the Student Handbook. The office of the Dean of Students will assist in answering questions in this area.

## DEPARTMENTAL CLUBS

Agriculture Club, American Marketing Association, Biology Club, Computer Science Club, Construction Engineering Technology Club, Forensics Society, Journalism Club, Le Circle

## SOCIAL CLUBS

Delta Chi Fraternity, Delta Zeta Sorority, Inter Greek Council, Lambda Chi Alpha, Panhellenic, Phi Mu, Sigma Kappa, Sigma Phi EpsiIon, Tau Kappa Epsilon.

## RELIGIOUS CLUBS

Baptist Student Union, Campus Christian House, Fellowship of Christian Athletes.

## SERVICE ORGANIZATIONS

Alpha Phi Omega, Circle K Club, Rotaract Club.

## MISCELLANEOUS

Amateur Radio Club, Brothers \& Sisters United, Happy-Healthy-Holy Club, International Students Club, Judo Club, Rodeo Club, Students International Meditation Society, Veteran's Club.


## nucul <br> ACADEMIC PROGRAMS

## 1

# DEGREE PROGRAMS 

The degree requirements in this catalog become effective in the fall semester of 1977. A candidate for a degree may use as a basis for degree requirements, the general catalog issued or any other year following the date of

## Pass-Fail

The major objective of the Pass-Fail option is to encourage a student to explore academically. The student may choose 100 and 200 level courses, normally avoided because of the regular grading system and lack of background.
A student may enroll for courses on a pass-fail basis within these guidelines:
a student may accumulate no more than six semester hours of Pass-Fail credit towards his degree,
the Pass-Fail option is only allowed for 100 and 200 level courses,
a student who passes the course (instructor indicating a letter grade of A, B, C, or D) receives credit without a grade, while the student who fails the course receives a grade of $F$. The attempted hours are not included in the GPA.
a student may take all six semester hours credit on a Pass-Fail basis in one semester if he so desires,
although course pre-requisites are not as important in the Pass-Fail option, a student who does not meet a pre-requisite should consult the chairman of the department in which the course is offered if a Pass-Fail option is considered,
a student must designate in the Office of Admissions and Records, the Pass-Fail option during the fourth week after the first day of classes,
a student's instructor will not be informed
the first registration at Missouri Western State, so long as it is not more than six years prior to the date the degree is to be conferred. The candidate must have been enrolled during the year of the catalog selected.
that the student is enrolled under the PassFail option. Current procedures will be followed by sending the mid-term grades and final grades form the instructor to the Registrar. In the Admissions and Records Office the student's grade will be converted to Pass-Fail credit,
a course completed under the letter grade in which $D$ or $F$ was earned may be repeated on a Pass-Fail basis, and
hours earned by Pass-Fail will not be used in computing grade point averages for honors.

## Baccalaureate Degree Programs

Missouri Western State College offers six baccalaureate degrees with majors in various fields. In order to earn one of these degrees, students must complete the general degree requirements as listed below and the specific major and (where required) minor requirements as listed under each department.
For general degree requirements, see the Baccalaureate Degree section in Requirements for Graduation.
The baccalaureate degrees offered are:
Bachelor of Arts
Bachelor of Science
Bachelor of Science in Business Administration
Bachelor of Science in Education
Bachelor of Science in Technology
Bachelor of Social Work
and by students who plan to seek employment in the areas of the arts, languages, social work, and government service. One of the requirements for this degree is sixteen credit hours in a foreign language. This degree is available with majors in biology, mathematics, natural science (Biology), English, history, political science, sociology, art, psychology, chemistry, theatre, and speech communications.

The Bachelor of Science degree is based on concentrated study in one or more sciences. It is usually pursued by students who plan to apply this knowledge in the scientific areas of health, research, and industry. This degree is available with majors in medical technology, computer science, psychology, biology, chemistry, mathematics, history, political sci-, ence, sociology, general agriculture, agricultural economics, agronomy, animal science, leisure management, natural science (Chemistry), and data processing.
The Bachelor of Science in Business Administration degree is designed for the student who desires a broad foundation in several areas related to business principles as applied in business, industry, or government employment. This degree is available with majors in accounting, economics, marketing, and management.
The Bachelor of Science in Education degree is designed to equip well-qualified individuals for careers in teaching or education. Upon completion of the degree requirements, the candidate will meet certificate requirements for the State of Missouri and be prepared for graduate study in education and related fields. This degree is available with majors in physical education; elementary education; and secondary education in the areas of basic business, business skills, mathematics, biology, English, speech and theatre, social science, art, music, marketing education, and chemistry.
The Bachelor of Science in Technology degree is designed for the student interested in a career as a technologist that requires skills and knowledge necessary to plan, produce, inspect, maintain, install and distribute technological products or services. This degree is available with majors in electronic engineering technology and construction engineering technology.
student must complete the general education and general college requirements for the degree.
The Bachelor of Social Work degree is designed for the student whose goal is preparation for professional social work practice. A structured program of instruction focused on necessary specialized skills and knowledge is available to students who have declared a major in social work in accordance with the requirements for admission to the social work program.

## 4 Year

## General Studies Program

## BASIC GUIDELINES

Besides the courses listed, a student may be allowed to substitute another course in the same academic area provided the department in which the course is taught can determine that the student meets the prerequisite for that course.
A student may elect a maximum of six (6) semester hours of pass-fail credit in the General Studies Program.
A student may attempt a test out in most of the General Studies credit.

## CATEGORY ONE

## 9 CREDIT HOURS

English Composition......... 6 Credit Hours ENG 104 and ENG 108, or credit by examination and ENG 112
Speech-one course from the
following.................. 3 Credit Hours
SPH 104 Oral Communication
SPH 105 Professional Speaking
SPH 106 Public Speaking
CATEGORY TWO
9 CREDIT HOURS
One course from the
following
3 Credit Hours
(Test-out strongly encouraged)
HIS 140 American History to 1865
HIS 150 American History since 1865
PSC 101 American Nat. Govt.
Two courses from the
following . ................... 6 Credit Hours
ECO 260 Principles of Economics
GEO 100 World Geography
HIS 100 Ancient and Medieval Civ.
HIS 110 Modern Civilization
PSY 101 General Psychology

MIL 200 American Military History (Both MIL courses must be taken to total 3 cr. hrs.)

## CATEGORY THREE

## OPTION 1

9 CREDIT HOURS
Literature..................... 3 Credit Hours
ENG 210 Approaches to Literature or
a Foreign Language Lit. course
Electives from the
following
6 Credit Hours
Philosophy
Foreign Language
Art
Music
Theatre
Literature
Three semesters in the following:
JOU 126 Journalism Laboratory
THR 140 Production Participation (Theatre)
SPH 151 Laboratroy Forensics (Speech)
MUS 110 Chorus
MUS 112 Vocal Ensemble
MUS 124 Symphony Orchestra
MUS 131 Symphonic Winds
MUS 333 Stage Band
MUS 135 Marching Band

## OPTION 2

## 9 CREDIT HOURS

Humanities I-HUM 203...... 3 Credit Hours
Humanities II-HUM 205 ..... 3 Credit Hours
Electives from the following .. 3 Credit Hours
Philosophy
Foreign Language
Art
Music
Theatre
Literature
Three semesters in the following:
JOU 126 Journalism Laboratory
THR 140 Production Participation (Theatre)
SPH 151 Laboratory Forensics (Speech)
MUS 110 Chorus
MUS 112 Vocal Ensemble
MUS 124 Symphony Orchestra
MUS 131 Symphonic Winds
MUS 333 Stage Band
MUS 135 Marching Band

BIO 101 Principles of

## CHE 101 Introductory

Chemistry 5 Credit Hours
PHY 101 Concepts and Principles of
Physics ................... 4 Credit Hours
ESC 204 Introduction to
Geology
4 Credit Hours
Mathematics ................. 3 Credit Hours
Any college level math course selected from those math courses listed under the Department of Mathematical Sciences and numbered 101 or higher.

## CATEGORY FIVE 4 CREDIT HOURS

PED 101 Concepts of<br>Physical Activity<br>1 Credit Hour<br>Activities (to be determined by concepts<br>course)..................... . 3 Credit Hours

## Associate Degree Programs

Missouri Western College offers the associate of science degree with majors in various fields. In order to earn this degree, students must complete the general requirements as listed below and the specific major and (where required) minor requirements as listed under each department.
For general degree requirements, see the Associate Degree section in Requirements for Graduation.
The associate of science degree is designed for the student who desires a concentrated program (usually technical in nature) in preparation for employment in business, industry, health care, or public services. The degree is available with majors in agri-business, agricultural supply technology, automotive technology, construction engineering technology, corrections, criminal justice, data processing, electronic engineering technology, executive secretary, lawyers' assistant, midmanagement, nursing, pilot training, and teacher's aide.

## 2 Year <br> General Studies Program

## Credit Hrs.

## Areal

Communications
ENG 104 Composition and Rhetoric I ... 3
One of the following courses: .......... 3

Social Sciences
One of the following courses . . . . . . . . . 3
PSC 101 American National Government HIS 140 American History to 1865
HIS 150 American History Since 1865

## Area III

Humanities
One of the following courses:
THR 113 Introduction to Theatre
HUM 203 Humanities I
HUM 205 Humanities II
HUM 210 Introduction to Philosophy
FRE 102 Elementary French I
GER 102 Elementary German I
SPA 102 Elementary Spanish I
ART 100 Introduction to Art
MUS 101 Perspectives in Music

## Area IV

Physical Education
PED 104 Concepts of Physical Activity ... 1
Physical Education Activity . . . . . . . . . . . 1
TOTAL Credit Hrs. . . . . . . . . . . 14

## 1 Year Certificate Programs

Missouri Western State College offers certificate programs with majors in various fields. In order to earn the certificate, students must
course requirements are listed under the area housing the certificate.

## Transfer Programs

Pre-professional programs in specialized fields are offered for students who plan to transfer to a university for the completion of their studies. Students choosing these programs should select their transfer institution early and should work closely with their academic adviser and counselor here.
The following areas are those which serve most students interested in transfer programs:

| Architecture | Mortuary Science |
| :--- | :--- |
| *Dentistry | Optometry |
| Engineering | Pharmacy |
| Journalism | Physical Therapy |
| Law | *Veterinary Medicine |

*Médicine
*A four-year degree is desirable before applying for acceptance into the professional school of your choice. Therefore, students with aspirations in these areas are invited to consider the Bachelor of Arts degree with a major in natural science.


# ACADEMIC POLICIES AND REGULATIONS 

## Class Attendance

Regular class attendance is considered an essential part of the student's educational experience, and a requirement for an adequate evaluation of student academic progress.
Each instructor will determine and make known to the class requirement for attendance.

## Class Auditors

A class auditor is a student registered for a course for no credit but for informational instruction. A student may audit a course for a number of reasons ranging from skill improvement through a review prior to registering for credit. Regardless of the student's purpose, it is important that the student gets a meaningful experience from instruction and makes satisfactory progress toward his purpose. It is the role of the instructor to aid the student in this determination. Therefore, audit students should expect to work closely with their instructors.
If a student enrolls in a class for credit, he may choose to change his registration to audit if he does so prior to the end of the sixth week of the semester. A change from audit to credit must be completed by the end of the first week of classes.

## Course Load

The normal load which may be carried by a student is 15 to 17 hours per semester or 7 to 9 hours in a summer term, exclusive of required physical education activities. This includes day and evening enrollment combined.
Upon recommendation of the faculty adviser and the approval of the division dean, a stu-
dent who has a 3.0 term grade point average may take additional credit the following semester.
A student cannot enroll as an auditor in excess of a normal load.
Students who find it necessary to work in order to attend college should adjust their course load to their work load. Students should use the following schedule as a guideline to determine their course load:
Hours Worked Per Week
$15-20$ hrs.
$20-30 \mathrm{hrs}$.
$30-35 \mathrm{hrs}$.
$35-40 \mathrm{hrs}$.

Course Load 12 credit hrs.
9 credit hrs. 6 credit hrs. 3 credit hrs.

## Change of Schedule

All class or schedule changes must be made by petition. In order to drop or add a course, it is necessary for a student to secure a change of study form and present the petition to the Admissions and Records Office. Change may be made during the following time periods:

## REGULAR SEMESTER

Add-During first week only.
Drop-First through the 14th week.
Courses dropped through the tenth week will not appear on the transcript as an attempted class.
Courses dropped after the tenth week and until the end of the last day of the fourteenth week will be assigned a grade of "WP" if passing or "WF" if failing.

## SUMMER SESSION (8 weeks)

Add-First three days only.
Drop-First through the seventh week.
Courses dropped through the fifth week
week will be assigned a grade of "WP" it
passing or "WF" if failing.
A "WP" grade does not count as attempted course work and will not affect the G.P.A.
A "WF" does count as a course attempted (same as " F "), but may be removed by repeating and earning a higher grade.

## Grading System

Grades used in evaluating the work of students are as follows:

## Letter Grade and Level of Performance

A superior
B good;
above average
C average
D Minimum passing;
below average
F failing
Inc. incomplete
WP withdraw passing
WF withdraw failing
Aud. audit
Cr. credit
Students who take courses that are evaluated by a pass-fail criteria will receive the number of credit hours for that course, with a grade of Cr . A failure will result in a grade of F and no credit. Hours earned by pass-fail will not be used in computing grade point averages for honors.
Grade point averages are used to determine an individual's class standing and eligibility for graduation, the Dean's and President's Honor Lists, and membership in honor societies.

## Incomplete Grades

An incomplete grade must be removed within six weeks after the close of the semester in which it was received; otherwise, the grade will be recorded as " $F$ ". Appeals for an extension of the time may be made to the department chairman and appropriate division dean.

## Honor Lists

A President's Honor List is published at the end of each semester. To be included on the President's List, a student must be carrying

## Grade Points Earned

 4 for each credit hr. 3 for each credit hr. 2 for each credit hr. 1 for each credit hr. 0 for each credit hr.each semester. Io be included on the vean's List, a student must be carrying twelve or more credit hours of work with a grade point average of 3.5 or higher exclusive of pass/fail credit or audits.

## Records of Academic Work and Transcripts

Unofficial transcripts will be stamped, "Unofficial, For Campus Use Only", and will not contain a certifying signature, date of issue, or college seal. Such transcripts are designed to be used by MWSC personnel only.
Official transcripts will be stamped with a certifying signature and date of issue, and will have the impression of the college seal. Official transcripts may be picked up in the Records Office or they will be mailed upon request. A fee of $\$ 1.00$ per copy will be charged.
All official transcripts issued to students will be stamped, "Issued to Student". Official transcripts will not be issued to or for students who are indebted to the college until such indebtedness has been paid in full.

## Scholastic Probation

A student is on scholastic probation if the cumulative grade point average drops below the following minimum requirements:
I. If the total hours attempted are less than 55 semester hours and his cumulative grade point average is more than 5 grade points below a 2.0 (C) average.
II. If the total credit hours attempted are 55 or more and his cumulative grade point average is less than a $2.0(\mathrm{C})$ average. (Refer to Table of Academic Standards.)

## Scholastic Suspension

A student places himself on scholastic suspension if his cumulative grade point average drops below the following minimum requirements:
must have completed 20 or more semester hours of course work and have been on probation the previous semester.
must be more than eighteen (18) grade points below a 2.0 (C) cumulative grade point average.
no student with a cumulative Grade Point
sion has the right to appeal his case in writing to the Academic Regulations \& Standards Committee.
A student suspended from the College who feels his case warrants special consideration may petition the Academic Regulations \& Standards Committee provided such appeal is made immediately following notification of suspended status. Circumstances beyond the student's control must be presented before reinstatement will be considered. If reinstatement is granted, it will be on a probationary basis. (Refer to Table of Academic Standards.)

## Readmission

A student placed on scholastic suspension the first time may be readmitted after the lapse of one academic semester provided that he file a written petition for return at least four weeks prior to the beginning of the session when eligible to return. Such petition should be directed to the Director of Admissions and Records. A student placed on scholastic suspension the second time after being readmitted may again be readmitted after the lapse of the academic year provided that he file a written petition for return at least eight weeks prior to beginning of the session when eligible to return. Such petition should be directed to the Academic Regulations and Standards Committee and submitted to the VicePresident for Student Affairs.
Reinstatement after any type of suspension will be granted on a probationary basis.

## Repeating Courses

A student is permitted to repeat any course. (The Pass/Fail Option cannot be used to repeat a course in which a prior letter grade of A, B, or C was earned.) Grades earned in the last attempt are used in calculating grade point average.

## Withdrawal From College

A student who finds it necessary to withdraw must notify the Admissions and Records Office in writing. The effective date of withdrawal will be on the date on which the student made the initial contact. A student will be given a "failing" grade in each subject if the formal notification of withdrawal has not been accomplished.
lished that lists the specific courses to be offered that term with the time of meeting, the building and the room number. The College reserves the right to cancel without notice any course listed in the General Catalog or in the Class Schedule for any term or to withdraw any course that does not have adequate student enrollment at the close of the registration period.

## Course Numbering System

Each course bears a number that identifies it and indicates its level, as follows:

000-099 courses that usually do not apply toward a degree.
100-199 Freshman level courses
200-298 Sophomore level courses
300-399 Junior level courses
400-498 Senior level courses
Normally, courses numbered 100-299 are considered lower division courses, and those numbered $300-499$ are considered upper division courses.

## Special Topics Courses

Departments may offer special topics courses without prior approval of the Curriculum Committee on a single offering basis in order to experiment with innovative methods or content or to take advantage of visiting staff. Course numbers 299 and 499 are reserved for assignment to special topics courses.

## Credit Units

The unit of credit is the semester hour, which represents a period of weekly study for a semester. In general, a course carrying three hours credit meets for three periods weekly for one semester. The number of credit hours is shown in parentheses after the course title.

## Semester Designation

The small Roman numerals, following the title of the course and the credit shown in parentheses, indicate the semester in which the course is normally offered.
i the course is offered in the fall semester
ii the course is offered in the spring semester
iii the course is offered in the summer session

| Hours Attempted | Probation Less than | Suspension Less than |
| :---: | :---: | :---: |
| 3 | 1 |  |
| 4 | 3 |  |
| 5 | 5 |  |
| 6 | 7 |  |
| 7 | 9 |  |
| 8 | 11 |  |
| 9 | 13 |  |
| 10 | 15 |  |
| 11 | 17 |  |
| 12 | 19 |  |
| 13 | 21 |  |
| 14 | 23 |  |
| 15 | 25 |  |
| 16 | 27 |  |
| 17 | 29 |  |
| 18 | 31 |  |
| 19 | 33 |  |
| 20 | 35 | 22 |
| 21 | 37 | 24 |
| 22 | 39 | 26 |
| 23 | 41 | 28 |
| 24 | 43 | 30 |
| 25 | 45 | 32 |
| 26. | 47 | 34 |
| 27 | 49. | 36 |
| 28 | 51 | 38 |
| 29 | 53 | 40 |
| 30 | 55 | 42 |
| 31 | 57 | 44 |
| 32 | 59 | 46 |
| 33 | 61 | 48 |
| 34 | 63 | 50 |
| 35 | 65 | 52 |
| 36 | 67 | 54 |
| 37 | 69 | 56 |
| 38 | 71 | 58 |
| 39 | 73 | 60 |
| 40 | 75 | 62 |
| 41 | 77 | 64 |
| 42 | 79 | 66 |
| 43 | 81 | 68 |
| 44 | 83 | 70 |
| 45 | 85 | 72 |
| 46 | 87 | 74 |
| 47 | 89 | 76 |
| 48 | 91 | 78 |
| 49 | 93 | 80 |
| 50 | 95 | 82 |
| 51 | 97 | 84 |
| 52 | 99 | 86 |
| 53 | 101 | 88 |
| 54 | -103 | 90 |
| 55 | 2.0 GPA | 92 |
| 56 | " | 94 |
| 57 | " | 96 |
| 58 | " | 98 |
| 59 | " | 100 |
| 60 | " | -102 |
| 61 | - " | - 104 |

# REQUIREMENTS 

## FOR GRADUATION

## Degree Evaluation

When a baccalaureate degree candidate has earned 80 semester hours or during the semester just prior to classification as a senior, he will complete a baccalaureate degree evaluation form. The student, along with the major adviser, division dean and the registrar, evaluates progress toward a degree and projects the courses needed to fulfill the requirements for this degree.
As associate degree candidate will complete the evaluation form when 25 hours have been earned or during the semester prior to classification as a sophomore.

## General Degree Requirements for Baccalaureate Programs

A student must meet the general studies requirements
A student must have a minimum of 124 credit hours (including 60 from a senior college)
A student must have a cumulative grade point average of 2.0 (C average)
A student must have a GPA of 2.0 or better in courses comprising the major in addition to meeting other institutional graduation requirements.
A student must have a minimum of 30 semester hours in the upper division courses (numbers in the 300 's and 400 's with adjustments in the two-plus-two programs)
A student must earn 30 of the last 45 semester hours at MWSC in resident course work.
A student must take the graduate record examination as a senior except in those instances where a department has selected an appropriate substitute for its major. Such a substitution must be approved by
the dean and the Vice President for Academic Affairs. Dates for the graduate exam may be secured from the office of the Director of Counseling and Testing.

## General Degree Requirements for Associate Programs

A student must meet the general studies requirements
A student must have a minimum of 62 credit hours
A student must have a cumulative grade point average of 2.0 (C average)
A student must earn the last 15 semester hours at MWSC in resident course work
A student must have a GPA of 2.0 or better in courses comprising the major in addition to meeting other institutional graduation requirements

## State Legislation Requirement

Section 10370, 10374, 10374a, 10374b, 10374c (SCS for SB 4) of the laws of Missouri, 1947 (6th General Assembly), prescribe that all candidates for a degree issued by the colleges and universities of Missouri must have completed courses of instruction in and "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the State of Missouri, and in American History, including the study of American Institutions." Students may comply with the law by successfully completing ONE of the following courses at MWSC; HIS 140, American History to 1865; or HIS 150, American History since 1865; or PSC 101, American National Government; or by completion of an equivalent course (as evaluated at MWSC) from another institution.
semester on campus or if graduating in the summer, at the time of registration for the spring semester.
A $\$ 15.00$ graduation fee must be paid during the semester in which all degree requirements will be completed.

## Multiple Degrees and Double Majors

The college will confer two baccalaureate degrees provided;
The student meets graduation requirements for each degree
The student has earned a minimum of 144 hours
The student pays an additional $\$ 5.00$ fee for each additional diploma
In the area of a double major, the departments involved will coordinate their efforts to resolve any possible problems. Courses which may count toward both majors will be allowed to do so.


## THE DIVISION OF

## CAREER PROGRAMS

The division includes the department of Nursing and programs in Automotive Technology, Criminal Justice, Corrections, Lawyers' Assistant, Secretarial Science, Small Engine Repair, Pilot Training, Agriculture Technology, Construction Engineering Technology, Electronic Engineering Technology, Mid-Management, and Data Processing.
The Division of Career Programs is organized to provide career-oriented education leading to one-year certificates and the Associate of Science Degree. Programs of study are offered which prepare individuals to enter into/or advance in careers within business, industry, public service, and health care.
The overall philosophy of the Division of Career Programs is to create a learning environment which promotes the acquisition of academic knowledges and the development of practical skills based upon the individual students' needs.
The Division of Career Programs strives to provide curricula based upon documented requirements for employment opportunities.

The objectives of the Division of Career Programs are:

To build the framework of basic knowledges underlying the chosen career program;
To provide situations of study in which skills for a career can be developed and utilized by the student;
To promote an environment conducive to learning not only the skills and knowledges, but also the proper attitudes necessary to achieve and become productive in their chosen career area;
To advise students in selecting educational experiences which will facilitate their educational development in their career field and in general education;

To assist the program graduates in securing responsible positions in their chosen careers.

The Department offers a nursing program leading to an Associate of Science degree. Throughout the curriculum; specific content and learning experiences are planned to move from an emphasis on the well person and the concept of health and the maintenance of homeostasis to the development and utilization of nursing concepts related to illness.

These objectives are believed to be essential learning needs for students in the Nursing program:
To understand the basic biophysical and psychosocial factors that influence an individual's behavior and his ability to maintain homeostasis,
To understand the body of knowledge that is basis for direct nursing care to patients,
To use the problem-solving approach as a basis for action in giving nursing care,
To develop the ability to give nursing care to patients based on immediate and longrange goals and,
To know the responsibilities and relationships of the nurse with other members of the health team.

Students in the associate degree nursing pro-

NUR 150 Nursing 1 (Fundamentals of Nursing) (6) i
Fundamentals is a coordinated study of concepts, skills, and attitudes basic to patient care, safety, and comfort; emphasizing orientation of the student to the individual, his health, and to the community health agencies. Guided laboratory experience in an extended care unit and a general hospital. Opportunity to observe health care and community services in a variety of settings. 4 hours lecture, 6 hours lab.
Prerequisite: Approval of department chairman.

NUR 151 Nursing II (Maternal and Child Health) (8) ii
A family centered approach to Maternal and Child Heaith, building upon the concept of wellness and homeostasis introduced in fundamentals course. Concerned with maternity cycle and the family unit. Emphasis is placed upon the normal health continuity from infancy to adulthood. Guided laboratory experience in a general hospital and selected clinic, out-patient and day care experience. 4 hours lecture, 12 hours lab.
Prerequisite: Nursing 150.
gram must make a letter grade of C or better in nursing courses to meet requirements as determined by the State Board of Nursing Missouri.
Upon completion of the program the graduate is eligible to write the State Board Test Pool Examination to qualify for licensure as a registered professional nurse (R.N.). This program is accredited by the Missouri State Board of Nursing.

## ADMISSION TO THE NURSING PROGRAM

A selection committee reviews all applicants and determines those students who will be admitted to each class. In order to be eligible for possible selection for the fall class, an individual must contact the department chairman for an application form before February 1. At this time the other requirements for admission will be explained.
The laboratory experience in the nursing program requires special uniforms. The cost for

An Associate of Science degree with a major in Nursing requires the completion of the following specific courses: NUR 150, 151, 250, 251; BIO 250 and 251; PSY 101; SOC 110; CHE 104.

NUR 250 Nursing III (Physical and Mental Illness I) (10) i The first course in Physical and Mental illness is designed for utilization of a conceptual and developmental approach in meeting nursing care and body maintenance needs. Focus is on the physical and psychological effects of illness. Guided laboratory experience in a general hospital, psychiatric setting, and selected observation experiences. 5 hours lecture, 15 hours lab.
Prerequisite: Nursing 151.
NUR 251 Nursing IV (Physical and Mental Illness II) (10) ii The course Physical and Mental illness is a continuation of Nursing 250 and provides the student with opportunities to give total patient care to individuals and groups of adults and children with identical and similar ilinesses. Guided laboratory experience in a general hospital and selected health agencies. 5 hours lecture, 15 hours lab. Prerequisite: Nursing 250.

Fall Semester
NUR 150 Nursing I . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 6
BIO 250 Anatomy and Physiology .............................. 5
CHE 104 Fundamentals of Chemistry .................... 4
ENG 104 English Composition . . . . . . . . . . . . . . . . . . . . . . 3

## Spring Semester

NUR 151 Nursing II . ........................................ . . . . 8
BIO 251 Public Health Microbiology . . . . . . . . . . . . . . . . 4
PED 101 Concepts of Physical Activity .................... . . . . 1
SOC 110 General Sociology . . . . . . . . . . . . . . . . . . . . . . . . . 3

P.E. Activity . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1

## Spring Semester

NUR 251 Nursing IV . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 10
Introductory Humanities . . . . . . . . . . . . . . . . . . . 3
Speech . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3


The Automotive Technology program is designed to prepare individuals to become automotive technicians and automobile service managers. Career opportunities include positions with:

Automobile and truck dealers; Service Stations; Automotive Service Centers; and

Automotive Service Departments of various sized companies.
An Associate of Science degree with a major in Automotive Technology requires the completion of the following specific courses: AUT 111, 120, 150, 180, 199, 200, 250, 255, 270; EGT 103 and 104; MAT 105; MGT 110; and SPH 105.

AUT 199 Autonotive Technology Practicum (3-5) ii, iii Designed to provide the student with the opportunity to apply formal training to actual work situations. The student will work in a job related to his area of interest and will be evaluated by the participating employer for course credit.
Prerequisite: All lower numbered automotive classes.
AUT 200 Principles of Diesel Power (5) i
Design principles and maintenance of twostroke cycle and four-stroke cycle, diesel engines, and their application to modern transportation. Emphasis on pump testing and injector testing and reconditioning. Three hours lecture and four hours lab.
Prerequisite: AUT 111 and AUT 150.
AUY 250 Service Management Seminar (3) i
A seminar designed to acquaint students with the operation of various types of automotive service businesses by utilizing guest speakers from the automotive industry in conjunction with related classroom material. Guest speakers include service advisors, service foremen or managers, factory service representatives, parts store managers, small business administration, bankers, insurance companies, specialty shop managers, and representatives from oil companies. Three hours lecture.

AUT 255 Service Techniques Laboratory (4) ii
Practical garage experience in all phases of automotive servicing with related technical content devoted to diagnosis, trouble shooting, and shop management. Eight hours lab.
Prerequisite: All lower numbered automotive classes.

AUT 270 Automotive Air Conditioning and Accessories (4) ii

A course to familiarize the student with automotive air conditioning units and power accessories. The emphasis is placed on service and diagnosing of these units on and off the vehicle. Two hours lecture and four hours lab. Prerequisite: AUT 150.

Fall Semester
AUT 111 Auto. Eng. Theo. \& Analysis ..... 5
AUT 120 Auto. Suspension \& Chassis ..... 4
EGT 103 Electrical Systems ..... 3
EGT 104 Engineering Graphics ..... 3
Concepts of Physical Activity ..... 1
16
Spring Semester
AUT 150 Auto. Electrical \& Fuel Systems ..... 5
AUT 180 Power Transmission ..... 4
MAT 105 College Algebra ..... 3
ENG 104 Composition \& Rhetoric I ..... 3

The Small Engine Repair Program is designed to prepare individuals to enter the Small Engine Repair field as service technicians or service managers. Career opportunites include positions with:

Lawn and Garden Service Centers, Farm Implement Dealers, and retail outlet stores

## Small Engine Repair

SER 100 Basic Small Engines (3) i
A beginning course in the basic operating principles of two and four cycle small gas engines with an introduction to the mechanics of diesel and rotary engines. Disassembly, inspection, measurements, adjustments, and assembly procedures are discussed and demonstrated in the lecture class with practical application during lab session. 2 hours lecture, 3 hours lab.
SER 110 Electrical and Charging Systems (3) i
A course covering the basics of electrical theory and the principles of operation of such units as magnetos, starters, generators, alternators, and charging system regulators are covered in the classroom. Lab sessions will include demonstration of testing and servicing procedures of these units with up-to-date test equipment by the instructor followed by student participation. 2 hours lecture, 3 hours lab.

SER 120 Fuel and Governor Control Systems (3) ii Principles of fuel system operation, various types of carburetors used on small engines and different types of throttle and governor controls are covered. The calibrating and maintaining of speed and governor control assemblies are covered in detail. Lecture sessions will be reinforced with pertinent lab activities. 2 hours lecture, 3 hours lab.
AUT 200Principles of Diesel Power5
AUT 250 Service Management Seminar ..... 3
MGT 110 Business Organization ..... 3
SPH 105 Business \& Professional Speech ..... 3
PED P.E. Activity ..... 1

## Spring Semester

AUT 255 Service Techniques Laboratory ..... 4
AUT 270 Auto. Air Cond. \& Accessories ..... 4
PSC 101 American Government or 140 American History, or 150 American History ..... 3
Introductory Humanities ..... 3

# SMALL ENGINE REPAIR 

for motorcycles, outboard motors, snowmobiles and other recreation vehicles.
A certificate with a major in Small Engine Repair requires the completion of the following specific courses: SER 100, 110, 120, 130, 190; MGT 110 and 116; PSY 101; AUT 250 and EGT 250.

## SER 130 Small Engine Power Transmission (3) ii

Power transmission and control units for recreational and lawn and garden equipment such as lawn mowers, motorcycles, and tillers are covered in the lecture series. Disassembly, assembly and adjustments of gear drive transmissions, belt drivers, hydraulic transmissions, trans-axle drives, power take-off units, power lifts and torque converters will be demonstrated by the instructor with organized student activity. 2 hours lecture, 3 hours lab.

SER 190 Small Engine Repair Practicum (5) iii
Designed to provide the student with the opportunity to apply formal training to actual work situations. The student will work in a job related to his area of interest and will be evaluated by the participating employer for course credit.
Prerequisite: Consent of instructor.

SER 100

The Criminal Justice program seeks to prepare individuals to enter into and/or advance in the criminal justice system in any of the following areas:

State, County, and Local Law Enforcement Agencies; Federal Investigative Agencies;

LAW 100 Introduction to Criminal Justice (3) i, ii, iii A survey of the philosophical and historical background of criminal justice. Reviews the principles underlying social organization control devices with an emphasis upon such legal systems as the criminal courts, corrections, and law enforcement. Designed to provide general knowledge about the concept and causes of crime, the varying goals and objectives of the criminal justice system with particular regard to an assessment of the specific role performance of various members of the criminal justice system.

LAW 110 Juvenile Delinquency (3) ii
The study of the delinquent juvenile as an individual and the impact on society. Investigates delinquency, causation, the role of the law enforcement officer, the juvenile officer, the juvenile court, and juvenile corrections.
LAW 120 Patrol Operations (3) i, ii, iii
A survey of the responsibilities and duties of the uniformed patrol. Special emphasis is placed upon patrol procedures, the mechanics of arrest, search and seizure, the interpretation and evaluation of information received on patrol, and the importance of accurate report writing.

LAW 140 Traffic Control and Accident Investigation (3) $i$, ii, iii
An introduction to traffic control and accident investigation in modern cities. Reviews the principles of organizing and administering police units for traffic enforcement, accident prevention and safety education. Presents the basic techniques of accident investigation, analysis, and interpretation.

LAW 150 Criminal Justice Report Writing (3) ii
An interdisciplinary approach toward the attainment of precise report writing within the field of criminal justice. Emphasis is placed upon the acquisition of criminal justice terminology and familiarity with spelling and definitions in criminal justice. Students will be required to demonstrate various report formats and be capable of writing precise and grammatically correct reports.
Prerequisite: ENG 104 or consent of instructor.

Corrections; Private Investigative Agencies, and Industrial Security.
An Associate of Science Degree with a major in Criminal Justice requires the completion of the following specific courses: LAW 100, $120,140,160,180,200,220,260,280,290 ;$ SOC 110; PSC 101; and PSY 101.

LAW 160 Principles of Investigation (3) $\mathbf{i}$, $\mathbf{i}$, (iii odd years) An introductory course on modern investigative methodology. Particular attention is given to the importance of information, interrogation, and instrumentation in the solution and preparation of criminal cases for trial.
Prerequisite: LAW 100.
LAW 180 Public Service and Community Relations (3) $i$, (iii odd years)
Presents a survey of the public service agency and its role in the community. Emphasis is placed upon the importance of the individual and his relationship to the public he serves. Outlines a general program of community relations to be undertaken by public service agencies.
Prerequisite: LAW 100.
LAW 200 Penology and Corrections (3) ii
Presents the origins and theories of punishment and the prison system. Introduces the principles and programs of institutional correction and special problems in administration. Reviews the modern recommendations for improvement of the system.
Prerequisite: Six hours in the field of Criminal Justice.

LAW 220 Police Administration (3) i, (iii even years)
An introductory survey of current police administrative methodology. Reviews the organization of the police service, analysis of police functions, principles of police management, operational services within police agencies, and the role of the police administrator in personnel assignment and evaluation.
Prerequisite: Six (6) hours in the field of Criminal Justice.

## LAW 260 Criminal Law (3) $i$, (iii even years)

Explores the origin, development, and classification of substantive criminal law. Reviews the rules of evidence of particular importance at the operational level of law enforcement and criminal procedures in arrest, force, search and seizure.
Prerequisite: Nine (9) hours in the field of Criminal Justice.

Prerequisite: Fifteen (15) hours in the field of Criminal Justice.

A course designed to provide students with additional opportunities to research, discuss, and explore special areas of interest within the criminal justice system.
Prerequisite: Consent of Instructor.

# SAMPLE PROGRAM ASSOCIATE OF SCIENCE DEGREE CRIMINAL JUSTICE 

## Freshman Year <br> Fall Semester

LAW 100 Introduction to Criminal Justice . . . . . . . . . . . . . . 3
LAW 120 Patrol Operations . . . . . . . . . . . . . . . . . . . . . . . . . . 3
LAW 140 Traffic Control \& Acc. Investigation .......... 3
SOC 110 General Sociology . . . . . . . . . . . . . . . . . . . . . . . . . .
SPH
Speech

- 3


## Spring Semester

LAW 160 Principles of Investigation
LAW 200 Penology and Corrections........................ . . 3
ENG 104 Composition \& Rhetoric I . . . . . . . . . . . . . . . . . . 3
PSC 101 American National Government .............. 3
Introductory Humanities Course .............. $\frac{3}{}$

## Sophomore Year Fall Semester

LAW 180 Public Service \& Community Relations....... 3
LAW 220 Police Administration. ........................... 3
LAW 260 Criminal Law ........................................ 3
PSY 101 General Psychology . ............................. 3
PED 101 Concepts of Physical Activity .................. 1
Supporting Elective.............................. 3

## Spring Semester

LAW 280 Criminalistics ................................... 3
LAW 290 Practicum in Criminal Justice 3
Supporting Electives . . . . . . . . . . . . . . . . . . . . . . . . 9
Physical Activity . ................................ 1 16


The Corrections program is designed to prepare persons to enter into or advance in careers related to the control, diagnosis, and treatment of criminal offenders in any of the following areas:

Federal, State, County or Local Correctional Facilities;

## Corrections

LAW 205 Institutional Procedures, Jails, and Detention (3) ii

The function of the custodial staff is examined with special emphasis on the correctional officer. Institutional procedures are reviewed, including reception, classification, program assignment, and release procedures. The jail programs that are or could be implemented are reviewed. Juvenile detention facilities and practices are examined.

LAW 210 Legal Rights of the Confined (3) i An overview of the legal rights of inmates, both pre and post conviction. This course undertakes an indepth analysis of administrative restrictions relating to inmates rights and reviews legal and practical remedies to insure the granting of these rights. Discovery of the relationship between the granting of their (inmates) legal rights and probable rehabilitation. Prerequisite: LAW 100.

LAW 215 Essentials of Interviewing (3) i
Fundamental concepts of verbal communication are examined with a view toward the application of these concepts to situations involving the interviewing of inmates by correctional workers, who view themselves as rehabilitative agents in the lives of said inmates. Students learn techniques for motivating the inmate to verbalize and are instructed in the formulation of interview question objectives. There is maximum emphasis placed upon learning by doing and this course objective will be achieved by the utilization of audiovisual aids and volunteer interviewees who will role play difficult interview situations. Counseling techniques will also be explained and relied upon during the progress of the course.
Prerequisite: Introductory Speech.

Federal, State, County Probation and Parole Departments.

An Associate of Science Degree with a major in Corrections requires the completion of the following specific courses: LAW 100, 110, 160, 200, 205, 210, 215, 230, 250, 270, 290; SPH 104; SOC 110; PSC 101; and PSY 101.

LAW 230 Contemporary Practices in Corrections (3) i
Modern trends in corrections, such as the com-munity-based programs in work release, halfway houses, contract program planning, as well as the therapeutic community and treatment team concept in institutions, are described and evaluated.
Prerequisite: LAW 100.
LAW 250 Prison Organization and Operation (3) ii
The organization of various institutions are studied. Treatment, custody, and support activities are examined as entities and in relation to each other. Students construct an organization chart for a model prison and functional charts for the various departments within the prison. Prerequisite: LAW 200.

LAW 270 Probation and Parole (3) ii
Probation and parole are viewed as alternatives to confinement and are examined with respect to their effectiveness in curbing future criminal behavior on the part of probationers and/or parolees.
Prerequisite: LAW 200.
LAW 100 Introduction to Criminal Justice ..... 3
LAW 110 Juvenile Delinquency ..... 3
SPH 104 Oral Communication
PSY 101 General Psychology ..... 3
SOC 110 General Sociology. ..... 3
PED 101 Concepts of Physical Activity ..... 1
Spring Semester
LAW 160 Principles of Investigation ..... 3
LAW 200 Penology and Corrections ..... 3
LAW 205 Institutional Procedures, Jails and Detention ..... 3
ENG 104 Composition and Rhetoric I ..... 3
SOC 230 Social Institutions ..... 3
PED Physical Education Activity ..... 13

## Spring Semester

LAW 250 Prison Organization and Operations ..... 3
LAW 270 Probation and Parole ..... 3
LAW 290 Practicum in Criminal Justice ..... 3
Supporting Electives15
program in

## SECRETARIAL CERTIFICATE:

Option I-MGT 110 and 116; ENG 104; SEC 141, 144, 145, 230, 240, and 351; One of the following: SEC 220; PSY 101; SPH 104 or 105; CSC 182; ACC 230.
Option II-MGT 110 and 116; ENG 104; SEC 141, 145, 230, 240, 340, and 351; One of the following: SEC 220; PSY 101; SPH 104 or 105; CSC 182; ACC 230.

## CLERICAL CERTIFICATE:

MGT 110 and 116; ENG 104; ACC 230; SEC 141, 230, 240, and 351; Two of the following: SEC 220; PSY 101; SPH 104 or 105; CSC 182; ACC 231; ECO 260.

Emphasis on developing speed and accuracy, typing business letters, manuscripts, and business forms. Minimum net speed of 25 words per minute is needed to take this course. Three hours lecture and two hours lab.
Prerequisite: SEC 140 or equivalent.
SEC 144 Elementary Shorthand (3) i, ii
Beginning course in which principles of Gregg Shorthand, Diamond Jubilee Series, are taught. 3 hours lecture, 2 hours lab.
Prerequisite: SEC 140 or equivalent and ENG 100 or equivalent.
SEC 145 Intermediate Shorthand (3) i, ii, iii
A continuation of Elementary Shorthand 144 designed to review the principles of Gregg Shorthand, Diamond Jubilee Series, with emphasis on development of dictation and transcription skills. Minimum dictation speed of 60 words per minute on new material is needed to take this course. Intermediate Typewriting 141 should precede or parallel this course. 3 hours lecture, 2 hours lab.
Prerequisite: SEC 144 with "C" grade or better or one year of high school shorthand with " C " grade or better.

SEC 220 Office Occupations Practicum (2 or 3)* i, ii, iii
A course designed to provide on-the-job office experience to students working in an approved local business for a minimum of 10 hours a week. Student may take it for credit only 1 semester.
*2 hours credit if employed 10-14 hours a week ( $20-28$ for summer session), 3 hours credit if employed 15 or more hours a week ( 30 or more for summer session).
Prerequisite: SEC 141 and written consent of the instructor.

SEC 230 Office Machines (3) i, ii
An introduction to electronic calculators, transcribers, duplicating equipment, and special typewriters. 6 hours lecture, 4 hours lab. Meets first half of semester. Prerequisite: SEC 141.
SEC 240 Office Typing Problems (3) i, ii, iii
Simulated office typing problems in specialized offices, such as banking, insurance, manufacturing, medical, and legal. Emphasis is on the production of mailable copy. Minimum net speed of 40 words per minute is needed to take this course. Three hours lecture and two hours lab. Prerequisite: SEC 141 with "C" grade or better.
SEC 340 Advanced Shorthand (3) i, ii, iii
A continuation of Intermediate Shorthand 145 with further development of dictation and transcription skills. Minimum dictation speed of 80 words per minute is needed to take this course. Office Typing Problems 240 must precede or parallel this course. Three hours lecture and two hours lab.
Prerequisite: SEC 145 with " $\mathrm{C}^{\prime}$ grade or better.
SEC 341 Secretarial Dictation and Transcription (3) i, ii, iii
A continuation of Advanced Shorthand 340 with emphasis on producing mailable transcripts. Minimum dictation speed of 100 words per minute is needed to take this course. 3 hours lecture and 2 hours lab.
Prerequisite: SEC 340 with " $\mathrm{C}^{\prime \prime}$ grade or better.
141.

SEC 351
Model Office I (3) i, ii
Simulated model office experience designed to integrate a wide range of knowledges and skills in modern office practice. Office Typing Problems 240 must precede or parallel this course. 6 hours lecture, 4 hours lab. Meets second half of semester.
Prerequisite: SEC 230.
SEC 352
Model Office II (3) i, ii
Continuation of Model Office I, with students being promoted to managerial positions. SEC 350 Office Communications must precede or parallel this course. 6 hours lecture, 4 hours lab. Meets second half of semester.
Prerequisite: SEC 351.

## SAMPLE PROGRAM

## ASSOCIATE OF SCIENCE DEGREE EXECUTIVE SECRETARY

## Freshman Year <br> Fall Semester

MTG 110 Business Organization . ........................... 3
ENG 104 English . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
MGT 116 Business Mathematics or
210 Business Stetics . . . . . . . . . . . . . . . . . . . . . . . 3
SEC 141 Intermediate Typewriting 3
SEC 144 Elementary Shorthand or Selected Elective .... 3

## Spring Semester

SEC 240 Office Typing Problems . . . . . . . . . . . . . . . . . . . . 3
SEC 145 Intermediate Shorthand ......................... 3
ACC 230 Principles of Financial Accounting ............ 3
PSC 101 Amer. Gov't or HIS 140 Amer. Hist. or HIS 150
SPH
PED 101 P.E. Concepts . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1
Speech . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 16

## Sophomore Year <br> Fall Semester

SEC 230
Office Machines . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Advanced Shorthand . . . . . . . . . . . . . . . . . . . . . . 3
Model Office I . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Intoduction to Data Processing . . . . . . . . . . . . 3
Introductory Humanities Course . . . . . . . . . . . . 3
$\begin{array}{ll}\text { SEC } 351 & \text { Model Office I . . . . . . . . . . . . . . } \\ \text { CSC } 182 & \text { Intoduction to Data Processing }\end{array}$ 3

PED 101 P.E, Activity 1

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## Spring Semester

SEC 341 Secretarial Dictation \& Transcription . . . . . . . . 3
SEC 350 Oral Communications ........................... 3
SEC 352 Model Office II .............................................. . . . . . 3
ECO 260 Principles of Economics I . . . . . . . . . . . . . . . . . . . . . . . . 3
Selected elective . . . . . . . . . . . . . . . . . . . . . . . . . 3
 Business Mathematics 3
SEC 141 Intermediate Typewriting . . . . . . . . . . . . . . . . . . . 3
SEC 145 Intermediate Shorthand3

## Spring Semester

SEC 230
SEC 240 Office Typing Problems3
3

SEC 340 Advanced Shorthand
SEC 351 Model Office I3

Select one of the following:
SEC 220 Office Occupations Practicum
PSY 101 General Psychology
SPH 104 Oral Communications
or
SPH 105 Business and Professional Speech
CSC 182 Introduction to Data Processing.
ACC 230 Principles of Financial Accounting
ENG 104 English ..... 3
MGT 116 Business Mathematics ..... 3
Intermediate Typewriting
$\begin{array}{r}3 \\ \hline\end{array}$
ACC 230 Principles of Financial Accounting
SEC 230 Office Machines ..... 3
SEC 240 Office Typing Problems ..... 3
SEC 351 Model Office I ..... 3
Select two of the following ..... 6
SEC 220 Office Occupations Practicum
PSY 101 General PsychologySPH 104 Oral CommunicationsSPH 105
ECO 260Business and Professional SpeechPrinciples of Economics I ............
Principles of Managerial AccountingIntroduction to Data Processing
the following specific courses: LAT 100, 110, 130, 160, 190, 210, 240, 260, 270, 290; ENG 108; LAW 215; SPH 104; ACC 230; PSC 101; MGT 310 and 311; CSC 182; and PSY 101.
A Certificate with a major in Lawyers' Assistant requires the completion of the following specific courses: LAT 100, 110, 130, 160, 290; ENG 104; ACC 230, and PSY 101, as well as directed electives.

LAT 130 Real Property Law (3) ii
A study of the law of real property with emphasis upon the common types of real estate transactions and conveyances, research of and practice in the drafting of contracts, deeds, leases, deeds of trust, forms of ownership, rights of creditors, and consequences of ownership.

LAT 160 Evidence (3) ii
Order of proof, form of question, opinions, cross-examination, impeachment, objections, competency, privileges, relevancy, demonstrative evidence, best evidence rule, parole evidence rule, hearsay, burdens of proof and persuasion, judicial notice.
be placed upon will drafting, incompetents estates, and probate proceedings and procedare.

Tort and Insurance Law (3) i
The study of the principles of the law of torts and insurance. Emphasis will be placed upon the practical aspects of tort and insurance claim investigation, research, and preparation of pleadings.

Business Organization and Regulation (3) ii
The study of the laws related to the formation and regulation of business entities. Emphasis is placed upon practical research and projects related to legal services provided to developing and on-going business organizations.

## SAMPLE PROGRAM <br> ASSOCIATE OF SCIENCE DEGREE LAWYERS' ASSISTANT

## Freshman Year

## Fall Semester

LAT 100 Introduction to Legal Services
LAT 110 Legal Bibliography and Brief Writing3
ENG 104 Composition and Rhetoric I3
Principles of Financial Accounting ..... 3
MET 310 Business Law I. ..... 3
PED 101 Concepts of Physical Activity ..... 1

## Spring Semester

LAT 130 Real Property Law3
LAT 160 Evidence ..... 3
SPH 104 Oral Communications ..... 3
MET 311 Business Law II ..... 3
CSC 182 Introduction to Data Processing. ..... 3
PED Physical Education Activity ..... 116
Summer Session
LAT 290 Lawyers' Assistant Practicum ..... 5
Sophomore Year
Fall Semester
LAT 190 Estate and Trust Administration ..... 3
LAT 210 Tort and Insurance Law ..... 3
LAW 215 Essentials of Interviewing. ..... 3
ENG 108 Composition and Rhetoric II3
PC 101 American National Government ..... 3

## Spring Semester

LAT 240 Business Organization and Regulation . . . . . . . . 3
LAT 260 Taxation . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
LAT 270 Domestic Relations . . . . . . . . . . . . . . . . . . . . . . . . . 3
PSY 101 General Psychology . ............................ 3
Required Humanities Course . . . . . . . . . . . . . . . 3

LAT 270 Domestic Relations (3) ii
A study of the legal aspects of family relationships. Emphasis will be placed upon the laws concerning marriage, divorce, separation, child support, adoption, and guardianship.

LAT 290 Lawyers' Assistant Practicum (5) iii
Designed to provide the student with the opportunity to apply formal education in actual work situations. The student will work in a position related to his area of interest and will be evaluated by the participating professional for course credit.
Prerequisite: Consent of instructor.

## SAMPLE PROGRAM CERTIFICATE LAWYERS' ASSISTANT

## Freshman Year

## Fall Semester

LAT 100 Introduction to Legal Services . . . . . . . . . . . . . . 3
LAT 110 Legal Bibliography and Brief Writing ........ . . . 3
ENG 104 Composition and Rhetoric I . . . . . . . . . . . . . . . . 3
ACC 230 Principles of Financial Accounting ........... 3
Select one of the following:
LAW 215 Essentials of Interviewing
LAT 190 Estate and Trust Administration
LAT 210 Tort and Insurance Law
MET 310 Business Law I.

## Spring Semester

LAT 130 Real Property Law . . . . . . . . . . . . . . . . . . . . . . . . . . 3
LAT 160 Evidence . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
PSY 101 General Psychology . . . . . . . . . . . . . . . . . . . . . . . 3
Select two of the following:
LAT 240 Business Organization and Regulation
LAT 260 Taxation
LAT 270 Domestic Relations
MGT 310 Business Law I or
MGT 311 Business Law II .
6

## Summer Session

LAT 290 Lawyers' Assistant Practicum

The Pilot Training program is designed to prepare individuals to become professional pilots. Employment opportunities for pilots include:

Air Taxi, Business or Corporate Flying, Supply Company Pilot, Pilot Instruction, Police Patrol Flying, and a host of others.

## PTR 120 Private Flight (3) i, ii

Flight maneuvers leading to private pilot, single engine, Land Certificate. 2 hours lecture, 4 hours lab.

PTR 123 Private Ground (3) i, ii
Ground training leading to a private pilot, single engine, Land Certificate. To be taken concurrently with PTR 120.

PTR 126 Commercial Flight I (3) i, ii
Continuation of flight training leading to qualification for commercial license. 2 hours lecture, 4 hours lab.
Prerequisite: PTR 120.
PTR 129 Commercial Ground (3) i, ii
Advanced weights and balances, meteorology, flight computers, navigation, and radio. Federal Aviation regulations, and flight maneuvers. To be taken concurrently with PTR 126.
Prerequisite: PTR 123.

An Associate of Science degree with a major in Pilot Training requires the completion of the following specific courses: PTR 120, 123, $126,129,240,243,246$, and 249.

There are costs for Pilot Training courses in addition to the regular college fees. Contact the advisor for further information.

## PTR 240 Commercial Flight II (3) i, ii

Continuation of Commercial Flight I. May be taken at the convenience of the student and the flight school. 2 hours lecture, and 4 hours lab.

PTR 243 Instrument Flight (3) $\mathbf{i}$, ii
Flight maneuvers and planning by sole reference to flight instruments. 2 hours lecture, 4 hours lab.
Prerequisite: PTR 126.
PTR 246 Instrument Ground (3) i, ii
Aircraft instruments and systems; instrument flight rules, flight charts, shorthand clearances, visual omni-range flight procedure, instrument

## SAMPLE PROGRAM

## ASSOCIATE OF SCIENCE DEGREE PILOT TRAINING

Freshman Year
Fall Semester
ENG 104 English........................................... 3
PSC 101 Amer. Gov't. or HIS 140 Amer. Hist. or HIS 150 Amer. Hist. 3
PTR 120 Private Flight. ........................................ . . 3
PTR 123 Private Ground ..................................... 3
PED 101 Concepts of Physical Activity .................. 1
Elective ............................................ 3
16

## Spring Semester

SPH Speech........................................... 3
PTR 126 Commercial Flight I .............................. 3
PTR 129 Commercial Ground ............................ 3
MAT 105 College Algebra. ................................. 3
PED P.E. Activity ......................................... . . 1
Electives.......................................... 3
landing systems, and automatic direction finder approaches. To be taken concurrently with PTR 243.

Prerequisite: PTR 129.
PTR 249 Instructor Flight (3) i, ii
Flight teaching procedure. 2 hours lecture, 4 hours lab. To be taken concurrently with PTR 243 and PTR 246.
Prerequisite: PTR 240.

Fall Semester
Introductory Humanities Course . . . . . . . . . . . . 3
PTR 240 Commercial Flight II . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3

Electives. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 9
1535

## Spring Semeter

PTR 243 Instrument Flight . . . . . . . . . . . . . . . . . . . . . . . . . . . 3

PTR 246 Instrument Ground . . . . . . . . . . . . . . . . . . . . . . . . . . 3

PTR 249 Instructor Flight . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3

Electives................... . . . . . . . . . . . . . . . . . . 6
Spring Semeter ..... 15

Sophomore Year
Sophomore eear

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## AGRICULTURAL SUPPLY TECHNOLOGY

(for details, see Department of Agriculture)
An Associate of Science degree with a major in Agricultural Supply Technology requires the completion of the following specific courses: AGR 111, 120, 130, 150, 200, 204, 222, $224,236,290,320,324,326,330$, and 420.

## AGRI-BUSINESS TECHNOLOGY

(for details, see Department of Agriculture)
An Associate of Science degree with a major in Agri-Business Technology requires the completion of the following specific courses: AGR 111, 120, 130, 150, 200, 204, 222, 236, 290, 324, 326, 402; MGT 110, 312; ACC 320; and MKT 374.

## CONSTRUCTION ENGINEERING TECHNOLOGY

(for details, see Department of Engineering Technology)
An Associate of Science degree with a major in Construction Engineering Technology requires the completion of the following speciffic courses: EGT 100, 104, 154, 202, 204, 250, and 258; CET 150, 206, 256, 304, and 354; MAT 105, 106 and 204; and PHY 110.

## ELECTRONIC ENGINEERING TECHNOLOGY

(for details, see Department of Engineering Technology)
An Associate of Science degree with a major in Electronic Engineering Technology requires the completion of the following specific courses: EGT 100, 103, 104, and 240; EET 210, 220, 230, 270, 300, and 340; MAT 105, 106 and 204; and PHY 110.

## MID-MANAGEMENT-ACCOUNTING

(for details, see the Department of Business \& Economics)
An Associate of Science degree with a major in Mid-Management-Accounting requires the completion of the following specific courses: ACC 230, 231, 330, 331, 333; ECO 260, 261; MGT 110, 116 or 210, and 312.

## MID-MANAGEMENT-BANKING AND FINANCE

(for details, see the Department of Business \& Economics)
An Associate of Science degree with a major in Mid-Management-Banking \& Finance requires the completion of the following specific courses: ACC 230, 231; ECO 260, 261, 363; MGT 110, 116 or $210,310,312$, and 315; BAN 253, and two of the following BAN 250, 251, 252, or AGR 206.

## MID-MANAGEMENT-DATA PROCESSING

(for details, see the Department of Business \& Economics)
An Associate of Science degree with a major in Mid-Management-Data Processing requires the completion of the following specific courses: ACC 230, 231; ECO 260, 261; MGT 110, 116 or 210, 310, 312; CSC $182,240,245$, and 345.

## MID-MANAGEMENT-RETAILING

(for details, see the Department of Business \& Economics)
An Associate of Science degree with a major in Mid-Management-Retailing requires the completion of the following specific courses: ACC 230, 231; ECO 260, 261; MGT 110, 116 or 120, 312; MKT 370, 371, 374, and 376.

## DATA PROCESSING

(for details, see the Department of Mathemattical Sciences)
An Associate of Science degree with a major in Data Processing requires the completion of the following specific courses: CSC 182, 188, 240, 245, 284, 286; MAT 201 or MGT 210; plus an approved related area consisting of 15 credit hours.


# THE DIVISION OF EDUCATION AND APPLIED SCIENCES 

The division includes the departments of Agricultures, Business and Economics, Elementary and Special Education, Secondary Education, Engineering Technology, HealthPhysical Education and Recreation, Military Science, and Psychology.
The division contributes to all facets of education within the College. Required and elective courses assist students in fulfillment of general educational needs; Comprehensive offerings lead to the completion of degree requirements: and the varied electives lead to program enrichment.
Students are provided the opportunity to pursue a wide spectrum of programs designed to culminate in competent graduates who also possess the general and human skills necessary to succeed in an everchanging society.
The division is dedicated to the belief that the College is for students and every effort is made to make both the staff and facilities available to help the student gain maximum benefits and enjoyment from his College pro-
gram. The objectives of the division are to provide students an opportunity for;
Professional Development, in which the student is prepared to enter the field of his choice, or concentration, with the knowledge and skills necessary for personal success and satisfaction in either the market place or in pursuit of additional education;
Personal Development, in which a variety of courses are available through which a student may broaden and enrich his understanding of himself, man and society;
Career Exploration, which through a blend of on-campus theory courses and off-campus experiences, the student can explore the field of his choice early in his or her academic program.
The semester course designations may be adjusted according to need, enrollment, demand of students, and availability of instructional resources.

Agriculture has changed tremendously in recent years and is continuing to do so. It is no longer simply "farming". Today's agricultural industry includes three broad areas: 1) research and education, 2) production of food and fiber, and 3) business and industry which provides goods and services in the processing and distribution of farm products. Under-
graduate curricular offerings in the Department of Agriculture are designed to provide students with a broad general education and still maintain the flexibility of allowing students sufficient opportunity to select specific general and professional electives to satisfy their special needs and desire.
sible without taking many of the general education courses that are required for the B.S. degree.
A minor consists of 20 semester hours in a selected discipline which would include the following courses:
Agricultural Economics 150, 200, 305
Agronomy 120, 222, 320
Animal Science 130, 236
BACHELOR OF SCIENCE DEGREE

## Core Curriculum

AGR 111 Orientation 1
AGN 120 Plant Science 4
AGN 222 Soil Science 4
AGN 320 Soil Fertility 4
ASI 130 Animal Science 4
ASI $236 \begin{gathered}\text { Fundamentals of Animal } \\ \text { Nutrition }\end{gathered}$
AEC 150 Agriculture Economics 4
AEC 200 Agricultural Marketing 3
AEC 305 Farm Management 3
MAIOR-Agricultural Economics 30
MAJOR-Agricultural Economics
Agricultural Economics Core
AEC 304 Farm Finance and Accounting 4
AEC 305 Farm Management 3
AEC 308 Commodity Marketing 3
AEC 310 Agricultural Policy 3
AEC 400 Farm Price Analysis 3
AEC 402 Agricultural Law 3
BIO 101 Principles of Biology 5
CHE 104 Fundamentals of Chemistry 4
ECO 260 Principles of Economics I 3
MAT $105 \begin{aligned} & \text { College Algebra } \\ & \text { or equivalent course }\end{aligned}$
Animal Science Elective 8
Agronomy Electives $\underline{4}$
AGN 324 Diseases of Field Crops ..... 2
AGN 326 Agricultural Chemicals ..... 3
AGN 420 Soil Conservation ..... 3
AGN 426 Soil Genesis \& Classification ..... 3
AGN 429 Corn \& Soybean Production ..... 3
AGN 436 Soil Microbiology ..... 3
AEC 402 Agricultural Law ..... 3
AGN Elective ..... 3
ASI Animal Science Elective ..... 7
BIO 101 Principles of Biology ..... 5
CHE 104 Fundamentals of Chemistry ..... 4
CHE 204 Agricultural Organic Chemistry ..... 4
CHE 304 Introduction to Biochemistry and Natural Products ..... 3
Agriculture Electives ..... *8
*Recommended: Agr 290, Occupational Ex- perience of Agr 490, Special Problems in Summer se- mester or Special Projects on the college farm or other.
58 MAJOR-Animal Science
Animal Science Core
ASI 265 Meat Science ..... 3
ASI 330 Applied Animal Nutrition ..... 4
Three of the following courses:
ASI 332 Beef Production ..... 3
ASI 334 Horse Production ..... 3
ASI 336 Sheep Production ..... 3
ASI 337 Swine Production ..... 3
ASI 338 Animal Breeding ..... 3
ASI 339 Livestock Evaluation ..... 3
ASI 475 Diseases of Livestock Animals ..... 2
CHE 104 Fundamentals of Chemistry ..... 4
CHE 204 Agricultural Organic Chemistry ..... 4
CHE 304 Introduction to Biochemistry and Natural Products ..... 3
Agronomy Electives ..... 6
Agricultural Economics Electives ..... 6
Agriculture Electives* ..... -
55
*Recommended: Agr 290, Occupational Ex-perience or Agr 490, Spe-cial Problems in the Sum-mer semester or SpecialProjects on the collegefarm.
AGN 322 Forage Crop Management ..... 3
Agriculture Electives
AGN 429 Corn and Soybean Production ..... 8 ..... 3
AEC electives* ..... 10
ASI electives* ..... 10
AGN electives* ..... $\underline{6}$*Recommended: Agr 290, Occupational Ex-perience or Agr 490, Spe-cial Problems in the Sum-mer semester or SpecialProjects on the collegefarm.
ASSOCIATE OF SCIENCE DEGREE
MAJOR—Agri-Supply Technology
Agricultural Supply Technology Core
AGR 111 Orientation to Agriculture ..... 1
AGR 290 Occupational Experience ..... 4-8
AEC 150 Agricultural Economics ..... 4
AEC 200 Agricultural Marketing ..... 3
AEC 204 Agricultural Supply Management ..... 3
AEC 402 Agricultural Law ..... 3
AGN 120 Plant Science ..... 4
AGN 222 Soil Science ..... 4
AGN 224 Grain Handling \& Grading ..... 4
AGN 320 Soil Fertility ..... 4
AGN 324 Diseases of Field Crops ..... 2
AGN 326 Agricultural Chemicals ..... 3
ASI 130 Animal Science ..... 4
ASI 236 Fundamentals of Animal Nutrition ..... 3
ASI 330 Applied Animal Nutrition ..... 4
AEC 150 Agricultural Economics ..... 4
AEC 200 Agricultural Marketing ..... 3
AEC 204 Agri-Supply Management ..... 3
AEC 402 Agriculture Law ..... 3
AGN 120 Plant Science ..... 4
AGN 222 Soil Science ..... 4
AGN 324 Diseases of Field Crops ..... 2
AGN 326 Agricultural Chemicals ..... 3
ASI 130 Animal Science ..... 4
ASI 236 Fundamentals of Animal Nutrition ..... 3
ACT 230 Principles of Financial Acct ..... 3
MGT 110 Business Organization ..... 3
MGT 312 Principles of Management ..... 3
MKT 374 Salesmanship ..... 3
CHE 104 Fundamentals of Chemistry54-58

## AGRICULTURAL ECONOMICS

## Course Offerings


#### Abstract

AEC 150 Agricultural Economics (4) i Economic principles underlying the organization of agriculture; problems of pricing, production costs, distribution and relation of agricultural policy to the consumer. Four hours


 lecture per week.AEC 200 Agricultural Marketing (3) ii
Principles underlying the marketing of farm products with the emphasis on describing the marketing process. Three hours lecture per week.
Prerequisite: AEC 150 or equivalent course.
AEC 204 Agri-Supply Management (3) ii
A comprehensive course in the management of a retail farm supply store. Included are product knowledge, personnel policies and relationships, purchasing and sales techniques, inventory methods, stock control, and merchandising. Three hours lecture per week.

AEC 304 Farm Finance and Accounting (4) ii
Purpose and methods of keeping farm records, and procedures in accounting; principles involved in financing the farm business and the use of credit. Four hours lecture per week.
Prerequisites: AEC 150, MAT 105 or equivalent courses.

AEC 305 Farm Management (3) i
A study of the principles of farm management and farm organization. Selection of farm enterprises, farm credit, leases and types of farming adapted to a given farm are included. Three hours lecture per week.
Prerequisites: AEC 150 and AEC 304.
AEC 308 Commodity Marketing (3) i (odd years)
Comprehensive analysis of the movement of agricultural commodities with an emphasis on pricing procedures, and the use and function of the futures market. Three hours lecture per week.
Prerequisite: AEC 200.

AEC 400 Farm Price Analysis (3) i
Economic and econometric principles applied to price movements and price discovery in agriculture. Three hours lecture per week.
Prerequisite: AEC 200.
AEC 402 Agricultural Law (3) ii
The legal framework impinging upon decision making by farm firms, families and individuals: liabilities, real and personal property, contracts, farm commercial code, organization of farm firms, intergeneration property transfer, water and fence laws, federal and state regulatory powers and insurance. Three hours lecture per week.
Prerequisite: Junior standing or consent of instructor.

## AGRONOMY

AGN 120 Plant Science (4) ii
Principles of production and management. Importance and ecology of each crop is discussed. New practices and varieties are emphasized. Laboratory will include a study of the plant and plant parts. Three hours lecture and two hours lab per week.

AGN 222 Soil Science (4) i
The origin, formation, and characteristics of different soil types, emphasis placed on soils of Missouri. Laboratory includes field trips. Three hours lecture and two hours lab per week.
Recommend: CHE 104.
AGN 224 Grain Handling and Grading (4) ii
Grain movement from producer to consumer and factors influencing these procedures. Application of the Federal standards for grading farm crops and judging of grains. Two hours lecture and four hours lab per week.
AGN 320 Soil Fertility (4) ii
The use and management of lime and fertilizer on soils. Emphasis is placed on individual nutrients utilization. Three hours lecture and two hours lab per week.
Prerequisite: AGN 222.
AGN 322 Forage Crop Management (3) ii
Ecology, insects, diseases, culture, uses and management of forage will be studied. Three hours lecture per week.

AGN 324 Diseases of Field Crops (2) i (even years)
Detail study of disease of field crops and forages that cause economic loss to the producer. Two hours lecture per week.
AGN 326 Agricultural Chemicals (3) i (odd years)
An introduction to the field of agricultural chemicals including herbicides, insecticides, fungicides. Types of materials, calibration of sprayer, methods of use and safety measures to be used. Two hours lecture and two hours lab per week.
Recommend: CHE 104.
AGN 420 Soil Conservation and Management (3) ii
Conservation and management of soils with respect to erosion, depletion, fertility, physical improvement and crop production. Includes farm surveying, design and layout of terrace systems, drainage and farm ponds. Three hours lecture per week.

AGN 429 Corn and Soybean Production (3) i
The study of the latest research and production practices concerning varieties, cultural practices, fertilization, rotations, insects, disease and weed control problems, and including harvesting and marketing.

## AGN 436 Soil Microbiology (3) i (odd years)

The study of soil mircoorganisms and their relation to the fertility of the soil, with special emphasis on the decomposition of organic matter, rocks and minerals.
Prerequisite: AGN 222.

## ANIMAL SCIENCE

ASI 130 Animal Science (4) i
An introductory course in animal science with emphasis on fundamental concepts of animal breeding, management, marketing, nutrition and physiology as they apply to the livestock industry. Three hours lecture and two hours lab per week.

ASI 236 Fundamentals of Animal Nutrition (3) i
Study of various nutrients; their function, digestion and metabolism by various species of animals. Three hours lecture.
Prerequisite: ASI 130 and CHE 104 recommended or equivalent Chemistry course.

ASI 265 Meat Science (3) ii
Introduction to slaughter of hogs, cattle, and sheep; carcass evaluation and grading; Federal and State Meat Inspection; and Identification of various cuts of meat from the domestic farm animal. Three hours lecture per week.

ASI 330 Applied Animal Nutrition (4) ii
Measure of the nutritive value of feeds, nutrient requirements of the various species of livestock, sources and composition of nutrients, ration formulation, preparation of feed, feed additives and food and drug regulations. Three hours lecture and two hours lab per week.
Prerequisite: ASI 236.
ASI 332 Beef Production (3) ii (odd years)
Production, management, marketing, and nutrition of commercial and purebred beef cattle. Two hours lecture and two hours lab per week. Prerequisite: ASI 130 and junior standing.
ASI 334 Horse Production (3) i (odd years)
Basic principles of horse breeding, color, inheritance, health, management, nutrition, and marketing of equine. Two hours lecture and two hours lab per week.
Prerequisite: ASI 130 and junior standing.
ASI 336 Sheep Production (3) ii (even years)
Production, management, marketing, and nutrition of breeding flock and feedlot lambs. Two hours lecture and two hours lab per week.
Prerequisite: ASI 130 and junior standing.
ASI 337 Swine Production (3) i (even years)
Methods of breeding, feeding, marketing and management of purebred and commercial swine. Two hours lecture and two hours lab per week.
Prerequisite: ASI 130 and junior standing.
week.
Prerequisite: ASI 130.
Livestock Evaluation (3) ii
Selection of beef, horses, sheep, and swine for specific uses. Comparative terminology, grading, judging and presentation of oral reasons. Six hours lab per week.
Prerequisite: ASI 130.
Intercollegiate Judging Training and Competition (3) $\mathbf{i}$
Specialized training in evaluating and grading live animals. Field trips to farms and livestock expositions. Six hours lab per week (plus trips to contests).
Prerequisite: AS! 339 and Permission of instructor.
Diseases of Livestock Animals (2) ii
Discussion of general principles regarding the prevention, identification, control, and eradication of troublesome and common diseases and parasites of farm animals. Two hours lecture per week.
Prerequisite: ASI 130. Recommended: One or more of the following-ASI 332,334, 336, or 337.

## AGRICULTURE

AGR 111 Orientation to Agriculture (1) i
Survey of careers in agriculture, concentrating on the areas of agricultural economics, agronomy, and animal science. Should be taken the first semester in college. One hour lecture per week.
AGR 290 Occupational Experience (1-8) i, ii, iii
Internship under the supervision of a college instructor. Students will be assigned according to their preparation and interests to intern in an approved agriculturally oriented agency or firm. They will work with administrative and operational personnel at several levels. Times will be arranged.
Prerequisite: Consent of department chairman during the first half of semester preceding time of enrollment.
(Note: Students should not enroll for other courses "during the day" in the semester in which they enroll for more than 3 credit hours in this course).
AGR 430 Seminar (1) $\mathbf{i}$, ii
Independent reading within the several disciplines of agriculture, summarized and presented orally to students and staff. One meeting per week.
Prerequisite: Junior or senior standing.
AGR 450 Independent Study (credit hours open)
Open only to seniors either as a means of taking a required course which is not otherwise available during their senior year or do advanced individual study and investigation in an area related to some $300+$ agriculture course of student's preference.
Prerequisite: This arrangement available by consent of department chairman.
AGR 490 Special Problems (1-4) i, ii, iii
Open to senior students majoring in agricultural economics, agronomy, animal science, and general agriculture. Research topics are assigned on an individual interest basis. Times of Conferences will be arranged.
Prerequisite: Consent of department chairman should be obtained the semester preceding enrollment.
AEC 150 Agricultural Economics ..... 4
AGR 111 Orientation ..... 1
ASI 130 Animal Science ..... 4
CHE 104 Fundamentals of Chemistry ..... 4
ENG 104 Composition \& Rhetoric I ..... 316
Spring Semester
AEC 200 Agricultural Marketing ..... 3
AGN 120 Plant Science ..... 4
AGN 222 Soil Science. ..... 4
MAT 105 College Algebra ..... 3
PED 101 Concepts of Physical Activity ..... 1
15
ECO 260 Principles of Economics ..... 3
AEC 310 Agricultural Policy. ..... 3
AGN 224 Grain Handling \& Grading .....  3
ASI 236 Fundamentals of Animal Nutrition ..... 4
SPH Speech elective ..... 3
Spring Semester ..... 16AEC 304 Farm Finance and Accounting
ASI 330 Applied Animal Nutrition ... ..... 44
ENG 108 Composition and Rhetoric II
ENG 210 Approaches to Literature ..... 3
PED Physical Activity elective ..... 1 .....
15 .....
15
Junior Year
Fall Semester
Sophomore Year
Fall Semester
16$\square$ Junior YearFall Sem
3
AEC 305 Farm Management
3
AEC 308 Commodity Marketing
1
PED Physical Activity elective .....  3
General Studies III elective ..... 3
General Studies III elective ..... 3
16
Spring Semester
AGN 320 Soil Fertility ..... 4
ASI 339 Livestock Evaluation ..... 3
ASI Animal Science elective* ..... 4
BIO 101 Principles of Biology ..... 5
PED
Physical Activity elective .....  1
Senior Year ..... 17
Fall Semester
AEC 400 Agricultural Prices ..... 3
ECO 261 Principles of Economics II ..... 3
MGT 210 Business Statistics ..... 3
General Studies III elective ..... 3
Agricultural elective* ..... 3
Spring Semester
AEC 402 Agricultural Law ..... 3
AGN 322 Forage Crop Management ..... 3
MAT 204 Applied Calculus ..... 5
MGT 313 Business Statistics. ..... 3
14TOTAL 124*Recommend AGR 290, Occupational Experience or AGR490, Special Problems in Summer Semester or SpecialProblems on College Farm
AEC 150 Agriculture Economics ..... 4
AGR 111 Orientation ..... 1
ASI 130 Animal Science ..... 4
ENG 104 English Comp. ..... 3
MAT Math elective* ..... 3
Spring Semester
AGN 120 Plant Science ..... 4
ENG 108 English Composition II ..... 3
PED 101 Concepts of Physical Activity ..... 1
General Studies II elective. ..... 3
General Studies IV elective** .....  5
Sophomore Year Fall Semester
AGN 222 Soil Sciences ..... 4
ASI 236 Fundamentals of Animal Nutrition ..... 3
Fundamentals of Chemistry ..... 4
PED Physical Activity elective ..... 1
SPH Speech elective
3
3 ..... 15
Spring Semester
AEC 200 Agricultural Marketing ..... 3
ASI 330 Applied Animal Nutrition ..... 4
ASI 265 Meat Science ..... 3
CHE 204 Agricultural Organic Chemistry .....  4
PED Physical Activity elective ..... 1
1515AEC
AGN 320
AGN Agronomy e ..... 3
ASI 475 Diseases of Livestock ..... 2
CHE 304 Introduction to Biochemistry and Natural Products ..... 3
AEC 305 Farm Managment ..... 3
AEC Agriculture Economics elective ${ }^{* * *}$ ..... 3
AGN Agronomy elective*** ..... 3
ASI Animal Science Animal Prod. elective ..... 3
Electives*** ..... 4
Junior YearFall Semester
ASI 338 Animal Breeding ..... 3
ASI
Animal Production elective ..... 3
General Studies III elective ..... 6
General Studies II elective ..... 3
Physical Activity elective ..... - 1
Spring Semester
ASI 339 Livestock Evaluation ..... 3
ASI Production Course elective ..... 3
Agriculture electives .....  4
General Studies II elective ..... 3
General Studies III elective ..... 3Senior Year
Fall Semester
Spring Semester ..... 1616-
Agriculture Economics elective3
*Recommend Math 105 TOTAL ..... 15
124
**Recommend Biology 101
***Recommend AGR 290, Occupational Experience orAGR 490, Special Problems or Special Problems on theCollege Farm
AGR 111 Orientation to Agriculture ..... 1
ASI 130 Animal Science ..... 4
CHE 104 Fundamentals of Chemistry ..... 4
ENG 104 Composition \& Rhetoric I ..... 3
SPH Speech elective ..... 3
Spring Semester
AEC 150 Agricultural Economics ..... 4
AGN 120 Plant Science ..... 4
ENG 108 Composition \& Rhetoric II ..... 3
PED 101 Concepts of Physical Activity ..... 1
General Studies II elective ..... 3
Sophomore Year
Fall Semester
AGN 322 Forage Crop Management ..... 3
AGN 222 Soil Science ..... 4
ASI 236 Fundamentals of Animal Nutrition ..... 4
PED Physical Activity elective ..... 1Spring Semester
AEC 200 Agricultural Marketing
AGN 224 Grain Handling \& Grading. ..... 4
ASI Elective ..... 4
PED Physical Activity elective15
3
General Studies III elective . . . . . . . . . . . . . . . . . . 315
Junior Year
Fall Semester
CHE 204 Agriculture Organic Chemicals ..... 4
Agriculture electives** ..... 9
General Studies II electives ..... 3
PED Physical Activity elective ..... 1
Spring SemesterAGN 326 Agriculture Chemicals3
AGN 429 Corn and Soybean Production ..... 3
ASI Elective ..... 3
BIO 101 Principles of Biology .....
General Studies II elective ..... 317
Senior Year
Fall Semester
AEC 305 Farm Management ..... 3
AGN 324 Diseased Field Crops ..... 2
AGN 436 Soil Microbiology ..... 3
CHE 304 Introduction to Biochemistry \& Natural Products ..... 3
General Studies III elective ..... 3
Spring Semester
AEC 402 Agriculture Law ..... 3
AGN 320 Soil Fertility ..... 4
AGN 420 Soil Conservation \& Management ..... 3
AGN 426 Soil Genesis \& Classification .....  3
General Studies III elective .....  3
TOTA ..... 124
*Recommend Math 105
**Recommend AGR 290, Occupational Experience or AGR490, Special Problems in Summer Semester or SpecialProjects on College Farm
AEC 150 Agriculture Economics ..... 4
AGR 111 Orientation to Agriculture ..... 1
ASI 130 Animal Science ..... 4
ENG 104 Composition \& Rhetoric 1 ..... 3
SPH Speech elective .....  3
Spring Semester
AGN 120 Plant Science ..... 4
CHE 104 Fundamentals of Chemistry ..... 4
ENG 108 Composition \& Rhetoric II ..... 3
PED 101 Concepts of Physical Activity ..... 1
General Studies II elective ..... 3
Sophomore Year
Fall Semester
AGN 222 Soil Science ..... 4
ASI 236 Fundamentals of Animal Nutrition ..... 3
ASI Animal Science electives ..... 3
MAT Math elective ..... 3
PED Physical Activity elective ..... 3
Spring Semester
AEC 220 Agricultural Marketing ..... 3
AEC Agriculture Economics electives ..... 7
PED Physical Activities elective .....  1
General Studies III elective ..... 314
Junior Year
Fall Semester
AGN 322 Forage Crop Management ..... 3
AGN Agronomy electives ..... 6
General Studies II elective ..... 3
Electives. ..... 315
Spring Semester
AEC 305 Farm Management ..... 3
AGN 429 Corn \& Soybean Production ..... 3
ASI Animal Science electives ..... 3
General Studies III elective ..... 3
General Studies II elective. ..... 3
15
Senior Year
Fall Semester
AGN 420 Soil and Water Conservation ..... 3
Agriculture electives**. ..... 8
General Studies IV. ..... 516
Spring Semester
AEC Agriculture Economics elective ..... 3
ASI Animal Science elective ..... 3
General Studies III elective ..... 3
Electives ..... -9
TOTAL ..... 18
*Recommend Math 105
**Recommend AGR 290, Occupational Experience or AGR490, Special Problems in Summer Semester or SpecialProjects on College Farm

## Fall Semester

$\begin{array}{lcc}\text { AEC } 150 & \text { Agriculture Economics . . . . . . . . . . . . . . . . . . . . . . . . } 4 \\ \text { AGR } 111 & 4 \\ \text { Orientation to Agriculture . . . . . . . . . . . . }\end{array}$
AGR 111 Orientation to Agriculture . . . . . . . . . . . . . . . . . 4
ENG 104 Composition \& Rhetoric I .......................... . . . . . . . 3
SPH Speech elective ...................................... 3

## Spring Semester

AEC 204 Agriculture Supply Managment . . . . . . . . . . . . . . 3
AGN 120
Plant Science
AGN 224 Grain Handling \& Grading . . . . . . . . . . . . . . . . . . . 4
CHE 104 Fundamentals of Chemistry ................... 4 15
AGR 290 Occupational Experience* ..... 4-8

Sophomore Year

Fall Semester

AGN 222 Soil Science . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
AGN 324 Diseases of Feed Crops . . . . . . . . . . . . . . . . . . . . . . 2
AGN 326 Agricultural Chemicals . . . . . . . . . . . . . . . . . . . . . 3
ASI 236 Fundamentals of Animal Nutrition ........... 3
PED 101 Concepts of Physical Activity . . . . . . . . . . . . . . . 1
Humanities elective . . . . . ....................... 3
16

Spring Semester
AEC 200 Agricultural Marketing . . . . . . . . . . . . . . . . . . . . 3
AEC 402 Agricultural Law . . . . . . . . . . . . . . . . . . . . . . . . . . 3
AGN 320 Soil Fertility . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
ASI 330 Applied Animal Nutrition . . . . . . . . . . . . . . . . . . . 4
PED Physical Activity elective 1
Social Science elective . . . . . . . . . . . . . . . . . . . . . 3
AEC 150 Agriculture Economics ..... 4
AGR 111 Orientation to Agriculture ..... 1
ASI 130 Animal Science ..... 4
ENG 104 Composition \& Rhetoric I ..... 3
SPH Speech elective ..... 3
Spring Semester
ACT 230 Principles of Financial Acct. ..... 3
AEC 240 Agri-Supply Management ..... 3
CHE 104 Fundamentals of Chemistry ..... 4
AGN 120 Plant Science ..... 4
MGT 110 Business Organization ..... 317
AGR 290 Occupational Experience* ..... 4-8
Sophomore Year
Fall Semester
AGN 222 Soil Science ..... 4
ASI 236 Fundamentals of Animal Nutrition ..... 3
MKT 374 Salesmanship ..... 3
PED 101 Concepts of Physical Activity ..... 1
Humanities elective ..... 3
Spring Semester
AEC 200 Agricultural Marketing ..... 3
AEC 402 Agricultural Law ..... 3
MGT 312 Principles of Management ..... 3
AGN 324 Diseases of Field Crops. ..... 2
AGN 326 Agricultural Chemicals. ..... 3
PED Physical Activity elective .....  1


The Department of Business and Economics offers diversified programs leading to associate degrees in mid-management and baccalaureate degrees with majors in accounting, business education, economics, management, and marketing. Students receive a general background in the fundamentals of business and economics as well as an opportunity to

## FOUR YEAR PROGRAMS

The Department offers a Bachelor of Science in Business Administration Degree with majors in accounting, economics, management, or marketing; and Bachelor of Science in Education Degree with majors in basic business, business skills, or marketing education.
The curricula for these majors are as follows:
For the Bachelor of Science in Business Administration Degree
FRESHMAN-SOPHOMORE CORE
ACC 230 Principles of Financial Accounting
ACC $231 \begin{gathered}\text { Principles of Managerial } \\ \text { Accounting }\end{gathered} 3$
ECO 260 Principles of Economics I 3
ECO 261 Principles of Economics II 3
MGT 210 Business Statistics I 3
MAT 105 College Algebra (Use to fulfill General Studies Requirement)
PROFESSIONAL CORE
MGT 310 Business Law I 3
MGT 312 Principles of Management 3
MGT 315 Financial Management 3
MGT 319 Business Communications 3
MKT 370 Principles of Marketing $\quad \underline{3}$
Total core hours 30

## Additional Major Requirements

ACCOUNTING
ACC 330 Intermediate Accounting I 3
ACC 331 Intermediate Accounting II 3
ACC 333 Cost Accounting 3
ACC 336 Tax Accounting 3
ACC 433 Auditing 3 Electives in Accounting 6
specialize within a particular discipline. The programs have been designed to prepare the student for a career in the challenging and everchanging field of business as well as the pursuance of advanced degrees. The Department is actively involved in student placement and assists students in meeting potential employers through annual seminars.

One of the following:
ECO 360 Macroeconomic Theory
ECO 361 Price Theory
ECO 362 Public Finance
ECO 363 Money and Banking
One of the following: 3
MGT 411 Investment Analysis MGT 412 Personnel Management
MGT 415 Administrative Supervision
MGT 419 Business Policy
One of the following: 3
CSC 245 Introduction to COBOL
MGT 311 Business Law II
MGT 313 Business Statistics II

ECONOMICS
ECO 360 Macroeconomic Theory 3
ECO 361 Price Theory 3
ECO 363 Money and Banking 3
Four of the following: 12
ECO 362 Public Finance
ECO 364 Labor Economics
ECO 365 Government Regulation of Business
ECO 367 Urban and Regional Economics
ECO 460 Business Cycles and Forecasting
ECO 461 International Economics
ECO 462 History of Economic Thought
ECO 463 Comparative Economic Systems
ECO 466 Current Economic Problems
Business elective (non-economics, upper level)


MGT 316 Principles of Insurance
Requirement)
MGT 410 Small Business Management
MGT 411 Investment Analysis
MGT 413 Real Estate
MGT 415 Administrative Supervision
MGT 416 Production Management
MGT 417 Credit Management
MGT 419 Business Policy
One of the following:
ECO 363 Money and Banking
ECO 364 Labor Economics
ECO 365 Government Regulation of Business
One of the following: 3
ACC 330 Intermediate Accounting I
CSC 245 Introduction to COBOL
PSY 310 Industrial Psychology
SOC 400 Ethnic and Race Relations
SOC 420 Collective Behavior

## MARKETING

MKT 376 Advertising 3
MKT 470 Marketing Management 3
MKT 472 Sales Management 3
MKT 473 Marketing Research 3
MKT 474 Marketing Seminar 3
Two of the following: 6
ECO 361 Price Theory
MKT 371 Principles of Retailing
MKT 372 Physical Distribution
MKT 374 Salesmanship
MKT 375 Industrial Marketing
MKT 377 International Marketing
MKT 378 Product Strategy
MKT 471 Consumer Relations and Behavior
or above) in the department. If a transfer student from a junior college fulfills a 300 -level required course with an accepted transfer course, the course will be accepted as meeting the course requirement, but will not be evaluated as fulfilling the 21 hour upper level requirement. No junior college course will be accepted as a transfer for any 400-level course in the department.
Students majoring in four-year programs in the department must complete a mathematics course at the level of MAT 105 or above. This should be taken during the freshman or the sophomore year.

## TWO YEAR PROGRAMS

The Department offers an Associate of Science degree with a major in Mid-Management (emphases in accounting, banking and finance, data processing, or retailing. In cooperation with the St. Joseph chapter of the American Institute of Banking, the department offers courses leading to the A.I.B. Standard Certificate. Further information is available in the office of the department chairman.

The curricula for this major is as follows: MID-MANAGEMENT CORE
MGT 110 Business Organization 3
MGT 116 Business Mathematics or
MGT 210 Business Statistics I
ACC 230 Principles of Financial Accounting3
ACC 231 Principles of Managerial Accounting ..... 3
ECO 260 Principles of Economics I ..... 3
ECO 261 Principles of Economics II ..... 3
MGT 312 Principles of Management ..... -
Total core hours ..... 21
ACCOUNTING EMPHASIS
ACC 330 Intermediate Accounting I ..... 3
ACC 331 Intermediate Accounting II ..... 3
ACC 333 Cost Accounting ..... 3Elective in business(upper level)3
Two of the following: ..... 6
AGR 205 Financing the Farm Business
BAN 250 Principles of Bank OperationsBAN 251 Savings and Time Deposit Banking
BAN 252 Trust Functions and Services
DATA PROCESSING EMPHASIS
CSC 182 Introduction to Data Processing ..... 3
CSC 240 Introduction to RPG ..... 3
CSC 245 Introduction to COBOL ..... 3
CSC 345 Advanced COBOL ..... 3
MGT 310 Business Law I ..... 3
1536
RETAILING EMPHASIS
MKT 370 Principles of Marketing ..... 3
MKT 371 Principles of Retailing ..... 3
MKT 374 Salesmanship ..... 3
MKT 376 Advertising ..... 3

Prerequisites for courses listed below may be waived at the discretion of the department chairman or the appropriate instructor.

## ACCOUNTING

ACC 230 Principles of Financial Accounting (3) i, ii, iii Fundamental principles of accounting and their application. Recording, classifying and summarizing business transactions. Analysis of balance sheet and income statement accounts. Prerequisite: A score of 14 or above on ACT math test, or MGT 116.

ACC 231 Principles of Managerial Accounting (3) i, ii, iii Assembly and use of accounting data for managerial decision-making; cost accounting; taxes; budgeting; cost-volume-profit analysis; cost of capital and traditional financial statement analysis.
Prerequisite: ACC 230.

ACC 331 Intermediate Accounting II (3) i, ii
A continuation of the critical study of balance sheet accounts and intensive analysis of financial statements.
Prerequisite: ACC 330.
ACC 332 Accounting Systems and Control (3) $i$, even years
Design of accounting systems from pen-andink journals to electronic data processing including forms design, internal control concepts, and other methods of control (accounting machines, microfilming, and cash registers). Major emphasis on billing, sales, purchases, and payroll procedures.
Prerequisite: ACC 231.
ACC 333 Cost Accounting (3) i, ii, iii
A study of cost accounting procedures with emphasis on the basic theory and procedures of allocating materials, labor, and manufacturing expenses in job order and process cost systems. Prerequisite: ACC 231.

ACC 334 Budgets and Budgeting Control (3) i, odd years Theory and procedures in the development of financial and operating budgets as managerial devices for profit planning and general budgetary control in business.
Prerequisite: ACC 231.
ACC 335 Government and Institutional Accounting (3) iii, or on demand
Accounting principles and procedures relating to schools, hospitals, and other non-profit institutions, and to cities, counties, and other governmental units.
Prerequisite: ACC 231.
ACC 336 Tax Accounting (3) i
An introduction to taxation which includes both federal and state taxes which many small businessmen and individuals are subject to. Includes payroll, sales, and income taxes. The area of income taxes includes an exposure to individual partnership and corporate income taxation. Prerequisite: ACC 231.

ACC 430 Advanced Accounting Problems (3) i
An accounting problems course with emphasis on problems facing partnership and corporate business organizations. Major emphasis is placed on; forms of the business organization, maintenance of the business organization, expansion of the business organization (mergers and consolidated statements and contraction of the business organization, liquidations, and reorganizations).
Prerequisite: ACC 331.
ACC 431 Seminar in Accounting Theory (3) ii
Objective of the course is to familiarize students with the current accounting issues and literature. Includes development of accounting theory, accounting concepts, and objectives of accounting. The course requires students to research basic accounting issues.
Prerequisite: ACC 331.
ACC 432 Advanced Cost Accounting (3) ii, even years Special problems of cost analysis such as joint product costs, differential costs, standard costs, estimated costs, budget and distribution costs. Prerequisite: ACC 333.

АСС 439
Advanced Tax Accounting (3) it
Special problems in the area of individual, partnership, and corporate taxation. This includes sales and disposition of property, pension plans, liquidation and re-organization of business organizations. Course also includes tax planning and introduction to federal estate and gift taxation.
Prerequisite: ACC 336.

## BANKING

BAN 250 Principles of Bank Operations (3) $i$, at night Fundamentals of bank functions presented in a descriptive fashion from a broad and operational perspective.

BAN 251 Savings and Time Deposit Banking (3) ii, even years at night
Historical development of savings institutions and basic economic functions of the savings process. Review of the economics of the savings process, emphasizing differences between financial savings and savings that lead to capital formation. Different types of financial savings are reviewed in order to describe the system of financial flows of income to capital investment.
BAN 252 Trust Functions and Services (3) i, odd years at night
Introduction to the services and duties involved in trust operations. Clarifies distinclion between business and legal aspects of trust functions.
BAN 253 Bank Management (3) $i$, at night
New trends in the philosophy and practice of bank management. Features case studies as an instructional device to provide new as will as experienced bank personnel with a working knowledge of bank management.

## BUSINESS EDUCATION

BUS 455 Methods of Teaching Business Subjects (3) i, ii A study of the methods and activities for teaching business education in the secondary school. To be taken concurrently with SED 303 Experience in Secondary Teaching II.
Prerequisite: Consent of advisor.

## ECONOMICS

ECO 160 Personal Economics (3) i, ii
A practical course designed to assist students in becoming more rational consumers in such areas as housing, transportation, insurance, and other consumer items. Also covers techniques of financial planning, budgeting, and a variety of investments. Does not count as an economics elective toward a major in economics.

ECO 260 Principles of Economics I (3) i, ii, iii

An introduction to basic principles of eco-
nomics with emphasis on the analysis of unem-
An introduction to basic principles of eco-
nomics with emphasis on the analysis of unemployment. GNP, inflation, and public debt. Fiscal and monetary theories and public policies are also discussed.

ECO 261 Principles of Economics II (3) i, ii, iii A continuation of economic fundamentals but with emphasis on supply and demand analysis, factor markets, different market structures, international economics, and various current economic problems.
Prerequisite: ECO 260. Prerequite: ECO 260.
policies to control the business cycle and infla-
tion.
Prerequisite: ECO 261.
ECO 361 Price Theory (3) i
A theoretical approach to the behavior of the individual buyer and seller in the marketplace. Areas studied include consumer demand theory, costs of production, and the market structures ranging from pure competition to monopoly.
Prerequisite: ECO 261.
ECO 362 Public Finance (3) ii
A study of the principles of taxation and public expenditures, the impact of fiscal policy on economic and social activity, and recent trends in public finance at the federal, state, and local levels.
Prerequisite: ECO 261.
ECO 363 Money and Banking (3) i
Continuation and expansion of the money and banking concepts introduced in ECO 260. Areas of study include: money, banks and other financial intermediaries, the Federal Reserve System, concepts of monetary control, monetary policy, and international banking. Prerequisite: ECO 260 and ACC 230.
ECO 364 Labor Economics (3) ii
Introductory course dealing with the institutional aspects of the American labor force, its organization, wage and employment theory, the economic role of bargaining, and the basic ingredients of public policy toward labor organizations.
Prerequisite: ECO 260.
ECO 365 Government Regulation of Business (3) i
Analysis of the legislative and legal control or business and its implications on the various economic components of the American economy.
Prerequisite: ECO 261.
ECO 367 Urban and Regional Economics (3) ii
Examination of economic growth in the United States with emphasis on the problems of economic growth in the Midwest. Attention is given to the factors instrumental in determining economic growth in various segments of the economy. Urban problems associated with growth are also considered.

## Prerequisite: ECO 261.

ECO 460 Business Cycles and Forecasting (3) i, odd years Study of the cyclical fluctuation of the economy by means of theoretical, graphical, and quantitative methods and use of basic economic and business forecasting techniques. Prerequisite: ECO 261 and MGT 210.
ECO 461 International Economics (3) ii, odd years Introduction to the study of the theory of international economics with emphasis on international trade, flows of funds, foreign exchange, balance of payments, and world economic interdependence.
Prerequisite: ECO 261.
ECO 462 History of Economic Thought (3) ii, even years Study of the development of various schools of economic thought. Topics covered include classical, neo-classical, institutional, Keynesian, and neo-Keynesian theories.
Prerequisite: ECO 261.

ECO 466 Current Economic Problems (3) i
Analytical study of various problems of current interest in economics. Course generally offered by arrangement only.
Prerequisite: Senior standing.

## MANAGEMENT

MGT 110 Business Organization (3) i, ii, iii
Introduction to the various activities and organizational structures in the business community. A general survey course that includes aspects of accounting, economics, management, and marketing.

MGT 116 Business Mathematics (3) i, ii, iii
An introduction to the daily mathematical problems that arise in business. Topics covered include: basic algebraic operations in business; ratio, proportion, and percentage, simple and compound interest; negotiable instruments; present worth; annuities; bond yields; retailing mathematics, and debt extinction.

MGT 210 Business Statistics I (3) i, ii, iii
A study of descriptive and inductive statistical methods as they apply to decision making in business and economics.
Prerequisite: MAT 105.
MGT 310 Business Law I (3) i, ii, iii
An introduction to the legal environment of business. Examination of the constitutional and historical foundations of the American legal system. Emphasis is placed upon the area of contracts, personal property, bailments, and sales.

MGT 311 Business Law II (3) i, ii
A continuation of Business Law I with emphasis on negotiable instruments and security devices under the Uniform Commercial Code. Partnerships and corporations and other related areas are also discussed.
Prerequisite: MGT 310
MGT 312 Principles of Management (3) $\mathbf{i}$, ii, iii
A study of the objectives and functions of a business enterprise with emphasis upon management principles of planning, organizing and controlling the organization.
Prerequisite: ACC 230.
MGT 313 Business Statistics II (3) ii
Emphasis on the statistical analysis of business and economic data and how this data aids in controlling operations and making sound business decisions.
Prerequisite: MGT 210.
MGT 315 Financial Management (3) $\mathbf{i}$, $\mathbf{i}$
An introductory survey of the issues which face the financial manager of a firm. Such pressing issues as the liquidity vs. profitability decision, capital budgeting, planning needs, and controlling uses of funds as well as the methods of procuring funds will be dealt with.
Prerequisite: ACC 231 and MAT 105.
MGT 316 Principles of Insurance (3) i
Nature and uses of insurance, structure, management, and regulation of insurance carriers; economic risk; principles of personal property, life, and casualty insurance.

## MGT 410 Small Business Management (3) i

Deals with all major aspects of starting and managing a small business. Topics covered include: factors in success and failure; methods of becoming a small business owner; capital requirements; sources of finance; employee and supplier relations; sales promotion; and control.
Prerequisite: MGT 312 and MKT 370.

MGT 411 Investment Analysis (3) ii
A critical approach to security analysis. Designed to present means of securing information about securities so as to permit dependable decisions to be made concerning their value and attractiveness at given prices.
Prerequisite: MGT 210 and MGT 315.

MGT 412 Personnel Management (3) ii, iii
Policies and practices in personnel management, such as job analysis, selection of employees, placement training, employee services, and industrial relations.
Prerequisite: MGT 312.

MGT 413 Real Estate (3) ii
Principles of land evaluation and development. Problems relating to the purchase, transfer, lease, financing, and management of land and buildings are considered.
Prerequisite: MGT 310.

MGT 415 Administrative Supervision (3) i
An examination of the human problems in the supervisor-subordinate relationship. Principles are relevant to all types of organization-business, service, government.
Prerequisite: MGT 312.

## MGT 416 Production Management (3) i

Development of scientific management principles and methods or organization and management in manufacturing including plant location and scheduling and production operating and information systems.
Prerequisite: MGT 210 and MGT 312.

MGT 417 Credit Management (3) ii
Designed to meet the needs of people who are now-or who will be-involved with the management of credit and collection activities of business organizations (or of their own personal affairs). The course will deal with the types, regulation, management, analysis, and control of commercial and consumer credit.
Prerequisite: ECO 260 and MGT 315.

MGT 419 Business Policy (3) ii
Examination of current problems and issues facing business in a changing society. Prerequisite: MGT 312 and senior standing
forces within the firm, dealing with price, promotion, distribution, personal selling, and product and economy aspects.
Prerequisite: ECO 260 and ECO 261 (at least taken concurrently).

MKT 371 Principles of Retailing (3) ii
A practical study of the underlying principles of retail store management with emphasis on basic retailing activities of buying, merchandising, and promotion.
Prerequisite: MKT 370.

## MKT 372 Physical Distribution (3) ii

An analysis of the physical distribution functions in marketing with emphasis on transportation methods, material handling, and facility location as elements of an integrated system.
Prerequisite: MKT 370.
MKT 374 Salesmanship (3) i
Study of the practical methods, principles, procedures, and policies of a professional salesman.

MKT 375 Industrial Marketing (3) ii, even years
Analysis of the structure of marketing for industrial and wholesaling activities. Extensive study is made in industrial salesmanship, warehousing, and wholesaling problems.
Prerequisite: MKT 370.
MKT 376 Advertising (3) $\mathbf{i}$
A survey of the fundamentals of market promotion, including advertising media. Creative advertising, advertising agencies, and the advertising campaign are discussed.
Prerequisite: MKT 370.

## MKT 377 International Marketing (3) i, odd years

This course is designed to provide the student with an overall view of the structure and approaches to international marketing. Special emphasis is placed on methods of evaluating and implementing international marketing opportunities. In addition, cultural, political, legal, and financial considerations are viewed as they relate to the total international marketing mix.
Prerequisite: MKT 370.
MKT 378 Product Strategy (3) i
The course is designed for students interested in the area of product management of product development, placement, maintenance, and withdrawal. Special attention will be given to application of marketing techniques to new products.
Prerequisite: MKT 370.

## MKT 470 Marketing Management (3) i

This course presents stimulating and timely facsimiles about today's management of the marketing function. With emphasis on the pragmatic application of marketing concepts, the student assumes the role of business practitioner and through either leadership or participation is given ample opportunity to integrate the marketing mix. The course is attractive to persons concerned with where marketing is and where it is going.
Prerequisite: MKT 370.

Application of sales management concepts to administration, planning, training, and acquisition of the sales force for a business. Prerequisite: MKT 370.

MKT 473 Marketing Research (3) ii
Analysis of markets and marketing problems by various research methods. Special emphasis will be given to project management.
Prerequisite: MGT 210, MKT 370, and senior standing.

## MKT 474 Marketing Seminar (3) ii

A seminar of case situations dealing with various strategy alternatives involved in marketing problem solving. Special attention is given to the marketing mix and the use of marketing research and decision making.
Prerequisites: senior standing and twelve hours of marketing.

## SAMPLE PROGRAM BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION DEGREE MAJOR IN ACCOUNTING

## Freshman Year Fall Semester

ENG 104 English Composition........................... . . 3
PSC 101 Am. Nat'l. Govt. or Am. History . .............. . . 3
MAT 105 College Algebra. ................................. . . 3
MGT 110 Business Organization (optional).............. 3
MGT 116 Business Mathematics (optional) .............. 3
PED 101 Concepts of Physical Activity ..................... 1

## Spring Semester

ENG 108 English Composition.............................. 3
ACC 230 Prin. of Financial Acct. . . . . . . . . . . . . . . . . . . . . . . 3
Social Science or Psychology ............... . . . . 3
Natural Science course . . . . . . . . . . . . . . . . . . . 4-5
Humanities area class . . . . . . . . . . . . . . . . .... 3
16-17

## Sophomore Year <br> Fall Semester

Speech
ACC 231 Prin. of Managerial Accounting . . . . . . . . . . . . . 3
ECO 260 Principles of Econ. I. . . . . . . . . . . . . . . . . . . . . . . . 3
MGT 210 Business Statistics I
3
Humanities area class . . . . . . . . . . . . . . . . . . . . . . 3
Physical Education activity. . . . . . . . . . . . . . . . . . . . . 1
16

## Spring Semester

ACC Interm. Acct. I or Cost Acct. . .................... . . 3
ECO 261 Principles of Economics II . . . . . . . . . . . . . . . . . . . 3
CSC 182 Intro. to Data Processing ...................... . . . . 3
MGT 310 Business Law I. . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Physical Education activity . . . . . . . . . . . . . . . . . . 1
Natural Science Course . . . . . . . . . . . . . . . . . . 4-5

Eronomics elective
Physical Education activity1

## Spring Semester

ACC 331 Intermediate Accounting II . . . . . . . . . . . . . . . . . 3
Accounting elective . . . . . . . . . . . . . . . . . . . . . .
Business \& Economics elective . . . . . . . . . . . . . . . . 3
MGT 315 Financial Management . . . . . . . . . . . . . . . . . . . . 3
15

Senior Year
Fall Semester
ACC 366 Tax Accounting ..... 3
MGT 319 Business Communications. ..... 3
Additional Accounting Requirement ..... 3
(COBOL, Bus. Law II, or Bus. Stat. II)
Social Science course ..... 3
Elective ..... 3

## Spring Semester

ACC 433 Auditing ..... 3
Accounting elective ..... 3
Electives ..... 915


## Freshman Yoar Fall Semester

ENG 104 English Composition. . . . . . . . . . . . . . . . . . . . . . . 3
Social Science course . . . . . . . . . . . . . . . . . . . . . . . 3
Elective . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
ECO 260 Principles of Economics 1.................... . . . . 3
ACC 230 Prin. of Financial Accounting . . . . . . . . . . . . . . . 3
PED 101 Concepts of Physical Activity . . . . . . . . . . . . . . . 1

## Spring Semester

ENG 108 English Composition. . . . . . . . . . . . . . . . . . . . . . . . 3
Social Science course . . . . . . . . . . . . . . . . . . . . . . 3
MAT 105 College Algebra. . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
ACC 231 Prin. of Managerial Accounting . . . . . . . . . . . . . . 3
ECO 261 Principles of Economics II . . . . . . . . . . . . . . . . . . . 3
Physical Education activity . . . . . . . . . . . . . . . . . 1

## Sophomore Year

Fall Semester
Speech . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Natural Science . . . . . . . . . . . . . . . . . . . . . . . . 4-5
MGT 210 Business Statistics I . . . . . . . . . . . . . . . . . . . . . . . . 3
Social Science course . . . . . . . . . . . . . . . . . . . . . 3
Elective ............................................. 3
16-17

Spring Semester
Humanities of Literature course . . . . . . . . . . . . . 3
ECO 360 Macroeconomic Theory ........................ 3
Natural Science . . . . . . . . . . . . . . . . . . . . . . . . . 4-5
Economics elective . . . . . . . . . . . . . . . . . . . . . . . . 3
Elective . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
16-17

## Junior Year

## Fall Semester

MGT 312 Prin. of Management . . . . . . . . . . . . . . . . . . . . . . 3
MGT 310 Business Law I. . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
ECO 361 Price Theory . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
ECO 363 Money and Banking . . . . . . . . . . . . . . . . . . . . . . . 3
Humanities area course . ....................... . . 3
Physical Education activity...................... 1

## Spring Semester

MGT 315 Financial Management . . . . . . . . . . . . . . . . . . . . . 3
MKT 370 Principles of Marketing . . . . . . . . . . . . . . . . . . . . 3
MGT 319 Business Communications. ...................... . . 3
Humanities area course . . . . . . . . . . . . . . . . . . . . . . . . 3
Economics elective . . . . . . . . . . . . . . . . . . . . . . . 3
Physical Education activity . . . . . . . . . . . . . . . . . . 1

## Senior Year <br> Fall Semester

Economics elective . . . . . . . . . . . . . . . . . . . . . . . . 3
Electives. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 9
Business elective . . . . . . . . . . . . . . . . . . . . . . . . . 3
ditional courses in Economics to strengthen background in that field. The student may also wish to develop stronger backgrounds in the fields cognative to economics such as accounting, management, and marketing. Greater development of tools in mathematics and statistics may also prove worthwhile.

## SAMPLE PROGRAM BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION DEGREE MAJOR IN MANAGEMENT

## Freshman Year Fall Semester

ENG 104 English Composition. ............................. . . . 3
Speech............................................. . . . . 3
Social Science course . . . . . . . . . . . . . . . . . . . . . . 3
MAT 105 College Algebra......................................... 3
Bus. Org. or Bus. Math. (optional) .............
PED 101 Concepts of Physical Activity . . . . . . . . . . . . . . 1

## Spring Semester

ENG 108 English Composition . . . . . . . . . . . . . . . . . . . . . . . . 3
Social Science course . . . . . . . . . . . . . . . . . . . . . . 3
Literature or Humanities course. . . . . . . . . . . . . . 3
General Education ............................... . . . 6
Physical Education activity . . . . . . . . . . . . . . . . . . 1 16

## Sophomore Year <br> Fall Semester

ACC 230 Prin. of Financial Accounting . ................. . . 3
ECO 260 Principles of Economics I.......................... 3
Social Science course . . . . . . . . . . . . . . . . . . . . . . 3
Humanities or Literature course. . . . . . . . . . . . . . 3
Natural Science . . . . . . . . . . . . . . . . . . . . . . . . . 4-5
16-17

## Spring Semester

ACC 231 Prin. of Managerial Accounting . . . . . . . . . . . . . . 3
ECO 261 Principles of Economics II . . . . . . . . . . . . . . . . . . . 3
MGT 210 Business Statistics I ................................. . . 3
Literature or Humanities course. . . . . . . . . . . . . . . . . . . 3
Electives............................................ . . . . 3
Physical Education activity . . . . . . . . . . . . . . . . 1

Junior Year
Fall Semester
MGT 310 Business Law 1. . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
MKT 370 Principles of Marketing . . . . . . . . . . . . . . . . . . . . . 3
MGT 312 Principles of Management . . . . . . . . . . . . . . . . . 3
ACC 333 Cost Accounting .................................. . . . . . . 3
Elective . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Physical Education activity . . . . . . . . . . . . . . . . . . 1

## Spring Semester

MGT 319 Business Communications. . . . . . . . . . . . . . . . . . 3
MGT 315 Financial Management . . . . . . . . . . . . . . . . . . . . . 3
Management electives
per requirements . . . . . . . . . . . . . . . . . . . . . . 6
Electives. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3

## Spring Semester

MGT 412 Personnel Management. . . . . . . . . . . . . . . . . . . .
Management electives per requirements 6

Electives

Spring Semester
ENG 108 English Composition . . . . . . . . . . . . . . . . . . . . . . 3
Speech............................................. . . . . 3
Humanities . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
ECO 260 Prin. of Economics I . . . . . . . . . . . . . . . . . . . . . . . 3
Natural Science . . . . . . . . . . . . . . . . . . . . . . . . . 4-5

## Sophomore Year <br> Fall Semester

Humanities or Lit. . . . . . . . . . . . . . . . . . . . . . . . . . . 3
ECO 261 Prin. of Economics II . . . . . . . . . . . . . . . . . . . . . . 3
ACC 230 Prin. of Finan. Accounting . . . . . . . . . . . . . . . . . . 3
MGT 210 Business Statistics I ............................... . . 3
Social Science . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Phys. Ed. activity . . . . . . . . . . . . . . . . . . . . . . . . . . 1

## Spring Semester

Social Science course . . . . . . . . . . . . . . . . . . . . . . 3
MKT 370 Prin. of Marketing . ................................. 3
ACC 231 Prin. of Manag. Acctng. . . . . . . . . . . . . . . . . . . . . 3
Natural Science . . . . . . . . . . . . . . . . . . . . . . . . 4-5
Humanities area course . . . . . . . . . . . . . . . ..... 3

## Junior Year <br> Fall Semester

MGT 312 Prin. of Management . . . . . . . . . . . . . . . . . . . . . 3
MGT 310 Business Law I. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
MGT 319 Business Communications. . . . . . . . . . . . . . . . . . . . . . . . 3
MKT 375 Advertising . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Elective ....................................... . . . . . . 3
Physical Education activity . . . . . . . . . . . . . . . . . 1

## Senior Year <br> Fall Semester <br> Fall Semeste

MKT 470 Marketing Management ..... 3
MKT 473 Marketing Research ..... 3
Marketing elective ..... 3
Electives. ..... 615
Spring Semester
MKT 474 Marketing Seminar ..... 3
Marketing elective ..... 3
Bus. and Econ. elective ..... 3
Electives. ..... 615
SAMPLE PROGRAM
BACHELOR OF SCIENCE IN EDUCATION DEGREE MAJOR IN BUSINESS SKILLS
Freshman Year
Fall Semester
ENG 104 English Composition ..... 3
Social Science course ..... 3
MGT 110 Business Organization ..... 3
SEC 141 Intermediate Typewriting ..... 3
SEC 144* Elementary Shorthand ..... 3
PED 101 Concepts of Physical Activity ..... 116
Spring Semester
ENG 108 English Composition ..... 3
Speech ..... 3
MAT 105 College Algebra ..... 3
SEC 240 Office Typing Problems ..... 3
SEC 145* Intermediate Shorthand ..... 3
Physical Education activity ..... 116
Sophomore Year
Fall Semester
Social Science course ..... 3
Humanities course ..... 3
SEC 340 Advanced Shorthand ..... 3 ..... 3
Bus. Math or Bus. Stat. I ..... 3
Physical Education activity ..... 1
Spring Semester
Natural Science ..... 4-5
ACC 231 Prin. of Managerial Accounting .....  3
CSC 182 Intro. to Data Processing ..... 3
ECO 260 Principles of Economics! ..... 3
Physical Education activity ..... 1
14-15
Junior Year
Fall Semester
Natural Science ..... 4-5
ACC 330 aterm. Accounting I .....  3
SEC 342 Model Office I ..... 6
SED 202 Participation in Teaching 1 ..... 3

## Senior Year <br> Fall Semester

SED 202
Participation in Teaching I .3

BUS 455** Methods of Teaching Bus. Subj. ............. . . 3
SED 303 Experience in Teaching II ...................... . . 3
EED 305 Psychology in Teaching . . . . . . . . . . . . . . . . . . . . 4
Education elective . . . . . . . . . . . . . . . . . . . . . . . . 3
Elective ........................................... 3
16
Spring Semester
SED 404 Foundations in Secondary Educ. . . . . . . . . . . . . . 3
SED 407 Educ. of the Exceptional Student . . . . . . . . . . . . 2
SED 409 Sec. Student Teaching III ........................ 9
*If student has received one unit of credit in high school, enroll in 145 Intermediate Shorthand first semester and 340 Advanced Shorthand second semester. Sophomore year, use the time for a business and economics elective.
**Must be taken to Student Teaching III.

## SAMPLE PROGRAM

## BACHELOR OF SCIENCE IN EDUCATION DEGREE MAJOR IN BASIC BUSINESS

Freshman Year Fall Semester
ENG 104 English Composition............................ . . . 33
Social Science course ..... 3
Social Science course ..... 3
SEC 141 Intermediate Typewriting ..... 3
PED 101 Concepts of Physical Activity ..... 1
Spring Semester
ENG 108 English Composition ..... 3
Speech ..... 3
MAT 105 College Algebra . ..... 3
SEC 240 Office Typing Problems ..... 3
CSC 182 Intro. to Data Processing ..... 3
Physical Education activity ..... 116
Sophomore Year
Fall Semester
Humanities courses ..... 6 ..... 6
ACC 230 Prin. of Financial Accounting ..... 3
ECO 260 Prin. of Economics I ..... 3
MKT 374 Salesmanship .....  3
Physical Education activity ..... 1
Spring Semester
ACC 231 Prin. of Managerial Accounting ..... 3
ECO 261 Prin. of Economics II ..... 3
MGT 210 Business Statistics I .....  3
Natural Science ..... 4-5
Physical Education activity
Spring Semester
Social Science course ..... 3
Electives ..... 6
MGT 311 Business Law II ..... 3
MGT 312 Principles of Management ..... 315
Senior Year
Fall Semester
BUS 455* Methods of Teach. Bus. Subjects ..... 3
MGT 319 Business Communications ..... 3
SED 303 Experience in Teaching II ..... 3
EED 305 Psychology in Teaching ..... 4
Education elective ..... 316Spring Semester
SED 404 Foundations in Secondary Educ. ..... 3
SED 407 Educ. of the Exceptional Student ..... 2
SED 409 Secondary Student Teaching III ..... $\underline{9}$14*Must be taken prior to 409 Student Teaching III.
BACHELOR OF SCIENCE IN EDUCATION DEGREE MAJOR IN MARKETING EDUCATION
Freshman YearFall Semester
ENG 104 English Composition ..... 3
MAT 105 College Algebra . ..... 3
Social Science course ..... 3
PSY 101 General Psychology ..... 3
sec 141 Intermediate Typewriting ..... 3
PED 101 Concepts of Physical Activity ..... 116
Spring Semester
ENG 108 English Composition ..... 3
Speech ..... 3
SEC 240 Office Typing Problems ..... 3
Natural Science ..... 4-5
Physical Education activity ..... 1
14-15
Sophomore Year
Fall Semester
Humanities courses ..... 6
ACC 230 Prin. of Financial Accounting ..... 3
ECP 260 Prin. of Economics I ..... 3
MCT 210 Business Statistics I ..... 3
Physical Education activity ..... 116

## Junior Year

## Fall Semester

ACC 330 Intermediate Accounting I ..................... 3
Natural Science course. . 5
SED 202 Participation in Teaching I. .....  3
MKT 371 Principles of Retailing ..... 3
MKT 374 Salesmanship ..... 3

## Spring Semester

MGT 312 Principles of Management ................... . . . 3
MKT 376 Advertising ...................................... 3
Marketing electives . . . . . . . . . . . . . . . . . . . . . . . . . . 6
Humanities course . . . . . . . . . . . . . . . . . . . . . . . 3

## Senior Year

## Fall Semester

BUS 455* Methods of Teaching Bus. Subj. ................. 3
MGT 319 Business Communications. . ....................... 3
SED 303 Experience in Teaching II ........................... 3
EED 305 Psychology in Teaching . . . . . . . . . . . . . . . . . . . . 4
Marketing Elective . . . . . . . . . . . . . . . . . . . . . . 3

## Spring Semester

SED 404 Foundations in Secondary Educ. . . . . . . . . . . . . . 3
SED 407 Educ. of the Exceptional Student . . . . . . . . . . . . 2
SED 409 Secondary Student Teaching III . . . . . . . . . . . . . . 9
*Must be taken prior to 409 Student Teaching III.

## SAMPLE PROGRAM <br> ASSOCIATE OF SCIENCE DEGREE IN MID-MANAGEMENT-ACCOUNTING

## Freshman Year

 Fall SemesterMGT 110 Business Organization ........................... 3
ACC 230 Prin. of Financial Accounting .................... 3
ECO 260 Principles of Economics I...................... . . . 3
ENG 104 English Composition................................... 3
PED 101 Concepts of Physical Activity ................. 1
MGT 116 Bus. Math or 210 Bus. Stat. . ..................... 3

## Spring Semester

ACC 231 Prin. of Managerial Accounting . . . . . . . . . . . . . 3
ECO 261 Principles of Economics II .......................... . . . . 3
Speech . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Electives. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 6
Physical Education activity . . . . . . . . . . . . . . . . . 1

## Spring Semester

ACC 331 Intermediate Accounting II ..... 3
Humanities elective ..... 3
*Business elective ..... 3
Electives ..... 6
*Business elective should be upper level course in business or economics to provide student with additional skill consistent with career objectives.

## SAMPLE PROGRAM ASSOCIATE OF SCIENCE DEGREE IN MID-MANAGEMENT-BANKING AND FINANCE <br> Freshman Year Fall Semester

MGT 110 Business Organization . . . . . . . . . . . . . . . . . . . . . 3
ACC 230 Prin. of Financial Accounting .................... 3
ECO 260 Principles of Economics I............................ . . . 3
ENG 104 English Composition. . . . . . . . . . . . . . . . . . . . . . . 3
MGT 116 Bus. Math or 210 Bus. Stat. ..................... . . . . 3
PED 101 Concepts of Physical Activity .................... 1 16

Spring Sernester
ACC 231 Prin. of Managerial Accounting . . . . . . . . . . . . . 3
ECO 261 Principles of Economics II ..................... . . . . 3
Elective . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Speech . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
BAN 253 Bank Management . . . . . . . . . . . . . . . . . . . . . . . . . 3
Physical Education activity . . . . . . . . . . . . . . . . . . 1
16

## Sophomore Year

Fall Semester
MGT 310 Business Law I. . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
MGT 315 Financial Management.................................... . . . . . 3
Banking and Finance elective . . . . . . . . . . . . . . . 3
Am. Hist. or Am. Nat'l. Gov't. . . . . . . . . . . . . . . . 3
Elective . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3

Humanities elective . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Electives. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 6

Fall Semester

MGT10 Business Or
MGI110 Business Organization ....................... 3
ACC 230 Prin. of Financial Accounting . . . . . . . . . . . . . . . 3
MGT 116 Bus. Math or 210 Bus. Stat. ...................... 3
CSC 182 Intro. to Data Processing . . . . . . . . . . . . . . . . . . . . 3
ENG 104 English Composition . . . . . . . . . . . . . . . . . . . . . . . 3
PED 101 Concepts of Physical Activity . . . . . . . . . . . . . . . 11

Spring Semester

ACC 231
Prin. of Managerial Accounting3
ECO 260 Principles of Economics I ..... 3
Elective ..... 3
Speech
3
CSC 240
Physical Education activity ..... 1
Sophomore Year Fall Semester
CSC 245 Introduction to COBOL ..... 3
Am. Hist, or Am. Nat'l. Gov't. ..... 3
MGT 310 Business Law ..... 3
MGT 312 Principles of Management
3
ECO 261 Principles of Economics II15
Spring Semester
CSC 345 Advanced COBOL ..... 3
Humanities elective ..... 3
Electives ..... -
MGT 110 Business Organization ..... 3
ACC 230 Prin. of Financial Accounting ..... 3
ECO 260 Principles of Economics I ..... 3
ENG 104 English Composition ..... 3
MGT 116 Bus. Math or 210 Bus. Stat ..... 3
PED 101 Concepts of Physical Activity16
Spring Semester
ACC 231 Prin. of Managerial Accounting ..... 3
ECO 261 Principles of Economics II ..... 3
MKT 370 Principles of Marketing ..... 3
Elective ..... 3
Speech ..... 3
Physical Education activity ..... 116
Sophomore Year
Fall Semester
MKT 376 Advertising ..... 3
MKT 274 Salesmanship ..... 3
Am. Hist. or Am. Nat'l. Gov't. ..... 3
Humanities elective
3
Elective15
Spring Semester
MKT 371 Principles of Retailing ..... 3
MGT 312 Principles of Management ..... 3
Electives15

tducation are concerned with the total process of helping individuals become teachers. Students who wish to become elementary or secondary teachers learn to understand and utilize the principles of learning, human growth and development, and inter-personal relationships. The departments also provide the student with specialized educational experiences in participating elementary and secondary schools under the supervision of experienced master teachers. The professional training of the prospective teacher is normally scheduled throughout the sophomore, junior and senior years, culminating within a final professional semester. The professional education sequence complements a broad general education curriculum. A sound command of a major teaching field is integrated throughout the four year program. The Missouri Western State College Teacher Education Program is accredited by the National Council for Accreditation of Teacher Education (NCATE).

The department of Elementary and Special Education offers a major in elementary education for the degree of Bachelor of Science in Education. The Bachelor of Science in Education with an emphasis in secondary education is offered in conjunction with other departments. All degree programs satisfy the appropriate requirements for teacher certification as established by the State Department of Education of Missouri. To be certified to teach the candidate must have fulfilled all degree requirements and must, according to Section 168.031 of the Missouri School Laws, present evidence of good moral character.
The department of Elementary and Special Education offers an Associate of Science degree with a major in Elementary EducationTeachers Aide.
Admission to the Teacher Education Program:

## GENERAL REQUIREMENTS:

The applicant's record must be without incident which could be found detrimental to future success as a teacher.
The applicant must be a good moral character as demonstrated by objective evidence, be free from gross physical and mental
teacher unlikely,
have command of standard acceptable English usage and be able to communicate as expected of a teacher,
be a student in good standing by the standards of Missouri Western State College, and, receive approval by the Teacher Education Admissions and Retention Committee.

## SPECIAL REQUIREMENTS:

For admission to the Participation in Teaching I program, the student must submit an application as determined by the teacher education program and have a 2.0 overall grade point average.
For admission to the Experience in Teaching II program, the student must
successfully complete Participation in Teaching I,
submit an application as determined by the teacher education program,
have a 2.0 overall grade point average and, have the recommendation of college and cooperating school personnel.
For admission to the Student Teaching III program, the student must
successfully complete Experience in Teaching
submit an application as determined by the teacher education program, have a 2.3 grade point average in major field and professional sequence courses, have a 2.0 overall grade point average, have at least a 2.0 for each course in professional sequence and,
have the recommendation of college and cooperating school personnel.
Completion: To be recommended for certification a student must have at least a 2.0 in his student teaching experience. Such refusal of certification will be so stated on the person's transcript.

## Special Program:

Academic Contracts (1-and 2-year temporary Missouri Certification):
Academic Contracts are available at Missouri Western State College. Interested persons should contact the Supervisor of Academic Contracts.

Summer Student Teaching is offered for experienced teachers only and will be arranged with the appropriate Department Chairman in Teacher Education.

The department of Elementary and Special Education is committed to the professional preparation of teachers for employment in elementary and special education programs. The goals are to prepare teachers who are:
highly knowledgeable in the cognitive areas,

## DEGREE REQUIREMENTS

General Studies requirements must be satisfactorily completed.
In addition to the general studies and the professional sequence, the elementary major is required to successfully complete the following courses: GEO 100, PSC 101, HIS 140 and 150, ART 300, MUS 300, EED 310, 320, 383, and PED 300 and 382, ESC 304, ENG 300, and MAT $300^{*}$ and $400^{*}$. Some of these courses meet General Studies and Elementary Education requirements.
*To meet the wide variance of individual mathematical backgrounds elementary majors may elect to be placed, after consulting the Math and Elementary Education Departments according to the following:

High school graduate five years or more ago with one year general math or with one year of Algebra with a C/D grade-take MAT 100, 101, 300 and 400.
Algebra I with $A / B$ within past five years enroll in MAT 101, 300 and 400.
Three or more years of college-prep, high school math $A / B$ enroll in MAT 300 and 400.

The elementary major may also select an emphasis area. If the requirements as determined by the Department and approved by Certification Section, State Department of Education, State of Missouri, are met, endorsements to the Life Certification, Elementary K-8 certificate may be secured.

The emphasis areas and/or special teaching areas include:
trained in the techniques and methods of teaching across the wide spectrum (early childhood through elementary grades),
warm, understanding, and empathetic in the area of humanizing education, and ready to assume an active role in the profession of teaching

| ART | PHYSICAL |
| :--- | :--- |
| ENGLISH | EDUCATION |
| FOREIGN LANGUAGE | GENERALSCIENCE |
| MATHEMATICS | SOCIALSCIENCE |
| MUSIC | READING |
|  | LANGUAGE ARTS |

Special certificates can be earned in the areas of:
EARLY CHILDHOOD EDUCATION REMEDIAL READING
teaching of the mentally retarded CHILD
TEACHING OF THE EMOTIONALLY DISTURBED CHILD
TEACHING OF CHILDREN WITH LEARNING DISABILITIES.

The requirements for emphasis areas and specialized certificate programs are available from the elementary education advisors. Early planning of one's total program is highly desirable for the achievement of concurrent, multiple certification.

Professional Sequence is:
Semester Hrs.
EED 202 Participation in Teaching I 3
EED 303 Experience in Teaching II 3
EED 305 Educational Psychology; Psychology in Teaching 4
EED $403 \begin{aligned} & \text { Foundations in Education } \\ & \text { (Elementary) }\end{aligned}$
EED 408 Student Teaching; Student Teaching III10
EED 410 Education of the Exceptional Child ..... 2
enrolled students or any interested individual.
Participation in Teaching (3) $i$, ii
(Applicable to all teacher education students) To help the student in his career choice, half of the course is devoted to a classroom situation where an introduction to education, its history and philosophy is given. The second half of the course is devoted to a "in-school experience", giving the student realistic guidance in his career choice.

EED 303 Experience in Elementary Teaching (3) i, ii (Applicable to all teacher education students) A continuation of the off-campus experiences in cooperating schools as a teacher associate. To be taken concurrently with EED 305 or SED 304.
Prerequisite: Approved admission to the Teacher Education Program and Education 202. For elementary majors, EED 310 is a prerequisite.

EED 305 Psychology in Elementary Teaching (4) i, ii
A study of psychological principles as applied to educational settings. To be taken concurrently with EED 303.
Prerequisite: PSY 101 and EED 202.
EED 306* Current Trends in Education (3) $i$, ii
A study of educational innovations, new media, concurrent teaching problems and issues.
Prerequisite: EED 303 and 305 or SED 303 and 304.

EED 310 Teaching of Reading in the Elementary School (3) $\mathbf{i}$, ii

Developmental reading, the techniques of teaching reading in the elementary grades.
Prerequisite: ENG 104 and 108 or 112.
EED 311* Teaching Reading in the Secondary School (3) ii, iii
Techniques of teaching upper-level reading.
Prerequisite: ENG 104 or 108 or 112.
EED 320 Language Arts Methods (3) i, ii, iii
A general survey course to integrate the skills of listening, writing, and speaking with the reading skills.

EED 322* Language Arts Components (1-6) i
A componently-sectioned course designed to give students in-depth experiences in selected sections to meet special needs and interests. A student may take as many sections as desired.
a. Creative Dramatics b. Written Expression c. Poetry d. Listening e. Speech Development $f$. Handwriting g. Oral Communication h. Spelling i. Grammar and Linguistics $\mathbf{j}$. Language Arts for Children.

EED 331* Audio-Visual Education (1-3) ii
(See Department of Secondary Education.)
EED 342 Measurement and Evaluation in Education (3) $i_{\text {, }}$ ii, iii
Principles and techniques of administration, application and interpretation of tests, test results, and data for education majors.
Prerequisite: EED 303 and EED 305 -SED 304, MAT 201 or consent of Department Chairman.
EED 383 Diagnostic and Corrective Reading for the Classroom Teacher (3) i, ii, iii
Evaluation and diagnosis of basic problems. Prerequisite: EED 310 or 311.
for those programs which are currently used in area schools. It is recommended that a student take no more than six sections. Each section is one semester hour.
a. Phonic Methods b. Linguistic Methods c. Enrichment Methods d. Language Experience e. Individual Methods f. Basal Programs Prerequisite: EED 310 or 311.
EED 403 Foundations in Elementary Education ( ) i, ii An introduction and appraisal of the problems facing the teacher in the classroom, school, and society. To be taken concurrently with EED 408.
EED 408 Elementary Student Teaching III (10) $i$, ii
A semester of clinical experience in an offcampus situation under a cooperating teacher. To be taken concurrently with EED 403. Prerequisite: EED 202, 303, 305.
EED 410 Education of the Exceptional Child (2) $i$, ii, iii A course designed to give all teachers background and experience in working with the exceptional child in the regular classroom.

EED 413 Speech Correction for the Classroom Teacher (3) ii, iii

Methods and techniques of speech correction applied and utilized by the classroom teacher.

EED 414 Methods of Teaching the Mentally Retarded (3) i

Special techniques for teaching a typical child.
Prerequisite: EED 303, 305, or approval of the Department Chairman.

EED 415 Methods of Teaching the Emotionally Disturbed (3) ii
Special techniques for teaching the emotionally disturbed child.
Prerequisite: EED 303, 305 or approval of the Department Chairman.
EED 416 Methods-Learning Disabilities (3) ii, iii
Special techniques for teaching the child with learning disabilities.
Prerequisite: EED 303, 305 or approval of the Department Chairman.
EED $440^{*}$ Early Childhood Education (1-6) i, ii, iii
A componently-sectioned course designed to give the student in-depth understanding of early childhood education. A student may elect one or more sections.
a. Child Development b. Methods and Materials c. Parent Education d. Preschool Education e. Creativity f. Self-Concept.
Prerequisite: Approval of the Education Department Chairman.

EED 450 Independent Study (credit hours open) i, ii, iii A research-oriented involvement intended to extend the competencies of the student in a particular area of education.
Prerequisite: Approval of the Education Chairman.
EED 483 Practicum I (Diagnosis of Reading Difficulties) (4) i , ii

A clinical diagnosis in evaluation of reading and learning problems.
Prerequisite: EED 310, 383, and consent of the Education Department Chairman. ( 2 hours lecture, 3 hours laboratory.) Course can only be taken on Missouri Western State College campus.

## SAMPLE PROGRAM ELEMENTARY EDUCATION

## Freshman Year <br> First Semester

ENG 104 English ..... 3
MAT 101 Math ..... 3
HIS 140 Am. History ..... 3
SPH 104 Speech ..... 3
PED 101 P.E. Concepts ..... 1
PED 300 El. School Health ..... 2

## Second Semester

ENG 108 English ..... 3
HIS 150 Am. History ..... 3
BIO 101 Biology ..... 5
GEO 100 Geography ..... 3
P.E. Activity ..... 115
Sophomore Year First Semester
EED 202 Participation I ..... 3
EED 310 Elem. Reading ..... 3
PSC 101 Pol. Sci. (Govt.) ..... 3
Physical Sci. ..... 4-5
P.E. Activity ..... 1
PSY 101 Gen. Psych. ..... 3
19-20
Second Semester
MAT 300 Math ..... 3
ENG 210 App. to Lit ..... 3
*PSY 312 Psych. of Ex. Child ..... 3
P.E. Activity ..... 1
EED 383 Diag. Reading ..... 3
Elective ..... 3
*EED 342 Meas/Eval. ..... 3
Junior YearFirst Semester
EED 303 Experience II ..... 3
EED 305 Psych. in Teaching ..... 4
MUS 300 Music ..... 3
ENG 300 Child. Lit. ..... 3
EED 320 Language Arts ..... 316
Second Semester
MAT 400 Math ..... 4
ESC 304 Environ. Sci. ..... 4
ART 300 Art ..... 3
PED 382 P.E ..... 3
EED 410 Ed. of Except. Child ..... 2
*EED 414, or EED 415, or EED 416 ..... 319
Senior Year
First Semester
EED 403 Foundations ..... 2
EED 408 Student Teaching ..... 10
Elective ..... 2
*SOC 110 Sociology79

## Second Semester

3
*PSY 304 Child Psychology ..... 3
*PSY 309 Abnormal Psychology ..... 39*For those interested in Special Education Certification.

For those interested in Special Education Certification.

The department of Secondary Education has an overall objective of providing the seconddary schools with the best possible teachers to staff the classrooms. In accordance with this overall objective are the specific objectives of producing secondary education graduates who are capable of:
teaching in one or more fields, so their backgrounds will allow them to bring expertise in the discipline to the students.
implementing the idea that "teachers

## DEGREE REQUIREMENTS

The general studies requirements must be completed satisfactorily.
The specific requirements in the major field are set by the departments. Secondary education majors are available in the following fields: Art, Biology, Business, Mathematics, Music, English, Chemistry, Physical Education, Social Science, Speech and Theatre, Certification in a second teaching area is available in the majority of the above named fields. Degree requirements for the B.S. in Ed successfully completed according to departmental standards, fulfill certification requirements of the Missouri State Department of Education. Missouri Western State College is accredited by the National Council for Accreditation of Teacher Education (NCATE).

The professional sequence is as follows:
Course
Semester Hrs.
SED 202 Introduction to Secondary Education 2
SED 203 Participation in Secondary Teaching 1
SED 303 Experience in Secondary Teaching II3
SED 304 Psychology in Secondary Teaching ..... 4
SED 404 Seminar in Secondary Education and Human Relations ..... 3
SED 407 Education of the Exceptional Student ..... 2
SED 409 Secondary Student Teaching III ..... $\underline{9}$
teach students, not subject matter." The professional preparation in secondary education is well attuned to the human aspects of the educational process.
functioning in a variety of teaching situations, from the traditional to the innovative. In the professional preparation, attention is given to the new and different approaches to secondary education along with an exposure to the time-tested methods of teaching.

## THE PROFESSIONAL SEMESTER

Secondary Student Teaching III (SED409) is to be taken during the student's senior year.
Foundations in Secondary Education (SED 404) and Education of the Exceptional Student (SED 407) are to be taken concurrently with Secondary Student Teaching III. This semester is designated as a Professional Education semester.

Course work during the Professional Education semester is usually limited to SED 404, SED 407, and SED 409.
Petition for any additional course work must be submitted to the Chairman of Secondary Education in the semester prior to Secondary Student Teaching III. If granted, approval will be endorsed by the cooperating teacher to whom the student petitioner is to be assigned.
A student enrolled in Secondary Student Teaching III will assume the daily teaching schedule of the cooperating teacher.
*(Jointly offered by Elementary and Secondary Departments)

SED 202 Introduction to Secondary Education (2) i, ii A basic introduction to professional education. An on-campus exploratory course to aid the participant in deciding whether or not to become a teacher and provide for basic information and attitude development necessary to successful teaching. Taken the same semester as SED 203.

Prerequisite: SED 202-Approved admission to the Teacher Education Program.
SED 303 Experience in Secondary Teaching II (3) i, ij A continuation of the off-campus experience in a cooperating school as a teacher associate. To be taken concurrently with SED 304.
Prerequisite: PSY 101, SED 202, and SED 203.
SED 304 Psychology in Secondary Teaching (4) i, ii
A course designed to study psychological principles as applied to educational settings. To be taken concurrently with SED 303.
Prerequisite: PSY 101, SED 202 and 203.
*SED 306 Current Trends in Education (3) i, ii
A study of educational innovations, new media, current teaching problems and issues.
*SED 331 Audio-Visual Education (1-3) i
A component course designed to give students in-depth experiences in selected areas of instructional Media/Audio-Visual Education: (1) Classroom Utilization and Selection of Instructional Media (2) Preparation of Instructional Materials (3) Equipment Operation. Students are required to provide their own supplies for preparing instructional materials. Components can be taken independently but it is recommended that all three components be taken during one semester. A lab fee will be charged.
SED 404 Seminar in Secondary Education and Human Relations (3) i, ii
A study of philosophical, ethical, and legal problems related to Secondary Education. Instructional strategies, including classroom and laboratory experiences are explored. Consideration is given to interpersonal relations as applied to teaching. To be taken concurrently with SED 407 and SED 409.
Prerequisite: SED 303 and SED 304.

SED 409 Student Teaching III (Secondary) (9) i, ii Full-time off-campus teaching experiences working with a cooperating teacher. To be taken concurrently with SED 404 and SED 407. Prerequisite: SED 303, SED 304, and special methods course in the major.

SED 410 Student Teaching IV (6) iii
An on-campus course designed for the experienced teacher. Activities will include micro teaching and human relations training. Not open to baccalaureate degree candidates.
Prerequisite: one full academic year of teaching experience plus completion of a baccalaureate degree.

SED 430 The Middle School (2) is
A course designed to explore the philosophy, curriculum, and techniques applicable to middle schools and junior high schools. a. Concepts b. Core Curriculum c. Psychology of the Emerging Adolescent.

SED 450 Independent Study (credit hours open) i, ii, iii A research-oriented involvement intended to extend the competencies of the student in a particular area of education.
Prerequisite: Approval of the Chairman of Secondary Education.
SED 490 Applied Education Practices (1-9)
Workshops will be developed in selected areas in accordance with demonstrated interest and need.
*EED Teaching Reading in the Secondary School (3) i (See Department of Elementary Education)


The Department of Engineering Technology offers two and four year programs in engi-

## ENGINEERING TECHNOLOGY:

Engineering Technology has been defined as that part of the technological field which requires the application of scientific and engineering knowledge and methods combined with technical skills in support of engineering activities; it lies in the occupational spectrum between the craftsman and the engineer at the end of the spectrum closest to the engineer.
Engineering technology is oriented less toward theory and more toward practical applications. The associate of science degree prepares the student to be an engineering technician, and the baccalaureate degree program prepares the student to be an engineering technologist. Both the four and two year programs are designed to prepare the student to work in meaningful jobs. Programs are offered in Construction Engineering Technology and Electrical Engineering Technology.
Graduates from other institutions with associate degrees in electrical-electronics or civilconstruction engineering technology are eligible for transfer into the four year programs in engineering technology.

## ENGINEERING (TRANSFER)

Engineering has been defined as the profession in which a knowledge of the mathematical and natural sciences gained by study, experience, and practice is applied with judgement to develop ways to utilize, economically, the material and forces of nature for the benefit of mankind.
The engineering transfer program is closely coordinated with the University of MissouriColumbia and the University of MissouriRolla. Professional engineering is very mathematical and depends heavily on a rigorous study of the natural and engineering sciences. More and more often the professional engineer finds that a master of science degree is necessary to do his work.
The sample program shown in this section is intended only as an example. The exact pro-
neering technology and architecture and professional engineering transfer program.
gram followed will depend on the specialized area (civil, architecture, mechanical, electrical, etc.) and the engineering school to which transfer is planned. Also, many students are not prepared for calculus their first semester and special programs can be arranged. Therefore, an advisor in the Department of Engineering Technology will set up a suitable program for each pre-engineering or pre-architecture student.

## DEGREE REQUIREMENTS

For the Bachelor of Science in Technology Degree with a Major in:

## CONSTRUCTION ENGINEERING TECHNOLOGY:

EGT 100, 103, 104, 154, 202, 204, 250, 258, 356,
456; CET 150, 206, 252, 304, 308, 354, 358, 406, 408, 458; MAT 105, 106, 204; CSC 188; PHY 110; ESC 204 or BIO 101; 3 hours free electives; 12 hours approved technical electives; and 31 hours of general education.

## ELECTRONIC ENGINEERING TECHNOLOGY:

EGT 100, 103, 104, 240, 250, 380, 456; EET 220, 230, 270, 300, 340, 350, 360, 370, 420, 430, 460, 480, 2nd. class FCC License, MAT 105, 106, 204; CSC 188; PHY 110, 111; CHE 101; 5 hours free electives; 6 hours approved technical electives; and 31 hours of general education.
For the Associate of Science Degree with a Major in:

## CONSTRUCTION ENGINEERING <br> TECHNOLOGY:

EGT 100, 104, 154, 202, 204, 250, 258; CET 150, 206, 256, 304, 354; MAT 105, 106, 204; PHY 110; 2 hours free electives and 14 hours of general education.

## ELECTRONIC ENGINEERING TECHNOLOGY:

EGT 100, 103, 104, 240; EET 210, 220, 230, 270, 300, 340; MAT 105, 106, 204; PHY 110; 3 hours free electives and 14 hours of general education.

The occupational spectrum of the technical
world of work is studied emphasizing the role of the engineering technician, the engineering technologist and the professional engineer. Although the course emphasizes the work done by these practitioners, some orientation is given to the kind of education required and what MWSC can provide. Lectures, slides, films, and field trips. One hour lecture. Open to all majors.

Electrical Systems (3) i
The student is exposed to electrical and electronic terminology including component names, electrical units, instrumentation and devices. Component characteristics, electrical measurements, electrical circuits and the application of electricity to other areas are also studied. Emphasis is on power generation and distribution, introductory electrical code. A laboratory section is provided to reinforce the theory as well as provide a practical hands-on approach to gain the student's interest. Two hours lecture, three hours lab.
Prerequisite: MAT 100 or consent of instructor.

## EGT 104 Engineering Graphics I (3) i, ii

An introduction to the fundamentals of drawing, drafting room practices and technical communication through graphics. Technique is developed through the graphical solution of many current, practical problems in the engineering and technical areas. Two hours lecture, four hours lab.

## EGT 154 Engineering Graphics II (3) ii

A continuation of EGT 104, but with an extension of graphical problem solution in three dimensional space. Problem solving techniques are developed through the solution of numerous in-class, practical problems in the engineering and technology areas. Two hours lecture, four hours lab.
Prerequisite: EGT 104.
EGT 202 Surveying I (3) i
An introduction to the basic principles of plane surveying with applications to engineering and construction problems. Laboratory periods will be utilized for in-the-field application of introductory surveying techniques. Two hours lecture, three hours lab.
Prerequisite: MAT 105, 106.

## EGT 204 Architectural Graphics I (3) i

Introduction to architectural graphics with an emphasis on residential type dwellings. Topics include lettering, shades-shadows, free hand sketching, planning and working drawings. Emphasis on technique and methodology. Two hours lecture, four hours lab.
Prerequisite: EGT 104.

Mechanics of Materials (3) on demand
The concept of stress and strain at a point; geometric interpretation of stress and strain; axial, shear, bending and torsional stresses; deflections; introduction to indeterminate structures; elementary column theory. Three hours lecture.
Prerequisite: EGT 258.

Circuit analysis provides a mathematical approach for solving the current flows and voltages in both A.C. and D.C. circuits. Methods used include mesh analysis, nodal analysis, superposition, voltage and current divider rules, Thevenin's Theorem, Norton's Theorem, and Millman's Theorem. R-C and R-L circuits are also analyzed for transient conditions. Whenever possible practical applications are used for illustrations. The computer is used to show the labor saving techniques that are possible for electronic calculations. Two hours lecture, three hours lab.
Prerequisite: EGT 103, MAT 105, 106.
EGT 250 Technical Report Writing (2) ii
The study of various types and forms of reports. Practical projects in preparing reports of various lengths and degrees of complexity. Oral presentation of report material. Emphasis on clear communication of technical ideas. Two hours lecture.
Prerequisite: ENG 104.
EGT 258 Statics and Strength of Materials (4) ii
Topics of study include elements of statics in two and three dimensions; laws of equilibrium applied to structures and machines; simple stresses and strains; torsion, shear and bending; mechanical behavior of materials. Laboratory experience to supplement the theory. Three hours lecture, three hours lab.
Prerequisite: MAT 105, 106.
EGT 300 Dynamics (3) on demand
Motion of a particle; kinetics of rigid bodies; work and energy; impulse and momentum; impact. Three hours lecture.
Prerequisite: EGT 258, MAT 240.
EGT 340 Thermodynamics (3) ii
Fluid properties, work and heat, first law, second law, entropy, applications to vapor and ideal gas processes. Three hours lecture. Prerequisite: MAT PHY 210
EGT 356 Fluids and Hydraulics (3) ii
An introduction to fluid mechanics including fluid statics and elementary fluid dynamics. Typical topics of study include energy equations of steady flow, steady flow of incompressible fluids in pipes, and open channel flow. Three hours lecture.
Prerequisite: MAT 204, PHY 110.
EGT 375 Applied Hydraulics and Pneumatics (3) on demand
Provides the student with a familiarity of industrial hydraulic and pneumatic components and circuits. Identification, functions, and interchangeability of components are areas emphasized in conjunction with drawing schematics, building circuits from schematics, building circuits for specific purposes, and tracing industrial circuits. Two hours lecture, three hours lab. Prerequisite: EGT 240.
EGT 380 Refrigeration and Air Conditioning (3) i
Principles of Refrigeration and Air Conditioning. Study of heat loads and assigning of equipment for specific applications. Electrical circuits and motors. Intensive coverage of mechanical refrigeration systems and service. Two hours lecture, three hours lab.
Prerequisite: EET 220 or consent of instructor.

Electrical Systems of Buildings (3) ii
A more detailed study of the electrical and lighting systems of buildings. Design, code requirements and personnel safety are covered. Three hours lab.
Prerequisite: EGT 103.
EGT 490 Technological Practices (1-3) i, ii, iii
This course is intended for the advanced student who can procure a job which adequately reinforces and extends his knowledge and skills in his chosen field. Approval by the department chairman is required at least two weeks before the end of the previous term.

## CONSTRUCTION ENGINEERING TECHNOLOGY

CET 150 Blueprint Reading (1) ii
The course provides a short but intense coverage of various aspects of blueprint reading from the general and heavy construction field. Topics covered include heavy timber, structural steel and reinforced concrete. One hour lecture. Prerequisite: EGT 104 or consent of instructor.

CET 206 Structural Drawing (2) i
An introduction to the drawing and detailing of various structural elements used in construction. Topics include beams, columns, trusses, frames and slabs with emphasis on the various connections involved in each case. One hour lecture, three hours lab.
Prerequisite: EGT 154.
CET 252 Surveying II (3) ii
Intermediate and advanced surveying techniques and procedures with applications to engineering and construction problems. Topics include mapping, hydrography and photogrammetry. Laboratory periods will be utilized for in-the-field applications of the techniques. Two hours lecture, three hours lab.

## Prerequisite: EGT 202.

CET 256 Bituminous, Concrete, \& Soils (3) ii
A study of the properties and engineering applications of prime materials used in structural and roadway construction, including classification, basic quality control, and construction practices used with respect to asphalt, concrete, and soils. Two hours lecture, three hours lab.
Prerequisite: MAT 204.
CET 304 Methods and Materials of Construction (3) $\mathbf{i}$
An introduction to the methods and materials used in the various areas of the construction industry. Laboratory hours will be utilized for plant trips and field trips. Two hours lecture, three hours lab.
Prerequisite: EGT 204 or consent of instructor.
CET 306 Model Building (3) on demand
Presents the basic techniques and standard procedures of model building in the construction field. The student will construct a model of his choice. Two hours lecture, three hours lab. Prerequisite: EGT 204.

Prerequisite: EGT 258.

CET 354 Construction Estimating (3) ii
An introduction to the field of construction estimating. Emphasis is placed on the accurate and systematic analysis of working drawings and specifications as they pertain to quantity takeoffs. Three hours lecture.
Prerequisite: CET 304.

Structural Steel Design (4) ii
An introduction to elementary structural steel design. The design of individual members and their connections as dictated by various specifications (AISC, AASHO, etc.) is stressed. The laboratory period will include an introduction to the use of the computer in the area of structural analysis. Three hours lecture, three hours lab.
Prerequisite: CET 308.

CET 406 Mechanical Systems of Buildings (3) i
An introduction to the mechanical systems of buildings. Principles of water supply, sanitation systems, plumbing, heating and air conditioning are studied. Three hours lecture.
Prerequisite: EGT 356.

## CET 408 Reinforced Concrete Design (4) i

An introduction to the design of reinforced concrete elements and structures. Topics include beams, columns, slabs and footings. The designs are based on the current ACl Code provisions for elastic and ultimate design. Three hours lecture, three hours lab.
Prerequisite: CET 308 or consent of instructor.

## CET 410 Production Drafting (4) on demand

Drafting practices and terminology peculiar to working drawings. General mechanisms, cams, gears and power transmission. Emphasis is placed on developing speed and accuracy in the production of detail and working drawings for practical application. Two hours lecture, six hours lab.
Prerequisite: EGT 104.

CET 458 Soil Mechanics (4) ii
A study of the properties of soils with applications in civil engineering design and construction. Laboratory experiences to supplement theory. Three hours lecture, three hours lab.
Prerequisite: EGT 258.

## ELECTRONIC ENGINEERING TECHNOLOGY

EET 210 Electronic Design and Fabrication (3) ii
The student selects a construction project subject to the approval of the instructor. Only routine design or re-design is expected with the emphasis on fabrication. Two hours lecture, three hours lab.
Prerequisite: At least ten semester hours of electronics.
(algital and anaiog), oriuges, power suppues,
digital freauency counters, \& special purpose instruments. There is also some discussion of calibration requirements and techniques. The student also gives a demonstration of some electronic test instruments. Two hours lecture, three hours lab.
Prerequisite: EET 230, EGT 240, prefer completion of or concurrent EET 270.

EET 230 Introduction to Electronics (3) ii, iii
The theory of operation of various solid state, devices are studied: diodes, transistors, EET's, SCR's, and monolithic integrated circuits. The student performs laboratory training sessions in which he evaluates many of the solid state devices. Two hours lecture and three hours lab. Prerequisite: EGT 103, concurrent EGT 240 preferred.

Electronics (4) i
This course provides the student with exposure to complete electronic circuits, including: rectifiers, regulators, SCR controls, amplifiers using transistors and FET's, oscillators, waveshaping circuits, clippers, limiters, and basic logic. The laboratory section consists of the following experiments: power supplies, filters, regulators, SCR controls, transistor characteristics, EET characteristics, push-pull amplifiers, oscillators, amplifiers, and logic gates. Three hours lecture, three hours lab.
Prerequisite: EET 230.
Digital Electronics (4) ii
Number systems, computer codes, fundamentals of combinational logic circuits, sequential logic circuits, and special topics. Three hours lecture, three hours lab.
Prerequisite: EET 270 or consent of instructor.
Communication Systems (4) ii
Analysis of various types of circuits used in equipment such as: AM and FM receivers and transmitters, TV receivers and transmitters, and microwave equipment. Antennas and transmission lines are also studied. Three hours lecture, three hours lab.
Prerequisite: EET 270.
EET 350 Advanced Communications Systems (3) ii
A study of communications theory emphasizing the relationship of information transmission with band width and noise. A further study of transmission line theory, electromagnetic fields and wave guides. Three hours lecture.
Prerequisite: EET 340, EET 360, EET 370, MAT 204.

Microwave Systems (3) i
VHF and UHF components, circuits and measurement techniques; distributed elements, waveguides, microwave links, radar and similar systems. Two hours lecture, three hours lab.

## Prerequisite: EET 340.

EET 420 Control Systems (3) ii
The application of electronic control circuits to industrial needs. This includes control of manufacturing processes, measurement and counting of components and servo control. The laboratory section consists of experiments which support the theory presented in the lectures. Two hours lecture, three hours lab.
Prerequisite: EET 300.
EET 430 Advanced Electronics (4) i
An advanced treatment of discrete and integrated circuit electronics. Small signal, large signal and digital circuit topics are extended beyond the level of EET 270 \& EET 300. Three hours lecture, three hours lab.
Prerequisite: EET 270, EET 300.
Rotating Machinery (4) i
This course provides instruction in the construction, theory of operation, and application of the following: various types of A.C. and D.C. motors and generators, synchros and servo systems, and motor controllers. Also, covered are mathematical computations dealing with motor efficiency, power requirements, horsepower, torque, and power factor correction. The laboratory consists of working with various types of A.C. and D.C. motors and generators to observe the actual performance as compared to the theoretical performance. Three hours lecture, three hours lab.
Prerequisite: EGT 103, EGT 240, prefer EGT 456.
EET 480 Design \& Fabrication (3) ii
With the instructors approval, the senior student selects an electronic system or sub-system that he would like to design. The student draws on his basic electronic background to begin his task. He will have to build a functional prototype to demonstrate his design concept. The system design is not a trial and error process since a written paper is required which supports the project. The paper will require the student to develop some research techniques and an ability to document his sources. Two hours lecture, three hours lab.
Prerequisites: thirty hours of electrical courses.

## 85

## Freshman Year <br> Fall Semester

EGT 104 Engineering Graphics I ..... 3
EGT 100 Introduction to Engineering \& Technology ..... 1
Humanities Elective ..... 3
MAT 105-6 College Algebra, Trigonometry ..... 5
ENG 104 Composition and Rhetoric I ..... 3
PED 101 P.E. Concepts ..... 116
Spring Semester
PHY 110 College Physics ..... 5
Blue Prints ..... 1
EGT 154 Engineering Graphics II ..... 3
P.E. Activity ..... 1
MAT 204 Applied Calculus ..... 515
Sophomore Year
Fall Semester ..... 3
EGT 204 Architectural Graphics
EGT 202 Surveying I ..... 3
EGT 103 Electrical Systems. ..... 3
P.E. Activity ..... 1
Social Science Elective ..... 3
CET 206 Structural Drawing ..... 2
Spring Semester
CET 252 Surveying II. ..... 3
EGT 258 Statics \& Strength of Materials ..... 4
EGT 250 Technical Report Writing ..... 2
SPH Speech (104, 105, or 106) ..... 3
*Approved Technical Elective ..... 3
P.E. Activity ..... - 1
Junior Year
Fall Semester
CET 308 Structural Analysis. ..... 3
CSC 188 Fortran IV Programming ..... 3
CET 304 Methods \& Materials of Construction ..... 3
*Approved Technical Elective ..... 3
Geology or Biology ..... 4 or 5
16 or 17
Spring Semester
CET 358 Structural Steel Design ..... 4
EGT 356 Fluids \& Hydraulics ..... 3
CET 354 Construction Estimating ..... 3
ENG 108 Composition and Rhetoric II ..... 3
Humanities Elective .....  3
16
Senior Year
Fall Semester
CET 408 Concrete Design ..... 4
CET 406 Mechanical Systems of Building ..... 3
Economics (Elective) ..... 3
*Approved Technical Elective ..... 3
Humanities Elective ..... 3
*See suggested CET option list for management, art, computer science, electronics, geology \& special

## SAMPLE PROGRAM BACHELOR OF SCIENCE IN TECHNOLOGY DEGREE MAJOR IN ELECTRONIC ENGINEERING TECHNOLOGY

Freshman Year Fall Semester

EGT 103 Electrical Systems. ..... 3
EGT 104 Engineering Graphics I ..... 3
EGT 100 Introduction to Engineering \& Technology ..... 1
MAT 105-6 College Algebra, Trigonometry ..... 5
PED 101 P.E. Concepts ..... 1
ENG 104 Composition and Rhetoric I ..... 316
EGT 240 Electrical Circuits ..... 3
EET 230 Introduction to Electronics ..... 3
MAT 204 Applied Calculus ..... 5
PHY 110 College Physics ..... 5
Sophomore YearCSC 188 Fortran Programming3
EET 270 Electronics ..... 4
EET 220 Instruments \& Measurements ..... 3
CHE 101 Introductory Chemistry ..... 5
PED P.E. Activities ..... - 1Spring Semester
EET 340 Communication Systems ..... 4
EET 300 Digital Electronics ..... 4
EGT 250 Technical Report Writing ..... 2
SPH Speech $(104,105$, or 106$)$ ..... 3
Social Science Elective ..... 316
Junior Year
Fall Semester
ECO 260 Economics (Elective) ..... 3
EET 360 Network Analysis. ..... 3
EET 370 Microwave Systems ..... 3
EGT 380 Refrigeration and Air Conditioning ..... 3
Humanities Elective ..... 3
PED P.E. Activities ..... 116
Spring Semester
EET 350 Advanced Communication Systems ..... 3
PHY 111
Electrical Systems of Buildings .....  3
ENG 108 Composition and Rhetoric II ..... 3
3
Humanities Elective .....  3

Fall Semester

## Spring Semester

EET 480 Design \& Fabrication3
EET 420 Control Systems ..... 3
Approved Technical Elective ..... 3
Sociology or Psychology (Elective) ..... 3
Free Elective ..... 2
P.E. Activities ..... 1

# SAMPLE PROGRAM <br> ASSOCIATE OF SCIENCE DEGREE MAJOR IN CONSTRUCTION ENGINEERING TECHNOLOGY 

## Freshman Year Fall Semester

EGT 104 Engineering Graphics I ..... 3
EGT 100 Introduction to Engineering \& Technology ..... 1
Humanities Elective ..... 3
MAT 105-6 College Algebra, Trigonometry
3
ENG 104 Composition and Rhetoric I15
Spring Semester
PHY 110 College Physics ..... 5
CET 150 Blueprint Reading ..... 1
EGT 154 Engineering Graphics II ..... 3
PED 101 P.E. Concepts ..... 1
MAT 204 Applied Calculus ..... 5
Sophomore Year
Fall Semester
EGT 204 Architectural Graphics ..... 3
Surveying I ..... 3
Methods \& Materials of Construction ..... 3
Structural Drawing ..... 2
Social Science elective ..... 3
Free Elective ..... 2
Spring Semester
CET 354 Construction Estimating ..... 3
EGT 258 Statics \& Strengths of Materials ..... 4
EGT 250 Tech. Report Writing ..... 2
SPH 10 Speech (104, 105, or 106) ..... 3
P.E. Activity ..... 1
CET 256 Bituminous, Concrete \& Soils ..... 3
EGT 100 ..... 1
EGT 103 Electrical Systems ..... 3
Graphics 1 ..... 3
MAT 105-6 College Algebra, Trigonometry ..... 5
PED 101 P.E. Concepts ..... 1
ENG 104 Composition and Rhetoric I ..... 3
Spring Semester ..... 16
EET 230 Introduction to Electronics ..... 3
EGT 240 Electrical Circuits ..... 3
MAT 204 Applied Calculus ..... 5
PHY 110 College Physics .....  5Sophomore YearFall Semester
EET 220 Instruments \& Measurements ..... 3
EET 270 Electronics ..... 4
Approved Elective ..... 3
Speech ..... 3
Humanities Elective ..... 3Spring Semester
EET 210 Electronic Design \& Fabrication ..... 3
EET 340 Communication Systems ..... 4
EET 300 Digital Electronics ..... 4
Social Science Elective ..... 3
P.E. Activity ..... - 1

## SAMPLE PROGRAM

PRE-ENGINEERING TRANSFER PROGRAM
Freshman Year Fall Semester
ENG 104 Composition and Rhetoric I ..... 3
EGT 104 Engineering Graphics 1 ..... 3
MAT 107 Calculus with Analytic Geometry 1 ..... 5
CHE 111 General Chemistry I ..... 5
Spring Semester
EGT 240 Electrical Circuits ..... 3
PHY 210 University Physics I ..... 5
MAT 108 Calculus with Analytic Geometry II ..... 5
ECO 260 Principles of Economics ..... 3
Sophomore Year
Fall Semester
MAT 209 Calculus with Analytic Geometry III ..... 5
PHY 211 University Physics II ..... 4
PSC 101 American National Government ..... 3
CSC 188 Fortran IV Programming ..... 3
Spring Semester
MAT 312 Differential Equations ..... 3
EGT 258 Statics and Strengths of Materials ..... 4
EGT 340 Thermodynamics ..... 3
Humanities Elective ..... 3
EGT 356 Fluids and Hydraulics ..... 3

## RECREATION

Whether programming intramural competition, offering a planned sequence of exercises and sports activities to help students develop strong active bodies, or working with students majors in physical education or leisure management, the Department of Health, Physical Education, and Recreation is interested in assisting all students to become healthy and productive members of society.
Every student at Missouri Western State College, as a part of the general education requirement, must take a course in "Concepts of Physical Activity" from which he or she
becomes acquainted with basic knowledges, understandings and values as they affect the student physiologically, psychologically, sociologically, and emotionally. Each student, based on his self evaluation and guidance by the instructor during the concepts course, should take activity courses which will assist him in areas which he has found personal deficiency.
These courses are of the physical conditioning, aquatics, sport, dance, combative, self-testing, gymnastics, adaptive, recreational and adventure types.

Adaptive Activities may be repeated as often as needed for students with handicaps which restrict them from the regular activity program. Repeats in this course will satisfy General Education activity requirements.
Intercollegiate Sports I and II are offered for intercollegiate team members only. These courses may be repeated up to four times each. They count as electives but will not satisfy the General Education Physical Education activity requirements.
The department offers a Bachelor of Science in Education degree with an all level (elementary, secondary) major in physical education. Majors in this department must meet the requirements of general education, teacher education, and physical education. Students who desire a major in this department encounter the various strategies of successful team coaching, various techniques of planning, teaching, and evaluating physical education programs as well as a scientific background of the discipline.
The department offers a Bachelor of Science degree with a major in leisure management. It offers a core of required courses as well as related course work in an area of professional emphasis as determined by the individual student's interest and upon approval of this advi-
sor. It also offers a minor in leisure management.

Driver Education and Athletic Coaching certification courses are also offered by this department for any education majors who desire teaching certification in these areas.

## MAJOR IN HEALTH AND PHYSICAL EDUCATION (57 HOURS)

Courses in Physical Education must total 52 hours and 5 hours in Biology. The specific courses required are PE 148, 175, 176, 185, 191, 192, 201, 301, 302, 303, 304, 310, 373, 382, 385, 393; three semester hours from 311, 312, 313, 314, 315; four semester hours from 390, 391, 392; four semester hours from specific physical education activities as determined by the student's major advisor.

## BACHELOR OF SCIENCE DEGREE-MAJOR IN LEISURE MANAGEMENT (62 HOURS)

Individuals seeking a Bachelor of Science degree with a major in leisure management are required to take the following: LMA 220, 225, 230, 320, 323, 330, 420, 424, 430; PED 201, 395; and 30 hours within the professional emphasis area of choice (community, outdoor, private, commercial, special populations, or youth agency).
standard certification included. (One hour lec-

## CERTIFICATION IN ATHLETIC COACHING ( 18 HOURS)

Majors in any department who receive a degree in Education may also receive Athletic Coaching Certification. The following are the specific courses required: PED 201, 304, 210, 273, and 385; three semester hours from 311, $312,313,314$, and four semester hours from 390, 391, 392.

## CERTIFICATION IN DRIVER EDUCATION (21 HOURS)

Majors in any department who receive a degree in Education may also receive certification in Driver Education. Courses must total 3 hours in Safety Education, 6 hours in Driver Education, 2 hours in First Aid and 4 hours in Psychology in Secondary Teaching. The following specific courses are required: PED 154, PED 201, PED 254, PED 354 and SED 304. Six hours of electives are to be taken from the following: LAW 140, LAW 160, SED 331 and PED 385.
A facility fee of $\$ 3.00$ is required for all courses in this Department which entitles the student to utilization of the locker and shower rooms.

All Physical Education majors must pass a swimming proficiency test or show evidence of successfully passing a swimming course prior to being admitted into student teaching. The test consists of the following items:
Jump feet first into deep water and level off.
Swim fifteen yards across the pool using the crawl stroke.
Change directions without touching the edge and swim back using the elementary back stroke.

## PHYSICAL EDUCATION THEORY:

PED 101 Concepts of Physical Activity (1) i, ii, iii
To acquaint students with basic knowledge, understandings and values of physical activity as it relates to optimal healthful living. (1 hour lecture and 1 hour lab).

PED 191 Foundation of Physical Education (2) $\mathbf{i}$, $\mathbf{i i}$ Meaning of physical education, opportunities in the field, and evaluation of aptitudes and abilities. Recommended for freshmen. (Two hours lecture).

PED 300 Elementary School Health Education (2) $\mathbf{i}$, ii, iii Emphasis on content, methods, and materials at the elementary grade levels. Designed for the elementary school classroom teacher. (Two hours lecture).
PED 301 Health Teaching in the Schools (2) ii, iii
Emphasis on content, methods, and materials in health education at all levels ( $K$ through 12). (Two hours lecture.)
Prerequisite: PED 192.
PED 302 Methods of Physical Education (2) $\mathbf{i}$, ii
Methods and materials of teaching physical education in the secondary schools. Students are required to assist in the physical education activity program. (One hour lecture, two hours lab.)
Prerequisite: PED 101 plus 8 hours of Physical Education activities.
PED 303 Kinesiology (3) ii, iii
The analysis of movement from a study of the anatomical structure and the mechanical principles of the human body. (Three hours lectures.) Prerequisite: BIO 250.

PED 304 Physiology of Exercise (3) i, iii
Basic physiology applied to physical education and the training and conditioning of athletes. (Two hours lecture, two hours lab.)
Prerequisite: BIO 250.
PED 310 Principles oi Coaching (2) i, ii
A course covering the various principles of coaching in today's public school system.
Prerequisite: Junior classification.
PED 311 Coaching of Football (1) ii
Theory and fundamentals of football dealing with team selection, organization, and control as well as fundamentals and strategies of the game. (One hour lecture, one hour lab.)
Prerequisite: Sophomore classification.
PED 312 Coaching of Basketball (1) i
Theory and fundamentals of basketball dealing with team selection, organization, and control as well as fundamentals and strategies of the game. (One hour lecture, one hour lab.)
Prerequisite: Sophomore Classification.
PED 313 Coaching of Baseball and Softball (1) i
Theory and fundamentals of baseball and softball dealing with team selection, organization, and control as well as fundamentals and strategies of the game. (One hour lecture, one hour lab.)
Prerequisite: Sophomore classification.
PED 314 Coaching of Track and Field (1) ii Theory and fundamentals of track and field dealing with team selection, organization, and control as well as fundamentals and strategies of the sport. (1 hour lecture, 1 hour lab.) Prerequisite: Sophomore classification.
PED 315 Coaching of Volleyball and Tennis (1) i
Theory and fundamentals of volleyball and tennis dealing with team selection, organization, and control as well as fundamentals and strategies of the game. ( 1 hour lecture, 1 hour lab.)
Prerequisite: Sophomore classification.

PED 381 Outdoor Education (2) ii
Development of competencies in teaching in an outdoor learning environment. (Two hours lecture).

PED 382 Elementary School Physical Education (3) i, ii, iii Rhythmic activities, movement education, fundamental skills, and sports and games for the elementary school physical education program. (Two hours lecture, two hours lab).
Prerequisite: Sophomore classification.
PED 383 Adaptive Physical Education (2) ii
Theory and methods of programming activities for handicapped students. Recognition and prevention of, and practical experience with structural deviations from normal body mechanics. (Two hours lecture.)

PED 385 Athletic Training (2) $i$, ii
Prevention and care of common athletic injuries; protective equipment, training methods. (Two hours lecture).

PED 390 Sports Officiating in Football and Wrestling (2) i Rules and techniques used in the officiating of football and wrestling. Officiating in the intramural program is required. (One hour lecture, two hours lab).

Sports Officiating in Baseball, Softball, and Basketball (2) ii
Rules and techniques used in the officiating of baseball, softball, and basketball. Officiating in the intramural program is required. (One hour lecture, two hours lab).

PED 392 Sports Officiating in Field Sports and Volleyball (2) i

Rules and techniques used in officiating field sports and volleyball. Officiating in the intramural program is required. (One hour lecture, two hours lab).

PED 393 Measurement in Physical Education (3) i, ii Methods in evaluation of the product and process; special emphasis on physical fitness, motor ability, posture, and specific sport skills. (Three hours lecture).

PED 395 Intramural Management (2) i
Organization and administration of intramural and extramural activities. Assistance in the intramural program is required. (1 hour lecture, 2 hours lab).

PED 450 Independent Study in Physical Education (1-5 hours) i, ii, iii
A research-oriented involvement intended to extend the competencies of the student in a particular area of education.
Prerequisite: Approval of the Department Chairman.

PED 465 Theory and Methods of Teaching Rhythms (2) ii Methods and procedures for instruction of folk, square, social, modern and tap dancing. (One hour lecture and two hours lab.)
Prerequisite: PED 148 and 153.
PED 480 Practicum in Physical Education (2) i, ii, iii Individualized in-depth study of a subject in which the student is particularly interested. Prerequisite: Senior classification.
bilities teachers and school ardministratorensı sponsibility of protecting children during school activities.
Course directed at preparing students to assume responsibility for safety education and accident prevention programming in school, industry, and/or public service. (Three hours lecture.)

PED 254 Developmental Traffic Education (3)
Introductory course to prepare teachers of Driver Education. Classroom instruction representing a broad approach to the teaching of drivers, both in knowledge and skills essential to successful driving in the teaching of good citizenship on streets and highways. Classroom instruction, laboratory experiences and driving skills are involved.

PED 354 Advanced Traffic Education (3)
Advanced course to prepare teachers of Driver Education. Actual experience in teaching beginning drivers in both the classroom and the car. (Two [2] hours lecture, two [2] hours lab arranged)
Prerequisite: PED 254.

## LEISURE MANAGEMENT

LMA 220 Introduction to Recreation (3) $i$, ii
History and foundations of organized recreation including objectives, responsibilities, scope, economic, and social aspects; tours of specific recreation agencies. (Two hours lecture, two hours lab).

LMA 225 Philosophy of Leisure (2) ii
Analysis of fundamental philosophical concepts as they relate to principles and practices of leisure patterns in modern society. (Two hours lecture.)
Prerequisite: LMA 220.
LMA 230 Recreation; Field Experience I (2) i, ii, iii Practical, exploratory view of three recreation agencies from an on-the-job perspective. (One hour lecture, five hours lab.)
Prerequisite: LMA 220.
LMA 243 Outdoor Living (3) i, ii
To develop knowledge and basic skills in Outdoor Recreation Activities. Emphasis on camping, outdoor cookery, backpacking, conservation, rappelling, and orienteering. Includes two weekend outings. (Two hours lecture, two hours lab).

LMA 320 Science of Leisure Management (2) ii
Social science research of principles, practices, and ethics of management techniques as they relate to leisure organizations. (Two hours lecture.)
Prerequisite: LMA 220.
LMA 322 Social Recreation (2) i
The principles and techniques of administering and conducting social events. Emphasis on planning, discussion, demonstration, and participation. (Two hours lecture).

LMA 323 Foundations for Recreation Programs (3) i Basic principles and practices in planning recreation programs in a variety of settings; additionally, practical application of the planning principles. (Three hours lecture.)
Prerequisite: LMA 220, 225.
view of intended professional aspirations. (One hour lecture, eight hours lab.)
Prerequisite: LMA 220, 230.
LMA 420 Seminar in Recreation (1) i
Practical preparation for profession including job finding skills, interview techniques, values of recreation associations, and visits from field professionals. (One hour lecture.)
Prerequisite: LMA 220, 225.
LMA 424 Organization and Administration of Leisure Agencies (3) ii
The internal operation of leisure organizations including staffing, finance, public relations, areas and facilities, decision making, and problem solving. (Three hours lecture.)
Prerequisites: LMA 220, 225, 323.
LMA 430 Recreation; Field Experience III (9) iii
Full-time summer internship with mutually agreed upon leisure agency to develop and utilize skills learned in the classroom. Prerequisites: LMA 220, 225, 230, 323, 330.
LMA 450 Independent Study in Leisure Management (1-5) i, ii, iii
Individual research investigation on selected topics or problems in the leisure field.
Prerequisite: Approval of the Department Chairman.

LMA 480 Practicum in Recreation (2) $\mathbf{i}$, ii, iii
An individualized approach to acquire entrylevel skills not acquired during curriculum course work. This course may be required by the advisor during a student's senior year.

## ELECTIVE PHYSICAL EDUCATION ACTIVITIES

No activity course can be repeated for credit. (Exceptions: 110, 158, 159.) Elective Physical Education activities will be offered during semesters when staff and facilities are available.
Classes may be offered for women, men, or co-educational.

All sport activities are designed for the development of techniques, knowledges, appreciation, and skills used during one's lifetime for recreation and fitness.

PED 110 Adaptive Activities (1)
A program of activities adapted to the rieeds of the handicapped and physically restricted student. By permission of the coordinator of adaptive activities only.

PED 114
Beginning Tumbling and Trampoline (1)
PED 115 Beginning Apparatus Gymnastics (1)
PED 116 Beginning Bait and Fly Casting (1)
PED 117 Beginning Riflery and Trap Shooting (1)
Students must purchase their own shells.

Students must furnish one can of new tennis balls.

PED 121 Beginning Badminton (1)
Students must furnish three new shuttlecocks.
PED 122 Beginning Orienteering (1)
PED 123 Beginning Judo (1)
Students must furnish Gi.
PED 124 Beginning Survival and Primitive Living (1)
PED 125 Beginning Handball (1)
Students must furnish their own glove.
PED 126 Beginning Squash (1)
PED 127 Beginning Archery (1)
Students must furnish matched set of six arrows.
PED 128 Beginning Backpacking (1)
PED 129 Beginning Mountaineering (1)
PED 130 Beginning Swimming (1)
Basic skills in swimming. Swim suit required.
Prerequisite: Non-swimmers only.
PED 132 Intermediate Swimming (1)
Development of swimming strokes. Swim suit required.
Prerequisite: Ability to swim.
PED 133 Advanced Swimming and Diving (1)
Advanced swimming skills and diving as well as competitive swimming. Swim suit required.
Prerequisite: Above average ability to swim.
PED 134 Life Saving (1)
Life saving techniques as prescribed by American Red Cross Senior Life Saving Certification for those who qualify. Swim suit required.
Prerequisite: Above average ability to swim.
PED 135 Skin and Scuba Diving (1)
Techniques and safety for skin and scuba diving. Swim suit required.
Prerequisite: Above average ability to swim.
PED 136 Recreational Water Sports (1)
Water Polo, Water Basketball, and Water Volleyball, with some small craft activity. Swim suit required.
Prerequisite: Above average ability to swim.
PED 137 Water Safety Instructor (1)
Water safety techniques as prescribed by the American Red Cross. W.S.I. Certification for those who qualify. Swim suit required.
Prerequisite: Current Senior Life Saving Certification.
PED 138 Beginning Sailing and Canoeing (1)
Prerequisite: Above average ability to swim.
PED 144 Beginning Recreational Games (1)
Shuffleboard, table tennis, horseshoes, croquet, and others.
PED 146 Beginning Social Dance (1)
PED 148 Beginning Folk and Square Dance (1)
PED 153 Beginning Modern Dance (1)
Students must furnish leotard.
ment in Physical Education. Must have permission of coach.

| PED 159 | Intercollegiate Sports II (1) <br> College intercollegiate team members only. Will not satisfy general educational requirement in Physical Education. Must have permission of coach. |
| :---: | :---: |
| PED 173 | Beginning Softball (1) |
| PED 174 | Beginning Field Hockey (1) |
| PED 175 | Beginning Volleyball (1) |
| PED 176 | Beginning Soccer and Speedball (1) |
| PED 177 | Beginning Basketball and Flag Football (1) |
| PED 183 | Beginning Wrestling (1) |
| PED 184 | Beginning Body Dynamics (Figure Improvement) (1) |
| PED 185 | Beginning Weight Training and Conditioning (1) |
| PED 186 | Aerobics (1) |
| PED 187 | Beginning Cycling (1) <br> Students must furnish bicycle. |

BACHELOR OF SCIENCE IN EDUCATION DEGREE MAJOR IN PHYSICAL EDUCATION
Freshman Year Fall Semester
ENG 104 English Composition ..... 3
HIS 140, 150 History or
PSC 101 Political Science ..... 3
BIO 101 Biology ..... 5
Math ..... 3
PED 191 Found. of Physical Education ..... 2
PED 101 Concepts of Physical Activity ..... 1Spring Semester
ENG 108 English Composition3
PED 192 Personal \& Community Health ..... 2
Social Science Required Elective ..... 3
Humanities ..... 3
Physical Science ..... 4-5
Physical Education Activities16-17
Sophomore Year
Fall Semester
3
SPH 104 Oral Communication ..... 3
BIO 250 Anatomy and Physiology ..... 5
PED 201 First Aid ..... 2
Physical Education Activities ..... 2Spring SemesterPED 382 Elementary School Physical
Education ..... 3
Social Science Gen. Elective ..... 3
Humanities ..... 6
Physical Education Activities ..... 4

PED 21
Intermediate Bowling (1)
Prerequisite: PED 118 or permission of instructor.

PED 219 Intermediate Golf (1)
Students must furnish four new golf balls.
Prerequisite: PED 119 or permission of instructor.

PED 220 Intermediate Tennis (1)
Students must furnish one can of new tennis balls.
Prerequisite: PED 120 or permission of instructor.

PED 223 Intermediate Judo (1)
Student must furnish Gi.
Prerequisite: PED 123 or permission of instructor.

PED 253 Intermediate Modern Dance (1)
Students must furnish leotards.
Prerequisite: PED 153 or permission of instructor.

PED 275 Intermediate Vollyball (1)
Prerequisite: PED 175 or permission of instructor.

## Junior Year Fall Semester

SED 202
SED 203
SED 310
PED 304
PED 302
Particip econdary Ed. ......................... 2
icipation in Secondary
Principles of Coaching . . . . . . . . . . . . . . . . . . . . . 2
Physiology of Exercise . . . . . . . . . . . . . . . . . . . . 3
Methods of Physical Education. . . . . . . . . . . . . . 2
Coaching Courses . . . . . . . . . . . . . . . . . . . . . . . . . 2
Physical Education Activities .................... 3
Spring Semester
PED 310 Health Teaching in the Schools . . . . . . . . . . . . . 2
PED 303 Kinesiology . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Coaching Course . . . . . . . . . . . . . . . . . . . . . . . . . 1
SED 303 Experience in Secondary Teaching II ........ . 3
SED 304 Psychology in Secondary Teaching . . . . . . . . . . 4
Physical Education Activities . . . . . . . . . . . . . . . 2

## Senior Year <br> Fall Semester

PED 393
PED 385
Measurements in Phys. Ed. . . . . . . . . . . . . . . . . 3
Athletic Training . . . . . . . . . . . . . . . . . . . . . . . . . 2
Physical Education Electives . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
(Upper Division) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 6
6
Free Electives . . . . . . . . . .
Physical Education Activities . . . . . . . . . . . . . . . 1 16

Spring Semester
SED 409
SED 404
SED 407
(Secondary) .....................3

Education of the Exceptional Student ......... 2
PSC 101 Political Science ..... 3
CSC 182 Intro. to Data Processing ..... 3
LMA 220 Intro. to Recreation ..... 3
PED 101 Concepts of Physical Activity ..... 1
ENG 104 English Composition ..... 3
Humanities ..... 316
Spring Semester
LMA 225 Philosophy of Leisure ..... 2
LMA 243 Outdoor Living ..... 3
PSY 101 Psychology ..... 3
Humanities ..... 3
PED (Activity Class) ..... 1
ENG 108 English Composition ..... 315
Sophomore Year Fall Semester
LMA 322 Social Recreation ..... 2
PED (Activity Class) ..... 1
PED 201 First Aid ..... 2
LMA 230 Recreation; Field Experience I ..... 
Natural Science ..... 4-5
Humanities14-15
Spring Semester
LMA 320 Science of Leisure Management ..... 2
(Activity Class) ..... 1
Natural Science ..... 4-5
SOC 110 General Sociology ..... 3
SPH 105 Business and Professional Speech
Elective ..... 3
LMA 330 Recreation; Field Experience II ..... 3
Professional Emphasis Electives
Professional Emphasis Electives ..... 7 ..... 7
Professional E
Free Electives ..... 4 ..... 4 ..... 14

Senior Year

Senior Year

Senior Year

Senior Year

Senior Year

Senior Year

Senior Year

Senior Year

Senior Year         Fall Semester         Fall Semester         Fall Semester         Fall Semester         Fall Semester         Fall Semester         Fall Semester         Fall Semester         Fall Semester

LMA 420 Seminar in Recreation

LMA 420 Seminar in Recreation

LMA 420 Seminar in Recreation

LMA 420 Seminar in Recreation

LMA 420 Seminar in Recreation

LMA 420 Seminar in Recreation

LMA 420 Seminar in Recreation

LMA 420 Seminar in Recreation

LMA 420 Seminar in Recreation .....  .....  .....  .....  .....  .....  .....  ..... 1 .....  .....  .....  .....  .....  .....  .....  ..... 1 .....  .....  .....  .....  .....  .....  .....  ..... 1 .....  .....  .....  .....  .....  .....  .....  ..... 1 .....  .....  .....  .....  .....  .....  .....  ..... 1 .....  .....  .....  .....  .....  .....  .....  ..... 1 .....  .....  .....  .....  .....  .....  .....  ..... 1 .....  .....  .....  .....  .....  .....  .....  ..... 1 .....  .....  .....  .....  .....  .....  .....  ..... 1

PED 393 Intramural Management

PED 393 Intramural Management

PED 393 Intramural Management

PED 393 Intramural Management

PED 393 Intramural Management

PED 393 Intramural Management

PED 393 Intramural Management

PED 393 Intramural Management

PED 393 Intramural Management .....  .....  .....  .....  .....  .....  ..... 2 .....  .....  .....  .....  .....  .....  ..... 2 .....  .....  .....  .....  .....  .....  ..... 2 .....  .....  .....  .....  .....  .....  ..... 2 .....  .....  .....  .....  .....  .....  ..... 2 .....  .....  .....  .....  .....  .....  ..... 2 .....  .....  .....  .....  .....  .....  ..... 2 .....  .....  .....  .....  .....  .....  ..... 2 .....  .....  .....  .....  .....  .....  ..... 2

Professional Emphasis Electives

Professional Emphasis Electives

Professional Emphasis Electives

Professional Emphasis Electives

Professional Emphasis Electives

Professional Emphasis Electives

Professional Emphasis Electives

Professional Emphasis Electives

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Spring Semester

Spring Semester

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LMA 424

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LMA 424   Organization and Administration of   Organization and Administration of   Organization and Administration of   Organization and Administration of   Organization and Administration of   Organization and Administration of   Organization and Administration of   Organization and Administration of   Organization and Administration of   Leisure Agencies   Leisure Agencies   Leisure Agencies   Leisure Agencies   Leisure Agencies   Leisure Agencies   Leisure Agencies   Leisure Agencies   Leisure Agencies .....  .....  ..... 3 .....  .....  ..... 3 .....  .....  ..... 3 .....  .....  ..... 3 .....  .....  ..... 3 .....  .....  ..... 3 .....  .....  ..... 3 .....  .....  ..... 3 .....  .....  ..... 3

Professional Emphasis Electives

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Free Electives ..... 3-4 ..... 3-4 ..... 3-4 ..... 3-4 ..... 3-4 ..... 3-4 ..... 3-4 ..... 3-4 ..... 3-4
13-14
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13-14
Senior Year
Senior Year
Summer Semester
Summer SemesterLMA 430 Recreation; Field Experience III.9


The department of Military Science administers the Reserve Officer's Training Corps (ROTC) program to those students desiring to enroll in Army ROTC. The purpose of Army ROTC is to develop qualities of leadership and skills in college-trained men and women in order to provide the Army and the civilian community with well-rounded leaders. The Army ROTC program is designed to provide broad leadership education rather than to develop military specialists. All courses are open to any student regardless of whether or not they enroll in the ROTC program.
The general military science curriculum at Missouri Western State College provides the cadet with the general leadership management and military skills needed to qualify for
a commission in any of the branches of the Army. The student is afforded the opportunity to apply this training during field training, conducted off campus. This curriculum alone does not lead to a degree, but is to be utilized in conjunction with another department granting a degree.
A commission as a Second Lieutenant in the United States Army Reserve is granted to the individual who completes either the TwoYear or Four-Year ROTC Program and obtains a baccalaureate degree from this college. Currently, a college graduate who is commissioned through ROTC is placed on active duty for either three months or three years depending on his desires and on needs of the service at the time of graduation.
veterans should contact the Director of Military Science for permission to enter the advanced course.
MONETARY ALLOWANCES: All ROTC students are furnished texts for their military science courses and uniforms for wear during leadership laboratory. Students enrolled in the last two years of military science receive $\$ 100$ per month, during the school year, not to exceed ten months per year. In addition, those cadets attending summer camps receive travel pay to and from the camp and monthly financial aid as previously described.

FINANCIAL ASSISTANCE:
Scholarship
One, two three, and four-year scholarships are awarded each year to selected students who are enrolled or will enroll in the Army ROTC Program. The scholarships provide payment of all tuition fees, textbooks, and a monthly payment of $\$ 100$ for the duration of the scholarship, not to exceed 10 months for each year of the scholarship.
Department of Military Science Scholarship. This scholarship has been established by the college and is to be given to a deserving freshman or sophomore who is enrolled in the ROTC program as a cadet. One scholarship will be given in each of the fall and spring semesters based on availability of funds. The recipient will receive $\$ 100$ towards
other source. Application should be made to
ment Chairman.

Fee Waivers: Fee waiver scholarship. See Department Chairman.

MIL 100 Development of the Defense Establishment (1) i, ii, iii
An examination of the evolution of the United States Military Defense System and the citizen soldier concept to include the evolution of warfare and development of weapons.
MIL 010 Leadership Laboratory (0) $\mathbf{i}$, $\mathbf{i}$, iii
Introduction to movement of small units and adventure training in basic mountaineering.
Prerequisite: Concurrent enrollment in MIL 100.

MIL 110 The Defense Establishment in National Security (1) i , ii, iii

A study of the organization and functions of the defense establishment of the United States to include the interrelations between services under the Department of Defense and the relationship of the Department of Defense to constitutional civil authority.

MIL 011 Leadership Laboratory (0) i, ii, iii
Basic military leadership, first aid and small unit movement.
Prerequisite: Concurrent enrollment in MIL 110.

MIL 200 American Military History (2) i, ii, iii
A general study and application of the development of the American Military System from colonial times to the present.

MIL 020 Leadership Laboratory (0) i, ii, iii
Adventure training in basic mountaineering and the study of military weapons.
Prerequisite: Concurrent enrollment in MIL 200.

MIL 210 Map Reading and Small Unit Tactics (2) ii, iii The study of map reading and analysis, offensive and defensive principles, small unit organization and tactics.
MIL 021 Leadership Laboratory ( 0 ) ii, iii
Basic study and practicum map reading and military leadership.
Prerequisite: Concurrent enrollment in MIL 210.

MIL 300 Leadership and Management I (3) i
An investigation into the study of organizational leadership; organizational and individual psychology in the military environment; application of academic theory to specific military management. Practical application of the military instruction methodology concludes the course. Prerequisite: Basic course or permission of Department Chairman.
MIL 030 Leadership Laboratory (0) i
Instruction and practicum in leadership, organization, and planning of basic military teams. Prerequisite: Concurrent enrollment in MIL. 300.

MIL 310 Fundamentals and Dynamics of the Military Team I (3) ii
The study of the principles and fundamentals of military operations, the decision making process, planning, communications and tactics of military units.
Prerequisite: MIL 300 or permission of Department Chairman.

MIL 031 Leadership Laboratory (0) ii
Advanced study and practicum in map and compass techniques and the organization and planning of military teams.
Prerequisite: Concurrent enrollment in MIL. 310.

MIL 350 Practicum in Advanced Leadership Training (3) iii

A six week practical experience in a field training environment to develop and demonstrate leadership capabilities in various situations.
Prerequisite: An advanced ROTC cadet and MIL 300 and MIL 310 or permission of the Department Chairman.

MIL 400 Fundamentals and Dynamics of the Military Team II (3) i
Discussion and application of the principles of military organization and management. Includes the comprehensive study of executive decision-making and communication; operation; training; logistics; intelligence; and personnel.
Prerequisite: MIL 310 or permission of Department Chairman.
MIL 040 Leadership Laboratory (0) ;
Practicum in management and military leadership.
Prerequisite: Concurrent enrollment in MIL 400.

MIL 410 Leadership and Management II (3) ii
Advanced study of leadership and management in examining the areas of administration at the company level and military justice. Also an inter-disciplinary seminar on the military implications of world change. Concludes with an overview of the obligations and responsibilities of an Officer.
Prerequisite: MIL 400 or permission of Department Chairman.

MIL 041 Leadership Laboratory (0) ii
Practicum in management and military leadership.
Prerequisite: Concurrent enrollment in MIL 410.

MIL 450 Independent Study in Military Science (1-5) i, ii, iii
Investigation of selected problems or topics on an individual or conference basis.
Prerequisite: Permission of the Department Chairman.

The ancient adage "Know Thy Self," along with the admonition "Know Thy Fellowman," succinctly state the philosophy of the Psychology Department. Our Orientation is humanistic. Our objective is to provide a deeper and broader understanding of human nature.
The purpose of the psychology curriculum is to give the student a better understanding of himself and others, and to better prepare him
to meet the complexities of life. Either the Bachelor of Arts or the Bachelor of Science degrees can be achieved with a major in psychology. Either degree, with a major in psychology, signifies that the student is prepared to pursue graduate study in psychology at the Master's or Doctorate level.
The department also serves other disciplines by offering courses which meet their needs.

PSY 200 Intermediate Psychology (3) i, ii, iii
An introduction to scientific psychology with emphasis on methodology.
Prerequisite: PSY 101.
PSY 201 Applied Psychology (3) i
Considers the applications of psychology in everyday life.
Prerequisite: PSY 101, 200.
PSY 210 Mental Hygiene (3) i, ii, iii
Considers principles and techniques for maintaining good mental health. The approach is practical rather than descriptive.
Prerequisite: PSY 101.
PSY 300 Psychological Measurements and Appraisals (3) ii, iii (i odd years).
Considers contemporary methods of inventorying individual differences, and the theoretical basis for criteria in constructing, standardizing, and using test instruments, with a brief historical introduction and critique of the misuse of psychological tests.
Prerequisite: PSY 101, 200.
PSY 301 Experimental Psychology (4) i, ii
Provides training in the techniques and methods of scientific psychology. Emphasis is on the construction of hypotheses, experimental design, data interpretation and style of reporting research. Three hours lecture and two hours lab.
Prerequisite: PSY 101, 200.
PSY 304 Child Psychology (3) i, ii, iii
The psychological growth of the child from conception to puberty, emphasizing the origins and principles of normal personality development.
Prerequisite: PSY 101, 200.
PSY 309 Abnormal Psychology (3) i, ii, iii
A descriptive and explanatory consideration of abnormal behavior, with a survey of past and present theories, classifications, and therapies. Prerequisite: PSY 101.

PSY 310 Industrial Psychology (3) ii
Psychology for management and employees in business and industry, with emphasis on psychological principles helpful to people working with people or serving the public.
Prerequisite: PSY 101.

A descriptive and explanatory consideration of
adolescence, with emphasis on motivation and frustration.
Prerequisite: PSY 101, 200, 304.
PSY 325 Psychology of Personality (3) i, (ii even years). Dynamics of personality development and human behavior, with emphasis on theories of personality.
Prerequisite: PSY 101, 200 and 304.
PSY 330 Systematic Psychology (3) i, iii (ii even years)
Consideration of the major ways of defining, organizing, and explaining psychological phenomena.
Prerequisite: PSY 101, 200.
PSY 335 Learning Theories (3) i even years
A survey of the major theories of learning in contemporary psychology, with a brief historical introduction.
Prerequisite: PSY 101, 200.
PSY 345 Animal Behavior (3) i odd years.
Introduction to the comparative method in exploring and classifying psychological behavior in the Animal Kingdom.
Prerequisite: PSY 101, 200, 330.
PSY 350 Physiological Psychology (3) i even years
Investigates the physiological correlates of psychological behavior in Iman.
Prerequisite: PSY 101, 200, 330.
PSY 401 Social Psychology (3) ii, iii (i odd years)
Considers the individual in relation to his society. The course covers theoretical foundations, socialization, social cognition, group dynamics and leadership.
Prerequisite: PSY 101, 200.
PSY 405 Psychology of Communication (3) ii odd years
Analyzes the elements of interpersonal communication with emphasis on techniques of communicating thoughts and ideas, listening techniques, understanding meaning, the utilization of feedback, and reasons for failures to communicate. Designed to improve the student's interpersonal relationships.
Prerequisite: PSY 101, 200.

PSY 420 Practicum in Psychology (4) i
To provide senior students in psychology the experience of applying their knowledge to an actual work situation in the field. An additional 4 credit hours may be earned by taking PSY 421. Prerequisite: Senior status in Psychology, and consent of department.
PSY 421 Practicum in Psychology (4) ii
To provide senior students in psychology the experience of applying their knowledge to an actual work situation in the field. An additional 4 credit hours may be earned by taking PSY 420. Prerequisite: same as PSY 420.

PSY 450 Independent Study (credit hours open) i, ii, iii By arrangement. Open only to seniors as a means of taking a required course which is not otherwise available during their senior year. Requires consent of the department chairman.

PSY 480 Independent Research (1-5) i, ii, iii
Research of selected topics or problems on an individual conference basis.
Prerequisite: Consent of instructor.
PSY 490 Senior Seminar (2) i, ii
A course designed for seniors majoring in psychology. Emphasis will be on discussion of current areas of interest in psychology. In addition present vocational and educational opportunities will be brought to the attention of students.
Prerequisite: Consent of instructor.
PSY 101 General Psychology ..... 3
ENG 104 English ..... 3
MAT 101 Fund. Concepts of Math ..... 3
BIO 101 Principles of Biology ..... 5
Concepts of P.E. ..... 1
Spring Semester
PSY 200 Intermediate Psychology ..... 3
ENG 108 English ..... 3
MAT 105 College Algebra ..... 3
SOC 101 General Sociology ..... 3
HIS 140 American History ..... 3
P.E. Activity ..... 116
Sophomore Year
Fall Semester
PSY 210 Mental Hygiene ..... 3
MAT 201 Elementary Statistics ..... 3
SPH 104 Oral Communications ..... 3
GEO 100 World Geography ..... 3
P.E. Activity ..... 1
Spring Semester
PSY 300 Psychological Measurements and3
Appraisals
98 SOC 120 Cultural Athropology ..... 3
PHY 101 Concepts and Principles of Physics ..... 4
HUM 210 Intro. to Philosophy ..... 3
Elective ..... 316
Junior Year
Fall Semester
PSY 310 Experimental Psych ..... 4
Psychology Elective ..... 3
ENG 210 Approaches to Lit. ..... 3
HUM 203 Humanities I ..... 3
Elective ..... 3
Spring Semester
PSY 330 Systematic Psychology ..... 3
ENG 220 Classical Backgrounds for Literature ..... 3
HUM 205 Humanities II ..... 3
P.E. Activity ..... 1
Psychology Elective ..... 3
Elective ..... 316
Senior Year
Fall Semester
Psychology Electives ..... 6
PSY 350 Physiological Psych. ..... 3
Electives, 300 or 400 level ..... 6
Spring Semester
PSY 401 Social Psychology ..... 3
Behavioral Sciences ..... 3
PSY 490 Senior Seminar ..... 2
Electives, 300 or 400 level .....  615161615
PSY 101 General Psychology ..... 3
ENG 104 English ..... 3
MAT 101 Fund. Concepts of Math ..... 3
BIO 101 Principles of Biology ..... 5
PED 101 Concepts of P.E ..... 1

## Spring Semester

PSY 200 Intermediate Psychology ..... 3
ENG 108 English ..... 3
MAT 105 College Algebra ..... 3
SOC 101 General Sociology ..... 3
HIS 140 American History ..... 3
P.E. Activity ..... 1
Sophomore Year
Fall Semester
PSY 210 Mental Hygiene ..... 3
MAT 201 Elementary Statistics ..... 3
SPH 104 Oral Communications ..... 3
GEO 100 World Geography ..... 3
Elective ..... 3
P.E. Activity ..... 1
Spring Semester
PHY 101 Concepts and Principles of Physics ..... 4
PSY 300 Psychological Measurements \& Appraisals ..... 3
SOC 210 Cultural Anthropology ..... 3
HUM 210 Intro. to Philosophy ..... 3
Elective ..... 3
16
Junior Year Fall Semester
Psychology Electives ..... 6
ENG 210 Approaches to Lit. ..... 3
HUM 203 Humanities I ..... 3
Foreign Language ..... 416
Spring Semester
PSY 330 Systematic Psychology ..... 3
HUM 205 Humanities II ..... 3
Foreign Language ..... 4
PSY 301 Experimental Psychology .....  4
P.E. Activity ..... 1
15
Senior YearENG 220 Classic Backgrounds for Literature3
Psychology Electives ..... 6
Elective 300 or 400 level ..... 3
Foreign Language ..... 4
Spring Semester
PSY 401 Social Psychology ..... 3
PSY 490 Senior Seminar. ..... 2
Electives, 300 or 400 level ..... 6
Foreign Language ..... 4


## THE DIVISION OF LIIBERAL ARTS AND SCIENCES

The division includes the departments of: Art, Biology, Chemistry, English and Modern Languages, Mathematical Sciences, Music, Social Science, and Speech/Theatre/Humanities.
The division is the essential core of the College. While other divisions largely direct their work toward specific groups within the student body, the Division of Liberal Arts and Sciences is concerned with all students. In contrast with those divisions that are essentially vocational, technical, or professional in their orientation, Liberal Arts and Sciences is primarily concerned with knowledge as a liberating force in the lives of all human beings. Within its disciplines, knowledge is investigated as the sum of the human endeavor to understand the nature of man and the universe; as an essential agent in the attempt to develop both man and the universe to their full potential; and as the goal in a neverending effort to extend its limits.

To make its work more effective, the division must also be concerned with the application of its appropriate bodies of knowledge to specific pursuits, and to the development of competencies in those students who wish to make arts or sciences the basis of their life work. Since Missouri Western State is an open-door college with especially close ties to the community, certain obligations must be assumed by the division. It must both demand the right and demonstrate the willingness to provide appropriate opportunities for growth to those who are not only able to benefit from its offerings but also willing to accept the self-discipline required for progress; it must act as a catalyst in the cultural life of the community.
In all pts activities, the division must strive, and lead others to strive, for academic excellence.

The department of Art is concerned with developing the skills and creative potentials of its majors, and provides the student with courses in art history, art education, seminars and studio. Basic skills for teaching at the elementary and secondary school levels are part of the expanding curriculum. Art training in the studio areas is presented with the aim of providing relevant skills and experience in today's demands of becoming a professional artist.

## BACHELOR OF ARTS DEGREE

## (Requires 16 credit hours in a foreign language)

## MAJOR IN ART

Courses in Art must total 57 credit hours. The following specific courses are required: ART 205, 206, plus 6 additional credit hours selected from courses in art history; ART 130, 170, $260,310,330,340,360,370,380,390,460,485$, and 495 , plus 9 additional credit hours in one specific studio area.

## BACHELOR OF SCIENCE IN EDUCATION DEGREE

## MAJOR IN ART

Courses in Art must total 52 credit hours. The following specific courses are required: ART 205, 206, plus 3 additional credit hours selected from courses in art history; ART 130, 170, $260,300,310,330,340,360,370,380,400,460$, 485, 495, plus 5 additional credit hours selected from courses in studio art.

## HISTORY AND APPRECIATION OF ART

ART 100 Introduction to Art (3) i, ii, iii
General background in the history, philosophy, principles, and techniques of the visual arts. Not for art majors.
ART 205 Ancient Through Medieval Art (3) i
History of art in western civilization: prehistoric times through the Middle Ages.

ART 206 Renaissance Through Modern Art (3) ii History of art in western civilization: Renaissance through modern times.

ART 307 Art of Eastern Civilization (3) i (even numbered years)
The history of art in eastern civilization from earliest records to the present day; visual arts of India, China, and Japan.
Prerequisite: ART 205, 206, or consent of instructor.

In order to broaden the horizons of its students the Art department has a gallery exhibition program and endeavors to provide visiting artists and lecturers, when possible. Field trips to the Albrecht and Nelson Galleries are an integral part of many class experiences. Students are encouraged to take advantage of the many cultural events, both on campus and in the St. Joseph/Kansas City area.

ART 405 Nineteenth Century Art (3) i (odd numbered years)
Major movements in nineteenth century painting, sculpture and architecture.
Prerequisite: ART 205, 206, or consent of instructor.
ART 406 Twentieth Century Art (3) ii (even numbered years)
Art in the twentieth century.
Prerequisite: ART 205, 206, or consent of instructor.

ART 411 American Art (3) ii (odd numbered years)
Development of Art in the United States.
Prerequisite: ART 205, 206, or consent of instructor.

ART 450 Independent Study in Art (1-5) i, ii, iii
Investigation of selected problems or topics on an individual conference basis.
Prerequisite: The student must have: (1) completed the major-minor application form, (2) obtained the consent of the department chairman, and (3) earned a minimum 2.5 grade point average in his major field of study.

## STUDIO ART

ART 130 Beginning Drawing (3) i, ii, iii
Elementary drawing with the figure, still life, landscape, and perspective in various media. 6 studio hours.

ART 170 Introduction to Tools and Techniques (2) i Basic skills with studio hand tools and power equipment. Emphasis on safety procedures. This course is a prerequisite for any studio art course except ART 130 and 260.4 studio hours.

ART 260 Two-Dimensional Design (3) i
Design in two-dimensional problems in various media. 6 studio hours.

ART 300 Art Teaching: Media and Concepts (3) i , ii, iii Media and concepts in elementary art for education majors.
Prerequisite: EED 202 or permission of instructor.
ART 310 Beginning Ceramics (3) $i$, ii
Basic foundation in ceramics: Theory, techniques, materials, processes. 6 studio hours. (Student must purchase the clay which he uses.)

Basic jewelry techniques relating to design and sheet stock fabrication. 4 studio hours.

ART 330 Advanced Drawing (3) i, ii
The figure in various media, and drawing as a complete form. May be repeated for credit. Prerequisite: ART 130.

ART 340 Beginning Printmaking (3) i, ii
Wood block, etching, serigraphy. 6 studio hours. Prerequisite: ART 130, 260, 330.

ART 360 Three-Dimensional Design (3) ii
Form in the third dimension; design principles and elements as they relate to three dimensions. 6 studio hours.
Prerequisite: ART 260.
ART 370 Beginning Painting (3) i , ii
Color, composition, technique; the figure and still life. 6 studio hours.
Prerequisite: 6 credit hours of drawing.
ART 380 Beginning Sculpture (3) i, ii Basic foundations in sculpture; theory, techniques, materials, processes. 6 studio hours. Prerequisite: ART 130.

ART 390 Beginning Photomedia (3) i Basic black and white photographic processes that relate visual art principles to the environment. Student must have access to camera with adjustable aperture and shutter speed. 6 studio hours.
Prerequisite: ART 130, 260.
ART 400 Secondary Art Education: Philosophy and Methods (2) ii (even numbered years)
Presentation of unique problems and duties of the secondary school art teacher.
Prerequisite: 20 credit hrs. art courses.
ART 410 Advanced Ceramics (3) i, ii
Advanced techniques and problems in ceramics. 6 studio hours. May be repeated for credit. (Student must purchase the clay which he uses.) Prerequisite: ART 310 and permission of instructor.

Advanced Jewelry (2)
Continuation of basic jewelry-making techniques. Emphasis on various casting techniques, handling of different metals and related materials. May be repeated for credit. 4 studio hours.
Prerequisite: ART 325.
ART 440 Advanced Printmaking (3) i, ii
Continuation of ART 340.6 studio hours. May be repeated for credit. Prerequisite: ART 340.

ART 460 Composition in Art (3) $\mathbf{i}$
A sequel to Art 260 and 360 . Re-definition and sophistication of the elements of design in problem solving; examination of master works, critiques; emphasis on college techniques. 6 studio hours.
Prerequisite: ART 360 and 6 hours drawing.
ART 470 Advanced Painting (3) i, ii
Continuation of ART 370.6 studio hours. May be repeated for credit.
Prerequisite: ART 370.
ART 480 Advanced Sculpture (3) i, ii
Advanced techniques in various media. 6 studio hours. May be repeated for credit. Prerequisite: ART 380.

## ART 485 Senior Exhibit (1) $\mathbf{i}$, ii, iii

Preparation and presentation of an exhibition of personal art work under the direction and approval of a faculty supervisor.
Prerequisite: Classification as a senior art major.
ART 490 Advanced Photomedia (3) i
Advanced problems and techniques in black and white photographic processes. Student must have access to camera with adjustable aperture and shutter speed. May be repeated for credit. 6 studio hours.
Prerequisite: ART 390.

## ART 495 Seminar in Art (3) i

Topics to vary each year: relating art history, criticism, and studio problems.
Prerequisite: 9 credit hours art history and 12 credit hours studio art.

Fall SemesterART 130Beginning Drawing3
ART 170 Introduction to Tools and Techniques ..... 2
ART 260 Two-Dimensional Design ..... 3
Natural Science ..... 4
English ..... 3
P.E. Concepts .....  1
Spring Semester
Advanced Drawing ..... 3
ART 360 Three-Dimensional Design ..... 3
Speech ..... 3
English ..... 3
Social Science
P.E. Activity16
Sophomore Year
Fall Semester
ART 205 Ancient/Medieval Art ..... 3
ART 380 Beginning Sculpture . ..... 3
ART 390 Beginning Photomedia ..... 3
Humanities
4
4
Foreign Language ..... 16
Spring Semester
ART 206 Renaissance through Modern Art ..... 3
ART 310 Beginning Ceramics ..... 3
ART 370 Beginning Painting ..... 3
Humanities ..... 3
Foreign Language ..... 4
Junior YearFall Semester
ART 307 Art of Eastern Civilization (Even years) ..... 3
or
ART 405 19th Century Art (Odd years)
ART 340 Beginning Printmaking3
ART 460 Composition in Art ..... 3
Mathematics ..... 3
Foreign Language .....  4
Spring Semester
ART 411 American Art (Odd years) ..... 3
ART 406 20th Century Art (Even years)
Art Elective ..... 3
Social Science ..... 3
Foreign Language ..... 4
Humanities .....  3Senior YearFall Semester
ART 495 Seminar in Art ..... 3
Art Elective ..... 3
Social Science ..... 3
Free Electives ..... 6
P.E. Activity ..... 1
16
Spring Semester
ART 485 Senior Exhibit ..... 1
Art Elective ..... 3
Natural Science ..... 5
Free Electives ..... 6
P.E. Activity ..... 1
ART 130 Beginning Drawing ..... 3
introduction to Tools and Techniques ..... 2
ART 260 Two-Dimensional Design ..... 3
English ..... 3
Social Science ..... 3
P.E. Concepts .....  1
Spring Semester
ART 330 Advanced Drawing ..... 3
ART 360 Three-Dimensional Design ..... 3
English ..... 3
Natural Science ..... 5
P.E. Activity ..... 1
Sophomore Year
Fall Semester
ART 205 Ancient through Medieval Art ..... 3
ART 380 Beginning Sculpture ..... 3
Speech ..... 3
Social Science ..... 3
Humanities .....  3
P.E. Activity ..... -
Spring Semester
ART 206 Renaissance through Modern Art ..... 3
ART 340 Beginning Printmaking ..... 3
ART 370 Beginning Painting ..... 3
Humanities
SED 202 Intro. to Sec. Ed. ..... 2 ..... 2
SED 203 Part. in Sec. Teach. I ..... 1
P.E. Activity ..... 116
Junior Year
Fall Semester
ART 405 19th Century History (odd years) ..... 3
ART 30Art Teaching: Media and Concepts.3
ART 460 Composition in Art ..... 3
Social Science ..... 3
Humanities ..... 3
Spring Semester
ART 400 Secondary Education (even years) ..... 2
Art Elective ..... 3
ART 310 Beginning Ceramics ..... 3
SED 303 Exp. in Sec. Teach. II ..... 3
SED 304 Psy. in Sec. Teach. ..... 415
Senior Year
Fall Semester
ART 495 Seminar in Art ..... 3
Art Elective ..... 2
SED 311 Audio Vis. Education ..... 2
Natural Science
6
6
Free Electives ..... 17
Spring Semester
ART 485 Senior Exhibit ..... 1
SED 404 Foundations in Sec. Ed. ..... 3
SED 407 Ed. of the Exceptional Student ..... 2
SED 409 Sec. Student Teach. III ..... 9

Biology students study all forms of life at the molecular as well as the organismal and population levels of complexity. These students work in new laboratories using modern tools and techniques, and in the department's wilderness area studying life in its natural environment. Independent study and special problems are offered for advanced students.

## BACHELOR OF ARTS DEGREE

(Requires 16 credit hours in a foreign language)

## MAJOR IN BIOLOGY

Courses in Biology must total 36 credit hours. The following specific courses are required: BIO 111, 112, 309, 310, 311, 312, 411, 412, plus 9 additional credit hours selected from Biology courses numbered 300 or higher, of which a minimum of 3 credit hours must be in plant science; CHE 111, 120, 310, 311, 370; MAT 105 and 201; PHY 110.

## MAJOR IN NATURAL SCIENCE (BIOLOGY EMPHASIS)

Courses in Biology must total 27 credit hours. The following specific courses are required: BIO 111, 112, 310, 312, 412, plus 12 additional credit hours selected from Biology courses numbered 300 or higher; CHE 111, 120, 310, 311, 312, 313, 370; PHY 101, or 110, MAT 107, 201.

The biology curriculum consists of core courses which are taken by all biology majors regardless of specialization, followed by biology electives in specific areas. These core courses are designed to give students a rigorous and sophisticated introduction to the principles of all important areas of modern biology.

## BACHELOR OF SCIENCE IN EDUCATION DEGREE

## MAJOR IN BIOLOGY

Courses in Biology must total 36 credit hours. The following specific courses are required: BIO 111, 112, 309, 310, 311, 312, 380, 411, 412, plus 6 additional credit hours selected from Biology courses numbered 300 or higher, of which a minimum of 3 credit hours must be in plant science; CHE 111, 120, 310, 311, 370; MAT 105 and 201; PHY 101 or 110.

## MINOR IN BIOLOGY

A minor in Biology consists of 20 credit hours in Biology, including BIO 111 and 112 plus electives selected from Biology courses numbered 300 or higher.

## BIOLOGY

BIO 101 Principles of Biology (5) i, ii, iii
Principles of living phenomena; meets the general education biological science requirement. Will substitute for BIO 111 for a student who earns a grade of " C " or better and subsequently majors in biology. 4 hours lecture, 2 hours lab.

BIO 111 General Biology (3) i
Phenomena associated with living organisms; primarily for biology majors. 2 hours lecture, 3 hours lab.

BIO 112 General Biology (3) ii
Continuation of BIO 111; 2 hours lecture, 3 hours lab.

BIO 250 Anatomy and Physiology (5), i, ii, iii
Concepts of human function and structure and relationship of these concepts to cells, tissues, organs, and systems. 4 hours lecture, 3 hours lab. Credit for this course is not applicable toward a major in biology.
Prerequisite: BIO 101 or consent of instructor.

## Prerequisite: BIO 111 or 112.

Basic Nutrition (3) ii
The science of human nutrition and its importance in the maintenance of health; translation of the basic principles of nutrition to the needs of individuals.
Credit for this course is not applicable toward a major in biology.

BIO 260 Human Sexuality (3) i, ii, iii
Biological, sociological, and psychological aspects of human sexuality. Credit for this course is not applicable toward a major in biology.

BIO 301 Ecology Seminar (3) Spring intercession
Interrelationships of fish, game, forest, the physical environment, and man. May be repeated for maximum of 2 credit hours. Course grades assigned on pass-fail basis.

BIO 305 Human Ecology (3) i, ii, iii
Man and his environment: ecological principles, population, pollution, resources.
Prerequisite: BIO 101.
BIO 309 Environmental Biology (4) i
Basic concepts and field techniques used in studying the relationships or organisms to their environment. 3 hours lecture, 3 hours lab.
Prerequisite: BIO 111 or 112 or consent of instructor.

BIO 310 Cellular Biology (4) i
Molecular cell structure with relationship to such cell functions as transport, chemical transformations, growth, and reproduction. 3 hours lecture, 2 hours lab.
Prerequisite: BIO 111 and CHE 120, or consent of instructor.

BIO 311 Animal Physiology (4) ii
The physiological systems, their functions and inter-actions in human physiology; comparisons within the animal kingdom. 3 hours lecture, 2 hours lab.
Prerequisite: BIO 111 or consent of instructor.

BIO 312 Genetic Biology (4) ii
Hereditary and adaptive principles as applied to plants and animals. 3 hours lecture, 3 hours lab. Prerequisite: BIO 310 and MAT 210, or consent of instructor.

BIO 350 Plant Systematics (3) i
Identification, characteristics and importance of seed plants. Study of classification, techniques and literature of taxonomy. A plant collection and field trips will be required. 2 hours of lecture, 2 hour lab.
Prerequisite: BIO 111 or 112.
BIO 380 Science Teaching: Materials and Methods (3) ii Curricula, evaluation, laboratory equipment, supplies and techniques.
Prerequisite: 20 hours of science, or consent of instructor.

BIO 400 Microbiology of Human Disease (5) ii (odd numbered years)
Pathogenic microorganisms, medically important parasites of man; immunological principles, collection, isolation and identification techniques. 3 hours lecture, 4 hours lab.
Prerequisite: BIO 399.
BIO 405 Plant Morphology: Nonvascular Plants (3) i (odd numbered years)
Structure, development, and relationships of the algae, fungi and the bryophytes. 2 hours lecture, 2 hours lab.
Prerequisite: BIO 111 or 112.
BIO 406 Plant Morphology: Vascular Plants (3) ii
(even numbered years)
Structure, development and relationships of the vascular plants. 2 hours lecture, 2 hours lab.
Prerequisite: BIO 111 or 112.
BIO 411 Developmental Biology (4) ii
Plant and animal development; formation of organs and organ systems. 3 hours lecture, 3 hours lab.
Prerequisite: BIO 111 or 112.
BIO 412 Seminar in Biology (1) i, ii
Individual reports and group discussion on problems and current research in biology. May be repeated for a maximum total of 2 credit hours. Biology majors are expected to attend during the Junior and Senior years whether or not they are enrolled for credit.
Prerequisite: Consent of instructor.
BIO 415 Invertebrate Zoology (3) i (even numbered years)
Comparative anatomy and biological principles of the invertebrates. 2 hours lecture, 2 hours lab. Prerequisite: BIO 111 or 112.

BIO 416 Vertebrate Zoology (3) ii (odd numbered years)
Principles and evolution of vertebrate structure and function. 2 hours lecture, 2 hours lab.
Prerequisite: BIO 111 or 112.
BIO 420 Biology Practicum (1) i, ii, iii
Supervised experience in the development and use of laboratory materials for biology classes. Student will serve as a resource person in beginning biology laboratories.
Prerequisite: Consent of instructor.
BIO 450 Independent Study in Biology (1-5) i, ii, iii Investigation of selected problems or topics on an individual conference basis.
Prerequisite: The student must have: (1) completed the major-minor application form, (2) obtained the consent of the department chairman, and (3) earned a minimum 2.5 grade point average in his major field of study.
BIO 470 Literature of Biology (2) ii
Research in major journals and other literature in the area of biology. For biology majors.
Prerequisite: Consent of instructor.
BIO 495 Special Problems in Biology (1-5) i, ii, iii
Research problems in biology.
Prerequisite: Consent of instructor.
fall Semester
*BIO 111 General Biology ..... 3
English ..... 3

* 102 Foreign Language ..... 4
CHE 111 General Chemistry I .....  5
Spring Semester
**BIO 112 General Biology ..... 3
English ..... 3
** 112 Foreign Language ..... 4
CHE 120 General Chemistry II ..... 上
Sophomore Year
Fall Semester
*BIO 309 Environmental Biology ..... 4
*CHE 310 Organic Chemistry I ..... 3
*CHE 311 Organic Chemistry Lab. I ..... 2
202 Foreign Language ..... 4
MAT 105 College Algebra ..... 3
Spring Semester16
** CHE 370 Biochemistry ..... 4
212 Foreign Language ..... 4
Social Science ..... 3
MAT 201 Statistics ..... 3
P.E. Concepts ..... 115
Junior Year
Fall Semester
*BIO 310 Cellular Biology ..... 4
PHY 101 or 110 Physics ..... 5
Social Science ..... 3
*BIO 350 Plant Systematics or ..... 3
***BIO 406 or 407 Plant Morphology ..... 3
Spring Semester
**BIO 311 Animal Physiology ..... 4
**BIO 312 Genetic Biology ..... 4
Humanities ..... 3
Elective ..... 3
P.E. Activity ..... 115
Senior Year
Fall Semester
BIO 412 Seminar in Biology ..... 1
Humanities ..... 3
Biology Electives ..... 6
P.E. Activity ..... 1
Free Electives ..... 6
Spring Semester
**BIO 411 Developmental Biology ..... 4
Humanities ..... 3
Social Science ..... 3
Biology Electives ..... 6
P.E. Electives ..... 1

[^0]Freshman Year

## Fall Semester

*BIO 111 General Biology ..... 3
English ..... 3
102 Foreign Language ..... 4
CHE 111 General Chemistry I ..... 5Spring Semester
**BIO 112 General Biology ..... 3
English ..... 3
** 112 Foreign Language ..... 4
CHE 120 General Chemistry II ..... 5
Sophomore Year
Fall Semester
MAT 105 College Algebra ..... 3
*CHE 310 Organic Chemistry I ..... 3
*CHE 311 Organic Chemistry Lab. I ..... 2

* 202 Foreign Language ..... 4
Speech ..... 3
P.E. Concepts ..... 1
Spring Semester
MAT 106 Trigonometry ..... 2
**CHE 312 Organic Chemistry II. ..... 3
**CHE 313 Organic Chemistry Lab. II ..... 2
** 212 Foreign Language ..... 4
Social Science ..... 3
Junior Year
Fall Semester
*BIO 310 Cellular Biology ..... 4
MAT 201 Elementary Statistics ..... 3
PHY 101 or 110 Physics ..... 5
Social Science ..... 3
Spring Semester
**BIO 312 Genetic Biology ..... 4
**CHE 370 Biochemistry ..... 4
Humanities ..... 3
Social Science ..... 3
P.E. Activity ..... 1
Senior Year
Fall Semester
MAT 107 Calculus I ..... 5 ..... 3
*BIO 350 Plant Systematics, or
***BIO 406 or 407 Plant Morphology ..... 3
Humanities ..... 3
P.E. Activity ..... 1
Biology Elective ..... 3
Spring Semester
BIO 412 Seminar in Biology ..... 1
Humanities ..... 3
Biology Electives ..... 12
P.E. Activity ..... 1
17
*Courses offered only Fall Semester.
${ }^{* *}$ Courses offered only Spring Semester.***Courses offered on alternate years.

Fall Semester
*BIO 111 General Biology ..... 3
English ..... 3
MAT 105 College Algebra ..... 3
CHE 111 Chemistry I ..... 5
P.E. Concepts ..... 115
Spring Semester
**BIO 112 General Biology ..... 3
English ..... 3
PHY 101 or 110 Physics ..... 5
CHE 120 Chemistry II ..... -16
Sophomore Year Fall Semester
*BIO 309 Environmental Biology ..... 4
*CHE 310 Organic Chemistry ..... 3
CHE 311 Organic Chemistry Lab. ..... 2
Speech ..... 3
Humanities ..... 3
P.E. Activity ..... 116
Spring Semester
**CHE 370 Biochemistry ..... 4
Social Science ..... 3
Humanities ..... 3
Biology Electives ..... 4
P.E. Activity ..... 1
15
Junior Year
Fall Semester
*BIO 310 Cellular Biology ..... 4
*BIO 350 Plant Systematics or ..... 3
**BIO 406 or 407 Plant Morphology ..... 3
Social Science ..... 3
Humanities ..... 3
Spring Semester
**BIO 311 Animal Physiology ..... 4
**BIO 312 Genetic Biology ..... 4
Social Science ..... 3
Humanities ..... 3
P.E. Activity ..... 1
Senior Year
Fall Semester
Biology Electives ..... 8
Free Electives ..... B

## Spring Semester

**BIO 411 Developmental Biology ..... 4
BIO 412 Seminar in Biology ..... 1
Biology Electives. ..... 4
Free Electives ..... 6

* Courses offered only Fall Semester.
**Courses offered only Spring Semester.
*** Courses offered on alternate years.
*BIO 111 General Biology ..... 3
MAT 105 College Algebra ..... 3
CHE 111 General Chemistry I ..... 5
P.E. Concepts ..... 1Spring Semester
**BIO 112 General Biology ..... 3
English ..... 3
PHY 101 or 110 Physics ..... 5
CHE 120 General Chemistry II ..... 5
Sophomore YearFall Semester
*BIO 309 Environmental Biology ..... 4
*CHE 310 Organic Chemistry I ..... 3
*CHE 311 Organic Chemistry Lab. 1 ..... 2
MAT 201 Elementary Statistics ..... 3
Humanities ..... 3
P.E. Activity ..... 116
Spring Semester
**CHE 370 Biochemistry ..... 4
SED 202 Intro. to Sec. Ed. ..... 2
SED 203 Participation in Secondary Teaching I ..... 1
Social Science ..... 3
Humanities
P.E. Activity ..... 1Junior YearFall Semester
SED 303 Exp. in Sec. Teach. II ..... 3
SED 304 Psy. in Sec. Teach. ..... 4
*BIO 310 Cellular Biology ..... 4
Social Science ..... 3
P.E. Activity ..... 1
Spring Semester
**BIO 380 Science Teach: Materials \& Methods ..... 3
**BIO 311 Animal Physiology ..... 4
**BIO 312 Genetic Biology ..... 4
**BIO 411 Developmental Biology ..... 4
15
Senior Year
Fall Semester
*BIO 350 Plant Systematics or
**BIO 405 or 406 Plant Morphology ..... 3
Humanities ..... 3
Social Science ..... 3
Biology Elective ..... 2
BIO 412 Seminar in Biology ..... 1
Speech ..... 3
15
Spring Semester
SED 404 Foundation in Sec. Ed. ..... 3
SED 407 Education of Excep. Child ..... 2
SED 409 Secondary Student Teach. III .....  914
*Courses offered Fall Semester only.

[^1]***Courses offered on alternate years.

The department of Chemistry deals with a core knowledge that is essential to much of the scientific experimentation that influences our daily lives in the modern world. From atomic theories to basic chemical structures, the prospective chemist studies that material which forms a basis for important work in engineering, pharmacy, medicine, medical technology, dentistry, and research chemistry.

## BACHELOR OF ARTS DEGREE

## (Requires 16 credit hours in a foreign language) <br> MAJOR IN CHEMISTRY

Courses in Chemistry must total 35 credit hours. The following specific courses are required: CHE 111, 120, 310, 311, 312, 313, 321, $431,432,495$, plus an additional 5 credit hours from Chemistry courses numbered 300 or higher; MAT 107, 108, 209; PHY 110; GER 102, 112, $202,212$.

## BACHELOR OF SCIENCE DEGREE

## MAJOR IN CHEMISTRY

Courses in Chemistry must total 45 credit hours. The following specific courses are required: CHE 111, 120, 310, 311, 312, 313, 321, 326, 341, 431, 432, 433, 434, 440, 495, MAT 107, 108, 209; PHY 210, 211, 212; GER 102, 112.

## MAJOR IN MEDICAL TECHNOLOGY

Courses in the Natural Sciences and Mathematics must total 57 credit hours; courses in Medical Technology must total 31 credit hours. The following specific courses are required: CHE 111, 120, 310, 311, 321, 326, 370; BIO 111, 311, 399, 400, plus 4 credit hours selected from Biology courses numbered 300 or higher; MAT 105, 106; PHY 101 or 110; MTE 105, 451, 452, 453.
MAJOR IN NATURAL SCIENCE (CHEMISTRY EMPHASIS)
Courses in the Natural Sciences and Mathematics must total 70 credit hours. The following specific courses are required: CHE 111, 120, 310, 311, 321, 370, 495, plus an additional 7 credit hours selected from Chemistry courses numbered 300 or higher; BIO 111,

The department also assists in the preparation of prospective science teachers. These students, as well as those who study chemistry as a part of their basic education, work in new facilities fully equipped for investigating contemporary chemistry topics in both classroom and laboratory.

310, 311 plus an additional 12 credit hours selected from Biology courses numbered 300 or higher; PHY 110, 111; MAT 105, 106, 201 or MAT 107, 201.

## BACHELOR OF SCIENCE IN EDUCATION DEGREE

## MAJOR IN CHEMISTRY

Courses in Chemistry must total 32 credit hours. The following specific courses are required: CHE 111, 120, 310, 311, 321, 431, 432, 465, 495, plus an additional 5 credit hours from Chemistry courses numbered 300 or higher; MAT 107, 108, 209; PHY 110, 111.

## MINOR IN CHEMISTRY

A minor in Chemistry consists of 18 credit hours in Chemistry, including CHE 111 and CHE 120 plus elective courses in chemistry numbered 300 or higher.

## CHEMISTRY

(Student must furnish required laboratory apron and safety glasses in laboratory courses. A $\$ 2.00$ refundable laboratory deposit is also required.)
CHE 101 Introductory Chemistry (5) i, ii, iii
Chemistry for Arts and Science students; meets the minimum physical science requirement. 3 hours lecture, 1 hour discussion, 2 hours lab.

## CHE 104 Fundamentals of Chemistry (4) i, ii

A survey of chemistry with special emphasis in solution and biochemistry; for students majoring in scientific and technological fields such as nursing, agriculture. 3 hours lecture, 2 hours lab.
CHE 111 General Chemistry I (5) i, ii
Basic concepts of chemistry; atomic theory and periodic system, chemical calculations, oxida-tion-reduction, states of matter, theory of chemical bonding, atomic structures. 3 hours lecture, 1 hour discussion, 3 hours lab. Prerequisite: 2 units algebra. High school chemistry is also recommended.
more common anions and cations by qualitative analysis. 3 hours lecture, 6 hours laboratory.
Prerequisite: CHE 111 with a grade of C or better.

CHE 204 Agricultural Organic Chemistry (4) ii (odd numbered years)
The aliphatic and aromatic series: fundamentals and reactions, relationship to the life processes and to the agricultural sciences. 3 hours lecture, 3 hours lab.
Prerequisite: CHE 104 with a grade of C or better.

CHE 304 Biochemistry \& Natural Products (3) i (odd numbered years beginning fall 1979)
Chemistry of biologically important compounds, special emphasis on their relationship to agriculture. 3 hours lecture.
Prerequisite: CHE 204.
CHE 310 Organic Chemistry I (3) i, ii
Methods of synthesis of organic compounds, reaction paths, chemical bonding and geometry of organic molecules; aliphatic and aromatic compounds studies concurrently. 3 hours lecture.
Prerequisite: CHE 120 with a grade of C or better.

CHE 311 Organic Chemistry Laboratory I (2) i, ii
Laboratory course to accompany CHE 310. 6 hours lab.
Prerequisite: CHE 310 concurrently.

CHE 312 Organic Chemistry II (3) ii
Continuation of CHE 310.3 hours lecture.
Prerequisite: CHE 310 with a grade of C or better.

CHE 313 Organic Chemistry Laboratory II (2) ii
Laboratory course to accompany CHE 312. 6 hours lab.
Prerequisite: CHE 312 concurrently.
CHE 321 Quantitative Analysis (4) i
Analytical chemistry; gravimetric, volumetric, colorimetric, and electro-analytical determinations. The instrumental approach to analysis is emphasized. 2 hours lecture, 6 hours lab.
Prerequisite: CHE 120 with a grade of C or better.

CHE 326 Instrumental Analysis (4) ii
Theories and methods in modern instrumental analysis. 2 hours lecture, 6 hours lab.
Prerequisite: CHE 321 with a grade of C or better.

CHE 341 Advanced Inorganic Chemistry (3) i (even numbered years)
Modern concepts of inorganic chemistry, encompassing chemical bonding theories, acidbase theories, mechanisms of inorganic chemistry, symmetry in molecules, inorganic thermodynamics and atomic and molecular structure. 3 hours lecture.
Prerequisite: CHE 120 with a grade of C or better.

## CHE 431 Physical Chemistry I (3) i

Thermodynamics, properties of solutions, phase equilibria, chemical equilibrium and conductivity. 3 hours lecture.
Prerequisite: CHE 311, 321 with a grade of C or better; PHY 210; MAT 209 (MAT 209 may be taken concurrently).

CHE 432 Physical Chemistry Laboratory I (2) i
Laboratory course to accompany CHE 431. 6 hours lab.
Prerequisite: Concurrent enrollment in CHE 431.

CHE 433 Physical Chemistry II (3) ii
A continuation of CHE 431: Electrochemistry, chemical kinetics, absorption and emission spectroscopy and introduction to quantum chemistry. 3 hours lecture.
Prerequisite: CHE 431 with a grade of C or better.

CHE 434 Physical Chemistry Laboratory II (2) ii
Laboratory course to accompany CHE 433. 6 hours lab.
Prerequisite: Concurrent enrollment in CHE 433.

CHE 440 Advanced Organic Chemistry (3) ii (even numbered years)
Modern mechanistic interpretations of the relations between structure and reactivity: the roles of reactive intermediates such as carbonium ions, carbanions, carbenes and radicals in reactions; molecular orbital theory, Hammett acid-base theory; factors which influence the equilibria and reaction mechanisms of organic molecules.
Prerequisite: CHE 310, 312, 431 or consent of instructor.

CHE 450 Independent Study in Chemistry (1-5) i, ii
Investigation of selected problems or topics on an individual conference basis.
Prerequisite: The student must have: (1) completed the major-minor application form, (2) obtained the consent of the department chairman, and (3) earned a minimum 2.5 grade point average in his major field of study.

CHE 465 Chemistry Teaching: Methods and Techniques (2) ii

Modern techniques in teaching high school chemistry: use of audio-visual equipment, project approach, lesson planning and difficulties in chemistry instruction at the secondary level. Prerequisite: Senior standing.

CHE 490 Research in Chemistry (1-3) i, ii
Original research on problems in various fields of chemistry. Hours arranged.
Prerequisite: Consent of department chairman.
CHE 495 Seminar in Chemistry (1) $i$
Individual reports and group discussion on modern topics in chemistry.
Prerequisite: Senior standing or consent of instructor.

MTE 451 Medical Technology Internship (12) i
Practical training and theoretical instruction in all phases of medical laboratory work; microbiology, basal metabolism, blood banking, chemistry, cytology, hemotology, histology, serology, and urinalysis.
Prerequisite: Completion of 94 hours course work as required for B.S. degree in Medical Technology.

MTE 452

State College and approved by the American Society of Clinical Pathologists.

## PHYSICAL SCIENCE

PHS 100 Introduction to the Metric System (1) $i$, ii The metric system including history of measurements, relationships within the metric system and conversions between the English and metric systems.

CHE 111 General Chemistry I ..... 5
MAT 107 Calculus I ..... 5
English ..... 3
Social Science ..... 3
Spring Semester
CHE 120 General Chemistry II ..... 5
MAT 108 Calculus II ..... 5
English ..... 3
Social Science ..... 316
Sophomore Year Fall Semester
CHE 310 Organic Chemistry I ..... 3
CHE 311 Organic Chemistry Lab. I ..... 2
MAT 209 Calculus III ..... 5
GER 102 Elementary German I ..... 3
Social Science ..... 316
Spring Semester
CHE 312 Organic Chemistry II ..... 3
CHE 313 Organic Chemistry Lab. II ..... 2
GER 112 Elementary German II ..... 3
Speech ..... 3
PED 101 Physical Education Concepts ..... 1
Humanities ..... 315
Junior Year Fall Semester
CHE 321 Quantitative Analysis ..... 4
GER 202 Intermediate German ..... 3
Humanities ..... 3
PHY 110 College Physics I ..... 5
P.E. Activity ..... 116
Spring Semester
PHY 111 College Physics II ..... 3
CHE 326 Instrumental Analysis ..... 4
German Elective ..... 3
Humanities ..... 3
Electives ..... 316
Senior Year
Fall Semester
CHE 431 Physical Chemistry I ..... 3
CHE 432 Physical Chemistry Lab. II ..... 2
CHE 495 Seminar in Chemistry ..... 1
Electives ..... 6
P.E. Activity ..... 214
Spring Semester
CHE 370 Biochemistry ..... 4
Electives. ..... 11
CHE 111 General Chemistry I ..... 5
MAT 107 Calculus I ..... 5
English ..... 3
Social Science. ..... 316
Spring Semester
CHE 120 General Chemistry II ..... 5
MAT 108 Calculus II ..... 5
English ..... 3
Social Science ..... 3
Sophomore Year Fall Semester
CHE 321 Quantitative Analysis ..... 4
MAT 209 Calculus III ..... 5
GER 102 Elementary German I ..... 3
Speech ..... 3
P.E. Concepts ..... 1
Spring Semester
CHE 326 Instrumental Analysis ..... 4
PHY 210 University Physics I ..... 5
GER 112 Elementary German II ..... 3
Social Science ..... 3
P.E. Activity ..... 1
Junior Year Fall Semester
CHE 310 Organic Chemistry I ..... 3
CHE 311 Organic Chemistry Lab. 1 ..... 2
CHE 341 Advanced Inorganic Chemistry ..... 3
PHY 211 University Physics II ..... 4
Elective ..... 3
P.E. Activity ..... 1
Spring Semester
CHE 312 Organic Chemistry II ..... 3
CHE 313 Organic Chemistry Lab. II ..... 2
PHY 212 University Physics III ..... 3
CSC 188 Fortran Language ..... 3
ENG 210 Approaches to Literature ..... 3
P.E. Activity ..... 1
15
Senior Year
Fall Semester
CHE 431 Physical Chemistry I ..... 3
CHE 432 Physical Chemistry Lab. I ..... 2
CHE 495 Seminar in Chemistry ..... 1
Elective ..... 6
CHE 490 Research in Chemistry ..... 315
Spring Semester
CHE 370 Biochemistry ..... 4
Elective ..... 4
CHE 433 Physical Chemistry II ..... 3
CHE 434 Physical Chemistry Lab. II ..... 2
CHE 440 Advanced Organic Chemistry ..... 3
CHE 111 General Chemistry General Chemistry I
BIO 111 General Biology I ..... 3 ..... 5
English ..... 3
Social Science
introduction to the Health Sciences
introduction to the Health Sciences ..... 1 ..... 1
$\begin{array}{ll}\text { MTE } 105 & \text { Introduction to } \\ & \text { P.E. Concepts }\end{array}$
$\begin{array}{ll}\text { MTE } 105 & \text { Introduction to } \\ & \text { P.E. Concepts }\end{array}$ ..... 1 ..... 116
Spring Semester
CHE 120 General Chemistry II ..... 5
MAT 106 Trigonometry ..... 2
English ..... 3
MAT 105 College Algebra ..... 3
P.E. Activity ..... 1
Elective ..... 115
Sophomore Year Fall Semester
CHE 321 Quantitative Analysis ..... 4
BIO 312 Genetic Biology ..... 4
Social Science ..... 3
Speech. ..... 3
P.E. Activity ..... 1
112
Spring Semester
CHE 326 Instrumental Analysis ..... 4
BIO 311 Animal Physiology. ..... 4
PHY 101 Concepts and Principles of Physics. .....  4
Humanities ..... 3
P.E. Activity ..... 1
Junior Year
Fall Semester
CHE 310 Organic Chemistry I ..... 3
CHE 311 Organic Chemistry Lab I ..... 2
BIO 399 Microbiology .....  5
Social Science .....  3
Humanities .....  3

## Spring Semester

CHE 370 Biochemistry ..... 4
Humanities ..... 3
Elective ..... 4
BIO 400 Microbiology of Human Disease .....  5
Senior Year
Taken at an affiliated hospital
MTE 451 Medical Technology Internship I ..... 12
MTE 452 Medical Technology Internship II ..... 12
MTE 453 Medical Technology Internship III ..... 6Freshman Year

## Fall Semester

CHE 111 General Chemistry I ..... 5
MAT 107 Calculus I ..... 5
BIO 111 General Biology I ..... 3
English ..... 316
Spring Semester
CHE 120 General Chemistry II ..... 5
BIO 112 General Biology II ..... 3
Social Science ..... 3
English ..... 3
P.E. Concepts ..... 115
Sophomore Year Fall Semester
CHE 310 Organic Chemistry I ..... 3
CHE 311 Organic Chemistry Lab I ..... 2
BIO 399 Microbiology ..... 5
Social Science .....  313
Spring Semester
MAT 201 Elementary Statistics ..... 3
CHE 370 Biochemistry ..... 4
BIO 311 Animal Physiology ..... 4
Social Science ..... 3
P.E. Activity .....  115
Junior Year
Fall Semester
CHE 321 Quantitative Analysis .....  4
PHY 110 College Physics I ..... 5
Humanities ..... 3
Speech ..... 3
P.E. Activity .....  116
CHE 326 Instrumental Analysis ..... 4
PHY 111 College Physics ..... 3
BIO 312 Genetic Biology ..... 4
Elective ..... 3
P.E. Activity ..... -15
Senior Year
Fall Semester
BIO 310 Cellular Biology .....  4
CHE 495 Seminar in Chemistry ..... 1
CHE 341 Advanced Inorganic Chemistry ..... 3
Humanities ..... 3
Electives. .....  4

## Spring Semester

Humanities ..... 3
Electives .....  1316

Fall Semeste
P.E. Activity . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1
CHE 111 General Chemistry 1 ..... 5
MAT 107 Calculus ..... 5
English ..... 3
Social Science ..... 316
Spring Semester
CHE 120 General Chemistry II ..... 5
MAT 108 Calculus II ..... 5
English ..... 3
Social Science ..... 3
Sophomore Year Fall Semester
CHE 321 Quantitative Analysis ..... 4
MAT 209 Calculus III ..... 5
Speech ..... 3
P.E. Concepts ..... 1
Humanities ..... 3
Spring Semester16
SED 202 ntro. to Sec. Ed. ..... 2SED 203
CHE 326 Part. in Sec. Teach. I . ..... 1
Humanities ..... 6
Social Science ..... 3
P.E. Activity ..... -17
Elective317
Spring Semester
PHY 111 College Physics II ..... 3
CHE 465 Chemistry Teaching: Methods ..... 2
Social Science ..... 3
P.E. Activity ..... 1
SED 303 Exp. in Sec. Teaching II ..... 3
SED 304 Psy. in Sec. Teaching ..... 416
Senior Year Fall Semester
CHE 431CHE 432
CHE 495
Physical Chemistry Lab I. ..... 3
Seminar in Chemistry . ..... 2
Elective ..... B14
Spring Semester
SED 404 ..... 3Ed. of the Ex. Student
SED 407
SED 409 Sec. Stu. Teaching III2$\frac{9}{14}$


The department of English and Modern Languages is organized to meet the needs of all students. Through its participation in the general studies program, the department offers work in composition, basic literary study, and language; through the Learning Skills Center, it provides opportunities for improvement in basic skills and habits of study. Major and minor sequences may include work in literature, writing, and language. In its endeavors, the department works toward a fourfold goal: the improvement of writing;

## BACHELOR OF ARTS DEGREE

## (Requires 16 credit hours in a foreign language)

## MAJOR IN ENGLISH

In addition to at least 9 credit hours of English included in the general studies program, a minimum of 36 credit hours of course work in English must be completed. The following specific courses are required: ENG 224, 332, 310 or 312 plus an additional 3 hour course in English literature; ENG 360 or 362 plus an additional 3 hour course in American literature; ENG 368 and 486. An additional 12 credit hours must be selected from English courses numbered above 300 . The student and his advisor must plan a program that includes some work beyond that encountered in basic survey courses in fiction, drama, and poetry, and at least one course providing a major emphasis in each of the following periods: preeighteenth century, eighteenth century, nineteenth century, and twentieth century. Although the appropriate English-Education courses may be presented as part of a degree program, they may not be used to fulfill the requirements listed above.

## MINOR IN ENGLISH

In addition to at least 9 hours of English from the general studies program, a minimum of 21 credit hours of English must be completed. Specific requirements are ENG 224; 310 or 312, plus an additional course in English literature; ENG 360 or 362 , plus an additional course in American literature; 368, and 3 hours elected from courses numbered above 300 (excluding courses in English-Education).
the development of skill in organizing and expressing ideas and in the interpretations of ideas expressed by others; the development and refinement of habits of critical and perceptive reading; and the increase of language awareness and precision. In all its pursuits, the department works toward the general end of encouraging the student to grow in self-knowledge and the knowledge of others through its emphasis on the humane and liberal characteristics of its offerings.

## MINOR IN JOURNALISM

Courses must include 18 hours in journalism. Students interested in pursuing a minor toward admission to a school of journalism should be advised early. Generally, a strong background in liberal arts and sciences is recommended, but some courses may be more important than others.
MINOR IN FRENCH, GERMAN, OR SPANISH
Twenty-two credit hours in one language constitutes a minor.

## BACHELOR OF SCIENCE IN EDUCATION DEGREE

## MAJOR IN ENGLISH

In addition to general studies requirements, a minimum of 32 hours of course work must be completed. The following specific courses are required: ENG 224, 234, 310 or 312 , plus an additional course in English literature; ENG 360 or 362 plus an additional course in American literature. ENG 368, 400, 465, 486; EED 311. An additional 6 credit hours must be selected from English courses numbered above 300 . Courses should be selected so that the student's program includes work in each of the major genres and significant selections from major literary periods.

## MINOR IN ENGLISH

Since the bachelor of science minor is specifically offered for the purpose of preparing the student for a second teaching field, it is structured to meet certification requirements and basic needs of teachers of English in grades seven through twelve. In addition to general

## ENGLISH COMPOSITION AND LANGUAGE

ENG 100 Basic Written Communication Skills (3) i, ii Instruction in reading and writing open to any student, but mandatory as first course for students scoring below 14 on ACT English test. Does not fulfill the English Composition requirement for baccalaureate degree.
ENG 104 Composition and Rhetoric I (3) i, ii, iii Instruction and practice in reading and writing, with emphasis given to expository prose.

ENG 108 Composition and Rhetoric II (3) i, ii, ii Instruction in reading various literary genres and continued practice in writing. Prerequisite: ENG 104.

ENG 112 Honors Composition and Rhetoric (3) i
An enriched course open to students with ACT English scores above 24 . This course fulfills the English communications requirement for regularly enrolled students.

ENG 200 College Learning Skills W rrkshop (3) i, ii
An intensive 12 -week skills course in reading, writing, and studying. For freshman and upperclassmen.

ENG 224 Advanced Composition and Literature (3) i
Required for English majors and minors, this course offers systematic instruction in writing about literature.
Prerequisite: ENG 108 or 112.
ENG 332 History of the English Language (3) ii (odd numbered years)
Growth and structure of the English language.
Prerequisite: Sophomore standing.
ENG 338 Creative Writing (3) i
Intensive practice in writing poetry, fiction, or drama, in accordance with the interests of the student. May be repeated for a maximum total of 6 credit hours.
Prerequisite: ENG 108 or 112.

## ENGLISH EDUCATION

English Education courses may not be used to fulfill any requirement for the Bachelor of Arts degree with a major in English.

ENG 234 Modern English Grammar (3) i
A systematic study of traditional, structural, and transformational grammar. Designed to meet the needs of the elementary and secondary teacher.
Prerequisite: ENG 108 or 112.
ENG 300 Children's Literature (3) i, ii, iii
Children's books; the use of literature with children. Does not fulfill any requirement for the major in English.
Prerequisite: ENG 108 or 112.
ENG 400 Literature for Adolescents (3) ii
Contemporary and traditional materials suitable for middle and secondary schools; standards of evaluation; listings and reliable reviews of appropriate books.
Prerequisite: Junior standing.

## ENGLISH LITERATURE

## ENG 210 Approaches to Literature (3) i, ii, iii

A general studies course providing practice in reading poetry, prose fiction, and drama. Various thematic approaches may be offered. Primarily for the non-English major.
Prerequisite: ENG 108 or 112, or consent of instructor.

ENG 220 Classical Backgrounds for Literature (3) ii Interdisciplinary in content, this course attempts to help the student establish a foundation for meaningful study of English literature. Recommended for majors but open to all students.
Prerequisite: ENG 108 or 112, or consent of instructor.

ENG 248 Approaches To Film Literature (3) ii
Themes, ideas, and techniques in film. Prerequisite: ENG 108 or 112.

ENG 310 English Literature (3) i
Beowulf to 1785.
Prerequisite: ENG 108 or 112.
ENG 312 English Literature (3) ii
A continuation of English 310; 1785 to 1930.
Prerequisite: ENG 108 or 112.
ENG 360 American Literature to 1865 (3) i
American literature from Bradford to Lincoln.

- Prerequisite: ENG 210 or 220, or consent of in-

ENG 362 American Literature since 1865 (3) ii
American literature from Whitman to the present.
Prerequisite: ENG 210 or 220 , or consent of instructor.

ENG 368 Shakespeare (3) i
Shakespearean drama.
Prerequisite: ENG 210 or 220 , or consent of instructor.

ENG 370 Medieval Literature (3) i (odd numbered years)
England's medieval culture and literature; special emphasis on Chaucer.
Prerequisite: ENG 210 or 220 , or consent of instructor.

ENG 372 Seventeenth Century English Literature (3) ii (even numbered years)
Poetry and prose of the seventeenth century, including Milton.
Prerequisite: ENG 210 or 220 , or consent of instructor.

ENG 374 Eighteenth Century English Literature (3) ii (odd numbered years)
The major literary movements and writers of the eighteenth century.
Prerequisite: ENG 210 or 220 , or consent of instructor.

ENG 380 Romantic Poetry and Prose (3) i (even numbered years)
Reading and criticism of representative works of the period.
Prerequisite: ENG 210 or 220 , or consent of instructor.
bered years)
Study of translations of major works in various genres.
Prerequisite: ENG 210 or 220 , or consent of instructor.
ENG 420 The American Short Story (3) ii (odd numbered years)
Representative selections.
Prerequisite: ENG 210 or 220 , or consent of instructor.
ENG 422 The American Novel (3) ii (even numbered years)
A study of selected works of the Nineteenth and Twentieth Centuries.
Prerequisite: ENG 210 or 220, or consent of instructor.

ENG 426 Contemporary Poetry (3) i (odd numbered years)
Poetry from 1945 to the present.
Prerequisite: ENG 210 or 220, or consent of instructor.
ENG 450 Independent Study in English (1-5) i, ii, iii
Independent research on a topic or problem which the student wishes to pursue in depth.
Prerequisite: The student must have: (1) completed the major-minor application form, (2) obtained the consent of the department chairman, and (3) earned a minimum 2.5 grade point average in his major field of study.
ENG 468 The English Novel: Defoe to Austen (3) i (odd numbered years)
The beginnings of the English Novel in the eighteenth century, its history as a major literary genre and its development into various modes from Defoe to Austen.
Prerequisite: ENG 210 or 220, or consent of instructor.

ENG 470 The English Novel: Scott to the Present (3) i (even numbered years)
Traces the development of the English novel from the Romantic period, through the Victorian Age, and to the present.
Prerequisite: ENG 210 or 220 , or consent of instructor.

ENG 478 Modern Drama (3) ii (even numbered years) Ibsen to the present.
Prerequisite: ENG 210 or 220, or consent of instructor.
ENG 486 Theory and Practice of Criticism (3) ii
History of criticism, and practice in the application of theory.
Prerequisite: ENG 210 or 220 , or consent of instructor.

ENG 488 Seminar in English (1-4) i, ii
Study of selected topics or problems in English. Open to advanced juniors or seniors with the consent of the instructor and department chairman.

## JOURNALISM

JOU 118 Principles of Journalism and Mass Media (3) i A general introduction to the historical evolution of modern communications media with an emphasis on the distinguishing features of the newspaper, magazine, radio, and television, and their interrelated roles in today's society.

Prerequisite: JOU 118 or permission of the instructor.
JOU 126 Journalism Laboratory-Newspaper Production (2) i , ii

Supervised experience in the production of the campus newspaper.
Prerequisite: Concurrent or previous enrollment in a journalism class, or the permission of the instructor.
JOU 127 Journalism Laboratory-Yearbook Production (2) i , ii

Supervised instruction in the production of the campus yearbook. (Laboratory courses may be repeated for a maximum of 8 credit hours.)

JOU 222 News Writing II (3) i
Instruction and practice in the application of professional news writing principles to interpretative and in-depth reporting, with an emphasis on editorial and column writing.
Prerequisite: JOU 120 or permission of the instructor.

JOU 224 News Editing (3) ii
Introduction to newspaper production management; intensive practice in copyreading, editing, headline writing, and page make-up.
Prerequisite: JOU 222 or permission of the instructor.

## MODERN LANGUAGES

A student with extensive background in a language is encouraged to petition for a testout. Two years of high school study in a language should provide background for testing out of the first semester course, and three to four years of study should enable the student to test out of the second basic course.

## FRENCH

FRE 102 Elementary French I (4) i
Basic structural patterns of the language and essential grammar; development of active proficiencies and comprehension of grammatical concepts. 3 hours lecture, 2 hours lab.
FRE 112 Elementary French II (4) ii
Continuation of FRE 102. 3 hours lecture, 2 hours lab. Prerequisite: FRE 102 or equivalent.
FRE 202 Intermediate French (4) i
Continuation of French 112; completion of essential grammar. 3 hours lecture, 2 hours lab.
Prerequisite: FRE 112 or equivalent.
FRE 212 French Conversation and Composition (4) ii Refinement of writing and speaking skills through review of structural patterns, mastery of idiomatic usages and study of vocabulary distinctions. 3 hours lecture, 2 hours lab.
Prerequisite: FRE 202 or equivalent.
FRE 315 French Reading and Conversation (3) i (even numbered years)
Short contemporary French masterpieces. 3 hours lecture, 1 hour lab.
Prerequisite: FRE 212 or equivalent.

French Civilization and Culture (3) ii (even numbered years)
The cultural basis of modern French. 3 hours lecture, 1 hour lab.
Prerequisite: FRE 315 or equivalent.
FRE 350 Introduction to French Literature (3) ii (odd numbered years)
Selected masterpieces in French literature from the twelfth to the twentieth century. Prerequisite: FRE 315 or 319.
FRE 402 Readings in French (3) $i$
A seminar in French literature or language. Topic will vary from semester to semester. May be repeated twice for credit.
Prerequisite: FRE 320 or 350.
FRE 412 Topics in French (3) is
An advanced seminar in French literature or language. Content of course will change from semester to semester. May be repeated twice for credit.
Prerequisite: FRE 402.
FRE 450 Independent Study in French (1-5) i, ii, iii
Investigation of selected problems or topics on an individual conference basis.
Prerequisite: The student must have: (1) completed the major-minor application form, (2) obtained the consent of the department chairman, and (3) earned a minimum 2.5 grade point average in his major field of study.

## GERMAN

GER 102 Elementary German I (4) i
Basic structural patterns of the language and essential grammar; development of active proficiencies and comprehension of grammatical concepts. 3 hours lecture, 2 hours lab.
GER 112 Elementary German II (4) ii
Continuation of GER 102. 3 hours lecture, 2 hours lab.
Prerequisite: GER 102 or equivalent.
GER 202 Intermediate German (4) i
Continuation of GER 112; completion of essential grammar. 3 hours lecture, 2 hours lab.
Prerequisite: GER 112 or equivalent.
GER 212 German Conversation and Composition (4) ii
Use of short literary works as a basis for conversation and short compositions. 3 hours lecture, 2 hours lab.
Prerequisite: GER 202 or equivalent.
GER 260 Scientific German (3) (on demand)
Scientific material written in German; basic scientific terms. Reading and translation; stress on scientific vocabulary.
Prerequisite: GER 202 or equivalent.
GER 315 German Reading and Conversation (3) i (even numbered years)
Short contemporary German masterpieces, newspapers and magazines as a basis for conversation.
Prerequisite: GER 212 or equivalent.
GER 319 German Short Story (3) i (odd numbered years) Reading short stories of 10-25 page length and discussion in German.
Prerequisite: GER 212.

GER 350
Introduction to German Literature (3) ii (odd numbered years)
Selected masterpieces in modern German literature.
Prerequisite: GER 315 or 319.
GER 402 Readings in German (3) i
A seminar in German literature or language. Topic of course will vary from semester to semester. May be repeated twice for credit. Prerequisite: GER 320 or 350.
GER 412 Topics in German (3) ii
An advanced seminar in German literature or language. Content of course will change from semester to semester. May be repeated twice for credit.
Prerequisite: GER 402.
GER 450 Independent Study in German (1-5) i, ii, iii Investigation of selected problems or topics on an individual conference basis.
Prerequisite: The student must have: (1) completed the major-minor application form, (2) obtained the consent of the department chairman, and (3) earned a minimum 2.5 grade point average in his major field of study.

## SPANISH

## SPA 102 Elementary Spanish I (4) i

Basic structural patterns of the language and essential grammar; development of active proficiencies and comprehension of grammatical concepts. 3 hours lecture, 2 hours lab.

SPA 112 Elementary Spanish II (4) ii
Continuation of SPA 102. 3 hours lecture, 2 hours lab.
Prerequisite: SPA 102 or equivalent.
SPA 202 Intermediate Spanish (4) i
Continuation of SPA 112; completion of essential grammar. 3 hours lecture, 2 hours lab. Prerequisite: SPA 112 or equivalent.
SPA 212 Spanish Conversation and Composition (4) ii
Conversations and written compositions based on textual materials as well as contemporary topics. 3 hours lecture, 2 hours lab.
Prerequisite: SPA 202 or equivalent.
SPA 315 Spanish Conversation and Reading (3) i (even numbered years)
Continuation of oral skills with emphasis on the reading skills. An introduction to literature. 3 hours lecture, 1 hour lab.
Prerequisite: SPA 212 or equivalent.
SPA 319 Advanced Spanish Conversation and Composition (3) i (odd numbered years)
Advanced Spanish grammar and syntax, less common idiomatic forms and subtle vocabulary distinctions. 3 hours lecture, 1 hour lab. Prerequisite: SPA 212 or equivalent.
SPA 320 Hispanic Civilization and Culture (3) ii (even numbered years)
Historical and cultural heritage of the Spanish speaking peoples.
Prerequisite: SPA 315 or equivalent.

SPA 402 Readings in Spanish (3) i
A seminar in Spanish literature or language. Topic will vary from semester to semester. May be repeated twice for credit.
Prerequisite: SPA 320 or 350.

## SAMPLE PROGRAM <br> BACHELOR OF ARTS DEGREE MAJOR IN ENGLISH

Freshman Year
Fall Semester
ENG 104 Eng. Comp. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
102 French, Spanish, or German .................. . . 4
Math ............................................ . . . . 3
Speech . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
PED 101 P.E. Concepts . . . . . . . . . . . . . . . . . . . . . . . . . . . 1
14

## Spring Semester

ENG 108 Eng. Comp. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
112 French, Spanish, or German .................. . . . 4
Natural Science . . . . . . . . . . . . . . . . . . . . . . . . . . . 5
Social Science . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
P.E. Activity . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 16

## Sophomore Year <br> Fall Semester

202 French, Spanish, or German4
Humanities Elective ..... 3
ENG 224 Adv. Comp. ..... 3
ENG 310 Eng. Lit. or Eng. Lit. Elective ..... 3
Social Science ..... 3
P.E. Activity ..... 117
Spring Semester
212 French, Spanish, or German ..... 4
Humanities Elective ..... 3
ENG 220 Classical Backgrounds ..... 3
ENG 312 Eng. Lit. or Eng. Lit. Elective ..... 3
Elective or Minor ..... 316
Junior Year
Fall Semester
Am. or Eng. Lit. Elective ..... 3
ENG 368 Shakespeare ..... 3
English Elective ..... 3
Natural Science ..... 4
Elective or Minor ..... 3
Spring Semester
ENG 332 Hist. of Eng. Lang ..... 3
Am. Lit. Elective ..... 3
Am. Hist. or Nat'l Gov't
6
Eng. Electives or Minor15

SPA 450
Independent Study in Spanish (1-5) i, ii, iii Investigation of selected problems or topics on an individual conference basis.
Prerequisite: The student must have: (1) completed the major-minor application form, (2) obtained the consent of the department chairman, and (3) earned a minimum 2.5 grade point average in his major field of study.
Senior Year
Fall Semester
Electives or Minor ..... 9
English Electives ..... 615
Spring Semester
ENG 486 Theory, Prac. Critic. ..... 3
English Elective ..... 3
Electives or Minor ..... -15
SAMPLE PROGRAM
BACHELOR OF SCIENCE IN EDUCATION DEGREE MAJOR IN ENGLISH
Freshman YearFall Semester
ENG 104 English Comp. ..... 3
Math ..... 3
Speech ..... 3
Social Science or Nat'l Gov't ..... 3
PED 101 P.E. Concepts ..... 1
PSY 101 General Psychology ..... 316
Spring Semester
ENG 108 English Comp. ..... 3
Natural Science ..... 5
Humanities Elective ..... 3
Social Science ..... 3
P.E. Activity ..... 1
Sophomore Year Fall Semester
ENG 224 Advanced Comp. ..... 3
ENG 234 Modern English Grammar ..... 3
ENG 310 English Lit. (or elective) ..... 3
English Elective ..... 3
Social Science. ..... 3
P.E. Activity ..... - 116
Spring Semester
SED 202 Introduction to Secondary Educ. ..... 2
SED 203 Participation in Secondary Teaching I ..... 1
ENG 220 Classical Backgrounds ..... 3
ENG 312 English Lit. (or elective) ..... 3
Natural Science ..... 4
P.E. Activity ..... 1
Elective ..... 1

## Spring Semester

ENG 362 Am. Lit. (or elective) . . . . . . . . . . . . . . . . . . . . . . . 3

ENG 400
ENG 486 Theory, Prac. Critic ..... 3
English Elective ..... 3
EED 311 Teaching of Reading ..... 3

## Spring Semester

SED 404 Foundations in Secondary Educ. . . . . . . . . . . . 3
SED 407 Ed. of the Exceptional Student3

SED 409 Secondary Student Teaching III ..... | 9 |
| :--- |

Students are encouraged, though not required, to take eight or more electives in foreign language.


The department of Mathematical Sciences contributes to the liberal education of all students and, in addition, provides specialized programs in computer science, data processing, mathematics and physics for those stu-

## BACHELOR OF ARTS DEGREE

## (Requires $\mathbf{1 6}$ credit hours in a foreign language) <br> MAJOR IN MATHEMATICS

Courses in mathematics must total 36 credit hours; courses in physics must total 11 credit hours. The following specific courses are required: MAT 107, 108, 209, 305, 312, 316, 420, 430 plus an additional 6 credit hours of upper division mathematics electives; PHY 210, 211, 212.

## BACHELOR OF SCIENCE DEGREE

MAJOR IN COMPUTER SCIENCE
The major in Computer Science requires completion of the following program for a total of 54 credit hours: CSC 182, 188, 240, or 255, 245, 284, 286; MAT 107, 108, 201, 209, 305, 312, MAT 417 or CSC 410 , plus 9 additional hours of Computer Science courses (excluding CSC 410.)

## MAJOR IN DATA PROCESSING

The major in Data Processing requires the completion of the following program for a total of 54 credit hours: CSC 182, 188, 240, 245, 284, 286; plus 12 credit hours of Computer Science electives; MAT 201 or MGT 210; and an approved program of 21 credit hours in a related area (The student must meet with the Computer Science faculty to design and obtain approval for this program).

## MAJOR IN MATHEMATICS

Courses in mathematics must total 36 credit hours; courses in physics must total 11 credit hours; courses in computer science must total 6 credit hours. The following specific courses are required: MAT 107, 108, 209, 305, $312,316,420,430$, plus an additional 6 credit hours of upper division mathematics electives; PHY 210, 211, 212; CSC 188, plus an additional 3 credit hours of computer science electives (excluding CSC 182).
dents who desire a more thorough preparation in these areas for jobs in business, government, industry and educational institutions.

## BACHELOR OF SCIENCE IN EDUCATION DEGREE

## MAJOR IN MATHEMATICS

Courses in mathematics must total 35 credit hours. The following specific courses are required: MAT 107, 108, 209, 305, 312, 315, 316, 420, 430, 465.

## ASSOCIATE OF SCIENCE DEGREE

MAJOR IN DATA PROCESSING
This degree program requires the completion of the following specific courses: CSC $182,188,240,245,284,286$; MAT 201 or MGT 210; plus an approved related area consisting of 15 credit hours. (The student must meet with the Computer Science faculty to design and obtain approval for related area programs).

## MINORS

## MINOR IN COMPUTER SCIENCE

The minor in Computer Science requires the completion of the following program for a total of 22 credit hours: MAT 107, 108; CSC 188, 284; plus 6 credit hours' of Computer Science electives (excluding CSC 182).

## MINOR IN DATA PROCESSING

The minor in Data Processing requires the completion of the following program for a total of 21 credit hours; CSC 182, 240, 245, and 345; ACC 230; plus 6 credit hours of Computer Science electives.

## MINOR IN MATHEMATICS

Courses in Mathematics must total 21 credit hours. The following specific courses are required: MAT 107 and 108 plus elective courses in Mathematics numbered 200 or higher.
MINOR IN PHYSICS
Courses in Physics must total 19 credit hours. The following specific courses are required: PHY 210, 211, 212, 310, 411.

CSC 188 Introduction to FORTRAN IV Programming (3) i, ii
Structure and facilities of FORTRAN (FORmula TRANslation) programming.
Prerequisite: CSC 182 and MAT 105, or equivalent, or consent of instructor.

CSC 240 Introduction to RPG Programming (3) i, ii Structure and facilities of RPG (Report Program Generator) programming.
Prerequisite: CSC 182.
CSC 245 Introduction to COBOL Programming (3) i, ii Structure and facilities of COBOL (COmmon Business Oriented Language) programming. Prerequisite: CSC 182.

CSC 255 Introduction to PL/I Programming (3) i
Structure and facilities of PL/I (Programming Language/l)
Prerequisite: CSC 188 or 245.
CSC 284 Symbolic Assembler Language I (3) i, ii
Assembly language level programming: Symbolic machine instructions, dumps, assembly language instructions, subprogram linkage, and vender supplied subprograms.
Prerequisite: CSC 188.
CSC 286 Computer and Programming Systems (3) i, ii
An introduction to machine organization, programming and operating systems.
Prerequisite: CSC 284.
CSC 310 Character Processing with FORTRAN (3) i
(odd numbered years)
Study of subprograms designed to manipulate alphameric characters.
Prerequisite: CSC 188, with grade of C or better.
CSC 345 Advanced COBOL Programming (3) i, ii
Continuation of CSC 245; table handling, errorroutine handling, tape processing, sequential and indexed-sequential disk processing, SORT AND REPORT WRITER features.
Prerequisite: CSC 245, with grade of C or better.
CSC 370 Information Retrieval (3) i (even numbered years)
Organization; hierarchies of storage, sorting, searching, and cross-referencing information from files.
Prerequisite: CSC 188.
CSC 384 Symbolic Assembler Language II (3) ii
Continuation of Computer Science 284; vender supplied ILS's, ISS's, programmer written ILS's, ISS's, conversion routines, and macro assemblies.
Prerequisite: CSC 284.
CSC 388 Introduction to Operations Research (3) ii (even numbered years)
Survey of linear programming, transportation and network theory, scheduling problem, inventory control, queueing theory, game theory, and simulation; emphasis on methodology.
Prerequisite: CSC 188 and MAT 201 or MGT 210.
CSC 410 Programming Numerical Methods (3) i
Computer approaches to numerical solutions to equations, solutions to systems of equations, linear programming, linear and polynomial approximations, numerical integration.
Prerequisite: CSC 188 and MAT 108.

CSC 488
Data Processing Management (3) ii
Basic management principles as applied to data processing. Assumes no prior management training.
Prerequisite: Senior college standing and one programming language course.

## EARTH SCIENCE

ESC 204 Introduction to Geology (4) i, ii Survey of physical and historical geology. 3 hours lecture, 2 hours lab.

ESC 304 Environmental Earth Science (4) i, ii
General survey of geology, meteorology, astronomy and oceanography. 3 hours lecture, 2 hours lab.
Prerequisite: 5 credit hours of Physical Science.

## MATHEMATICS

MAT 100 Basic Algebra (3) i, ii, iii
A basic introduction to addition, subtraction, multiplication and division of real numbers and polynomials; linear equations; inequalities and graphs; systems of equations; factoring; exponents; radicals; quadratic equations. (Not open to the student who has credit in MAT 105 or above).

MAT 101 Fundamental Concepts of Mathematics (3) $\mathbf{i}$, $\mathbf{i}$, iii
Tables and graphs, consumer mathematics, sets and logic, probability, statistics, metric measure. (Not open to the student who has credit in MAT 107).

MAT 105 College Algebra (3) i, ii, iii
Quadratic systems, exponents, radicals, ratio, proportion, variation, the binomial theorem, progressions, inequalities, permutations, and combinations.
Prerequisite: Two units of high school algebra or grade of $C$ or better in MAT 100 or the equivalent. (Not open to the student who has credit in MAT 107).

MAT 106 Trigonometry (2) i, ii, iii
Trigonometric functions, trigonometric identities, trigonometric equations, logarithms, solution of triangles, inverse trigonometric functions.
Prerequisite: MAT 100 or the equivalent. (Not open to the student who has credit in MAT 107).

MAT 107 Calculus with Analytic Geometry I (5) i, ii, iii Plane analytic geometry, differential calculus, and integral calculus.
Prerequisite: Grade of C or better in MAT 105 and 106 or the equivalent.

MAT 108 Calculus with Analytic Geometry II (5) i, ii A continuation of MAT 107 with selected topics from analytic geometry and calculus. Prerequisite: Grade of C or better in MAT 107 or the equivalent.
tion.
Prerequisite: MAT 100 or the equivalent.
MAT 204 Applied Calculus (5) ii
Functions; limits; the derivative; applications of the derivative; the integral; applications of the integral.
Prerequisite: MAT 105 and 106 or the equivalent. (Not open to the student who has credit in MAT 108).

MAT 209 Calculus with Analytic Geometry III (5) i, ii Infinite series, vectors, solid analytic geometry, partial differentiation, and multiple integrals. Prerequisite: Grade of C or better in MAT 108 or the equivalent.

MAT 300 Mathematics for Elementary Teachers I (3) i, ii, iii
A basic course in mathematics; emphasis on structure, meanings, relationships, and logical reasoning in elementary mathematics.
Prerequisite: MAT 101 or the equivalent. (Not open to major or minor in mathematics).

## MAT 305 Linear Algebra (3) i

Vector spaces, linear transformations, matrix operations, determinants, matrix inversion, linear systems, eigenvalues, canonical forms.
Prerequisite: MAT 209 or the equivalent.
MAT 312 Differential Equations (3) ii
Common types of ordinary differential equations; differential operators; Laplace transforms; systems of differential equations; partial differential equations; Fourier series; applications.
Prerequisite: MAT 209 or the equivalent.
MAT 315 Topics in Geometry (3) i
Synthetic projective geometry; basic symbolic logic; mathematical systems and finite geometries; algebraic geometry; non-Euclidean geometry.
Prerequisite: MAT 209 or the equivalent.
MAT 316 Abstract Algebra (3) ii
Groups, rings, fields and vector spaces; definitions and fundamental theorems; homomorphisms and isomorphisms; polynomials and field extensions.
Prerequisite: MAT 209 or the equivalent.
MAT 332 Mathematical Statistics (3) i (even numbered years)
The theory of mathematical stastics; probability, distribution theory and point estimation. Prerequisite: MAT 209 or the equivalent.

MAT 400 Mathematics for Elementary Teachers II (4) $\mathbf{i}$, $\mathbf{i i}$, iii

A continuation of MAT 300.
Prerequisite: MAT 300 or the equivalent. (Not open to major or minor in mathematics).

MAT 417 Numerical Analysis (3) i
The solution of algebraic and transcendental equations; finite differences; interpolation numerical differentiation and integration; numerical solutions of ordinary differential equations.
Prerequisite: MAT 209 and CSC 188 or the equivalent, or permission of the instructor.

Connectedness, completeness, compactness, the derivative, the Riemann integral, elementary transcendental functions, Taylor's theorem, sequences and series of functions. Prerequisite: MAT 420 or the equivalent.

MAT 450 Independent Study in Mathematics (1-5) $\mathbf{i}$, ii, iii Investigation of selected problems or topics on an individual conference basis.
Prerequisite: The student must have: (1) completed the major-minor application form, (2) obtained the consent of the department chairman, and (3) earned a minimum 2.5 grade point average in his major field of study.

MAT 465 Mathematics Teaching: Methods and Materials (2) ii

Techniques, materials and resources used in the mathematics curriculum in secondary schools.
Prerequisite: SED 303 or the equivalent; candidate for Bachelor of Science in Education Degree.

MAT 470 Seminar in Mathematics (1) $i$, ii
Investigation and discussion of selected mathematical topics.
Prerequisite: MAT 209 or the equivalent.

## PHYSICS

PHY 101 Concepts and Principles of Physics (4) i, ii, iii
A comprehensive treatment of the concepts and laws of physics using a non-mathematical approach. 3 hours lecture-demonstration, 2 hours laboratory.

PHY 104 Introduction to Astronomy (3) i, ii
A basic course in astronomy, mostly descriptive in nature; solar system, stellar astronomy, structure of galaxy and universe. 3 lecture hours per week.
Prerequisite: A basic knowledge of high school algebra and plane geometry.

PHY 110 College Physics I (5) i
Classical treatment of mechanics, waves, energy, electricity and magnetism. 4 hours lecture, 3 hours laboratory.
Prerequisite: MAT 105 or consent of instructor.
PHY 111 College Physics II (3) ii
Relativity, atomic physics and nuclear physics. 2 hours lecture, 3 hours laboratory.
Prerequisite: PHY 110 or consent of instructor.
PHY 210 University Physics I (4) ii
Calculus level mechanics, heat, and wave motion. 3 hours lecture, 3 hours laboratory.
Prerequisite: MAT 108 (may be taken concurrently) or consent of instructor,

PHY 211 University Physics II (4) i
Calculus level electricity, magnetism and optics. 3 hours lecture; 3 hours laboratory.
Prerequisite: PHY 210.
PHY 212 University Physics III (3) ii
Calculus level modern physics. 3 hours lecture.
Prerequisite: PHY 211.

SAMPLE PROGRAM

BACHELOR OF ARTS DEGREE
MAJOR IN MATHEMATICS
Freshman Year Fall Semester
MAT 107 Calculus I ..... 5
ENG 104 Composition \& Rhetoric I ..... 3
Natural Science Elective ..... 5
Speech Elective ..... 3
Spring Semester
MAT 108 Calculus II ..... 5
PHY 210 University Physics I ..... 4
ENG 108 Composition \& Rhetoric II ..... 3
Social Science Elective ..... 315
Sophomore Year
Fall Semester
MAT 209 Calculus III ..... 5
PHY 211 University Physics II ..... 4
PED 101 P.E. Concepts ..... 1
Elective ..... 3
Foreign Language ..... 4
Spring Semester
MAT 312 Differential Equations ..... 3
PHY 212 University Physics III ..... 3
ECO 260 Principles of Economics ..... 3
Foreign Language ..... 4
Elective ..... 3
P.E. Activity ..... 117
Junior Year Fall Semester
MAT 305 Linear Algebra ..... 3
HUM 203 Humanities I ..... 3
Advanced Math Elective ..... 3
Foreign Language ..... 4
Elective ..... 3
P.E. Activity ..... 117
Spring Semester
MAT 316 Abstract Algebra ..... 3
PSY 101 General Psychology ..... 3
HUM 205 Humanities II ..... 3
Foreign Language ..... 4
Elective ..... 3
P.E. Activity ..... 117
Senior YearFall Semester
MAT 420 Analysis I ..... 3
Advanced Math Elective ..... 3
Electives ..... 9
Spring Semester
MAT 430 Analysis II ..... 3
Humanities or Fine Arts Elective ..... 3
Electives ..... -

## SAMPLE PROGRAM

BACHELOR OF SCIENCE DEGREEMAJOR IN COMPUTER SCIENCEFreshman Year
Fall Semester
CSC 182 Introduction to Data Processing ..... 3
ENG 104 Composition \& Rhetoric I ..... 3
PSY 101 General Psychology ..... 3
Natural Science Elective .....  5
Speech Elective ..... 317
Spring Semester
CSC 188 Intro. to FORTRAN IV Programming ..... 3
MAT 107 Calculus I ..... 5
ENG 108 Composition \& Rhetoric II ..... 3
ECO 260 Principles of Economics ..... 3
Social Science Elective
Sophomore Year
Fall Semester
CSC 255 Introduction of PL/I Programming ..... 3
CSC 284 Symbolic Assembler Language 1 ..... 3
MAT 108 Calculus II ..... 5
MAT 201 Elementary Statistics ..... 3
PED 101 P.E. Concepts ..... 115
Spring Semester
CSC 245 Introduction to COBOL Programming ..... 3
CSC 286 Computer \& Programming Systems ..... 3
MAT 209 Calculus III ..... 5
Physical Science Elective ..... 4
P.E. Activity ..... 116
Junior Year
Fall Semester
MAT 305 Linear Algebra ..... 3
HUM 203 Humanities ..... 3
Humanities or Fine Arts Elective. ..... 3
Computer Science Elective ..... 3
Elective ..... 3
P.E. Activity ..... 116
Spring Semester
MAT 312 Differential Equations ..... 3
HUM 205 Humanities II ..... 3
Computer Science Elective ..... 3
Electives. ..... 6
P.E. Activity ..... 1
Spring Semester
Computer Science Elective ..... 3
Electives. ..... 9
SAMPLE PROGRAM
BACHELOR OF SCIENCE DEGREE
MAJOR IN DATA PROCESSING
Freshman Year
Fall Semester
CSC 182 Introduction to Data Processing ..... 3
MAT 105 College Algebra ..... 3
ENG 104 Composition \& Rhetoric I ..... 3
Speech Elective ..... 3
Physical Science Elective .....  4
16
Spring Semester
CSC 188 Intro. to FORTRAN IV Programming ..... 3
MAT 201 or MGT 210 Elem. Stat. or Bus. Stat. ..... 3
ENG 108 Composition \& Rhetoric II ..... 3
Social Science Elective ..... 3
Natural Science Elective .....  5
Sophomore YearFall Semester
CSC 284 Symbolic Assembler Language 1 ..... 3
CSC 240 Introduction to RPG Programming ..... 3
ECO 260 Principles of Economics ..... 3
PED 101 P.E. Concepts ..... 1
Related Area Elective ..... 3
Elective .....  3

## Spring Semester

CSC 286 Computer \& Programming Systems ..... 3
CSC 245 Introduction to COBOL Programming ..... 3
Related Area Elective ..... 3
Electives. ..... 6
P.E. Activity .....  1
Junior Year
Fall Semester
PSY 101 General Psychology ..... 3
HUM 203 Humanities I ..... 3
Computer Science Elective ..... 3
Related Area Elective ..... 3
Elective ..... 3
P.E. Activity .....  1
Spring Semester
HUM 205 Humanities II ..... 3
Computer Science Elective ..... 3
Humanities or Fine Arts Elective ..... 3
Related Area Elective ..... 3
Elective ..... 3
P.E. Activity ..... 1
Spring Semester
Computer Science Elective ..... 3
Related Area Elective ..... 3
Electives. ..... 9
SAMPLE PROGRAM
BACHELOR OF SCIENCE DEGREE MAJOR IN MATHEMATICS
Freshman Year
Fall Semester
MAT 107 Calculus I ..... 5
ENG 104 Composition \& Rhetoric 1 ..... 3
Natural Science Elective. ..... 5
Speech Elective .....  3
Spring Semester
MAT 108 Calculus II ..... 5
PHY 210 University Physics I ..... 4
ENG 108 Composition \& Rhetoric II ..... 3
Social Science Elective ..... 3
Sophomore Year
Fall Semester
MAT 209 Calculus III ..... 5
CSC 188 Intro. to FORTRAN IV Programming ..... 3
PSY 211 University Physics II ..... 4
ECO 260 Principles of Economics ..... 3
PED 101 P.E. Concepts ..... 1
16
Spring Semester
MAT 312 Differential Equations ..... 3
PHY 212 University Physics III ..... 3
Computer Science Elective ..... 3
Electives. ..... 6
P.E. Activity ..... 1
16
Junior Year
Fall Semester
MAT 305 Linear Algebra ..... 3
PSY 101 General Psychology ..... 3
HUM 203 Humanities I ..... 3
Advanced Math Elective ..... 3
Elective ..... 3
P.E. Activity ..... $\cdot 1$16
Spring Semester
MAT 316 Abstract Algebra ..... 3
HUM 205 Humanities II ..... 3
Electives. ..... 9
P.E. Activity ..... 116

## Spring Semester

MAT 430 Analysis II ..... 3
Humanities or Fine Arts Elective ..... 3
Electives. ..... 9

## SAMPLE PROGRAM

# BACHELOR OF SCIENCE IN EDUCATION DEGREEMAJOR IN MATHEMATICS 

Freshman Year
Fall Semester
MAT 107 Calculus 1 ..... 5
ENG 104 Composition \& Rhetoric I ..... 3
Speech Elective ..... 3
Natural Science Elective ..... 16
Spring Semester
MAT 108 Calculus II ..... 5
ENG 108 Composition \& Rhetoric II ..... 3
ECO 260 Principles of Economics ..... 3
Physical Science Elective ..... 4
Sophomore Year
Fall Semester
MAT 209 Calculus III ..... 5
PSY 101 General Psychology ..... 3
PED 101 P.E. Concepts ..... 1
Social Science Elective ..... 3
Elective ..... 315
Spring Semester
MAT 312 Differential Equations ..... 3
SED 202 Intro. to Secondary Education ..... 2
SED 203 Participation in Secondary Teaching I ..... 1
Electives. ..... 9
P.E. Activity ..... 116
Junior Year
Fall Semester
MAT 305 Linear Algebra ..... 3
MAT 420 Analysis I ..... 3
HUM 203 Humanities I ..... 3
Electives. ..... 6
P.E. Activity ..... 116
Spring Semester
MAT 316 Abstract Algebra ..... 3
MAT 430 Analysis II ..... 3
HUM 205 Humanities II ..... 3
SED 303 Experience in Secondary Teaching II ..... 3
SED 304 Psychology in Secondary Teaching ..... 4
P.E. Activity ..... 1
Spring Semester
MAT 465 Math Teaching: Methods \& Materials ..... 2
SED 404 Foundations in Secondary Education ..... 3
SED 407 Education of the Exceptional Child ..... 2
SED 409 Secondary Student Teaching III16
SAMPLE PROGRAM
ASSOCIATE OF SCIENCE DEGREE MAJOR IN DATA PROCESSING
Freshman YearFall Semester
CSC 182 Introduction to Data Processing ..... 3
MAT 105 College Algebra ..... 3
ENG 104 Composition \& Rhetoric I ..... 3
PED 101 P.E. Concepts ..... 1
Speech Elective ..... 3
Related Area Elective ..... 3
Spring Semester
CSC 188 Intro. to FORTRAN IV Programming ..... 3
MAT 201 Elem. Stat. or MGT 210 Bus. Stat. ..... 3
Social Science Elective ..... 3
Humanities Elective ..... 3
Related Area Elective ..... 3
P.E. Activity ..... 116
Sophomore Year
Fall Semester
CSC 284 Symbolic Assembler Language 1 ..... 3
CSC 240 Introduction to RPG Programming ..... 3
Related Area Electives ..... 6
Elective .....  315
Spring Semester
CSC 286 Computer \& Programming Systems ..... 3
CSC 245 Introduction to COBOL Programming ..... 3
Related Area Elective ..... 3
Electives. ..... - 8

The Department of Music provides a curriculum for the training of musicians and music educators. It is primarily concerned with improving the skills and disciplining the talents of music majors. The department also offers courses and activities for all college students to enhance their appreciation and understanding of music.

## BACHELOR OF SCIENCE IN EDUCATION DEGREE

## MAJOR IN MUSIC-VOCALEMPHASIS

Courses in music must total 69 credit hours. The following specific courses are required: MUS 100 (seven semesters), MUS 146, 147, $160,161,162,163,169,240,241,247,260,261$, $262,263,330,348,350,449,462,465$, plus 8 credit hours applied voice. Degree candidates must pass piano proficiency examination at the conclusion of MUS 247 and prior to SED 409, participate in one major ensemble each semester (with the exception of the professional semester), and present a recital during the senior year.

## MAJOR IN MUSICINSTRUMENTAL EMPHASIS

Courses in music must total 71 credit hours. The following specific courses are required: MUS 100 (seven semesters), 140, 141, 142, 143, 148, 160, 161, 162, 163, 169, 240, 242, 247, 260, 261, 262, 263, 330, 351, 462, 465, plus 8 credit hours on the applied major instrument. Degree candidates must pass piano proficiency examination at the conclusion of MUS 247 and prior to SED 409, participate in one major ensemble each semester (with the exception of the professional semester), and present a recital during the senior year.

Vocal or instrumental majors may choose to take an elementary music education concentration by adding two courses: MUS 331 and 332.

Vocal majors may achieve instrumental certification with the addition of instrumental music courses. The following instrumental courses are suggested: MUS 140, 142, 143, 148, 242 and two semesters selected from MUS 135, 324, 333, 334.

Students are encouraged to broaden their contacts with music through attendance of the many cultural programs in St. Joseph and area concert halls and through participation in programs by student musicians.

Instrumental majors may achieve vocal certification with the addition of vocal music courses. The following vocal courses are suggested: MUS 146, 147, 241, two semesters of MUS 370 and two semesters selected from MUS 110, 311, 312.

## MUSIC

MUS 100 Recital (1) i, ii
Attendance at department sponsored or approved concerts. Required for all music majors.

MUS 101 Perspectives in Music (3) i , ii, iii
Music materials, forms, historical-social development of composers and compositions. For non-music majors.

MUS 160 Elementary Theory I (3) i
Simple chord progression, accessory tones, harmonizing melodies and figured bass, original compositions in simple two and three part forms. To be taken concurrently with MUS 100 and MUS 161.

MUS 161 Elementary Sight-singing and Ear-training I (2) i Ear-training, sight-singing and keyboard application. To be taken with MUS 160.

MUS 162 Elementary Theory II (3) ii
Continuation of 160 adding modulation and seventh chords. Prerequisite: MUS 160.
MUS 163 Elementary Sight-singing and Ear-training II (2) ii Ear-training, sight-singing and keyboard application.
Prerequisite: MUS 161.
MUS 169 Introduction to Music Literature (2) ii
Historical survey of vocal, keyboard, symphonic, and chamber music. To be taken concurrently with MUS 162.
Prerequisite: MUS 160 or 300 or approval of instructor.

MUS 240 Elements of Conducting (2) i
Basic conducting techniques: patterns; cueing; left hand independence; ability to conduct legato, staccato and marcato styles.
Prerequisite: MUS 162.

A laboratory course in problems of instrumental conducting. Supervised conducting experience is provided.
Prerequisite: MUS 240.
MUS 260 Advanced Theory I (3) i
Continuation of Music 162 adding extended use of sevenths, accessory tones, harmonic elaboration, originals in the larger forms.
Prerequisite: MUS 162.
MUS 261 Advanced Sight-singing and Ear-training I (2) i
Ear-training, sight-singing and keyboard application.
Prerequisite: MUS 163.
MUS 262 Advanced Theory II (3) ii
Continuation of Music 260. Extended modulations, altered chords, introduction to present day harmonic practice, original work in the larger forms.
Prerequisite: MUS 260.
MUS 263 Advanced Sight-singing and Ear-training II (2) ii Ear-training, sight-singing and keyboard application.
Prerequisite: MUS 261.
MUS 300 Fundamentals of Music (3) i, ii, iii
Music fundamentals: development of skills necessary for sight singing, writing simple songs, and playing simple instruments. Primarily for elementary education majors.
MUS 330 Methods and Materials for Elementary Music Teachers (3) i
Materials and procedures for teaching singing, music reading, rhythms, instrumental, listening, and creative activities.
Prerequisite: MUS 160 or 300.
MUS 331 Music Activities for the Elementary Teacher (2) ii (odd numbered years)
A study of music activities using rhythmic and melodic instruments and audio-visual aids.
Prerequisite: MUS 160 or 300.
MUS 332 Supervising Elementary Teaching of Music (2) ii (even numbered years)
Procedures for supervising the elementary music program and for assisting elementary teachers.
Prerequisite: MUS 330 or 331.
MUS 337 Marching Band Techniques (1) i (odd numbered years)
Materials and ideas in Marching Band Techniques.
Prerequisite: MUS 135.
MUS 338 Instrument Care and Repair (1) ii (even numbered years)
Techniques and experience in the repair of band and orchestra instruments. Emphasizes practical and economical use of materials, skill, and time.
Prerequisite: Two of the following: MUS 141, 142, 143, 148.
MUS 349 Pedagogical Practices (1-3) (on demand)
Principles of teaching in the independent music studio. Content will be determined by student need: a. brass, b. keyboard, c. percussion, d. strings, e. voice, f. woodwinds. May be repeated for credit.
Prerequisite: Approval of instructor.
modern.
Prerequisite: MUS 169 and 262.
MUS 449 Advanced Music Literature (1-3) (on demand)
Study in music literature and performance practices: a. chamber, b. choral, c. piano, d. organ, e. solo instrument, $f$, solo vocal. May be repeated for credit.
Prerequisite: Approval of instructor.
MUS 450 Independent Study in Music (1-5) i, ii, iii
Investigation of selected problems or topics on an individual conference basis.
Prerequisite: The student must have: (1) completed the major-minor application form, (2) obtained the consent of the departmet chairman, and (3) earned a minimum 2.5 grade point average in his major field of study.
MUS 462 Form and Analysis (3) i
The elements, harmonic content, and formal structures of music; historical development.
Prerequisite: MUS 169 and 262.
MUS 463 Arranging (2) ii (on demand)
Classification of instruments and voices; arranging for various combinations of instruments and voices.
Prerequisite: MUS 169, 262 or approval of instructor.
MUS 465 Methods and Materials for Secondary Music Teachers (2) ii
Problems and techniques of teaching music in junior and senior high schools; organization of instrumental and vocal groups; evaluation of materials.
Prerequisite: MUS 262.

## MUSIC ENSEMBLES

Ensembles may be repeated for credit.
MUS 110 Chorus (1) i, ii
Group singing of various styles of music literature. 2 hours.
MUS 135 Marching Band (1) $\mathbf{i}$
Performance of marching maneuvers. 5 hours per week. May be repeated for credit. Rehearsals commence about 2 weeks before beginning of semester.
Prerequisite: Approval of director.
MUS 311 Choir (1) i , ii
Emphasizes tone production and musicianship, public performance of sacred and secular works. 3 hours.
Prerequisite: Approval of the director.
MUS 312 Vocal Ensemble (1) i, ii
Madrigal group, trios, and quartets for public appearance. 3 hours.
Prerequisite: Approval of the director.
MUS 313 Swing Choir (1) i, ii
Performance of popular music with choreography. 3 hours.
Prerequisite: Approval of director.
MUS 320 Percussion Ensemble (1) $\mathbf{i}$, $\mathbf{i i}$
Chamber music performance. 2 hours.
Prerequisite: Approval of the director.

Prerequisite: Approval of the director.

MUS 323 String Ensemble (1) jii
Chamber music performance. 2 hours.
Prerequisite: Approval of the director.

MUS 324 Symphony Orchestra (1) i, ii
Performance with the St. Joseph Symphony Orchestra for students who qualify by audition. 3 hours.

MUS 333 Stage Band (1) i, ii
Select ensemble for public performance. 3 hours.
Prerequisite: Approval of the director.

MUS 334 Symphonic Winds (1) ii
Emphasizes musicianship, playing skills: representative literature. 3 hours
Prerequisite: Approval of the director.

## APPLIED MUSIC

## CLASS INSTRUCTION

MUS 140 Class Strings I (2) i
Class lessons to develop playing knowledge of upper strings; techniques of teaching instrumental groups.

MUS 141 Class Strings II (2) ii
Class lessons to develop playing knowledge of lower strings; techniques of teaching instrumental groups.
Prerequisite: MUS 140.

MUS 142 Class Woodwinds (2) i
Class lessons to develop playing knowledge of woodwinds; techniques of teaching instrumental groups.

MUS 143 Class Brass (2) ii
Class lessons to develop playing knowledge of brass; techniques of teaching instrumental groups.

MUS 144 Class Piano I (2) i
Sight reading, transposition, harmonization, reading music, playing by ear, improvisation. Little or no piano background required.

MUS 145 Class Piano II (2) ii
Continuation of MUS 144.
Prerequisite: MUS 144 or approval of instructor.

MUS 146 Foundations in Singing I (2) i
Tone production, breath control, articulation, and interpretation. International phonetic alphabet and Italian pronunciation for singing.

Class lessons to develop playing knowledge of percussion; techniques of teaching instrumental groups.

MUS 246 Class Piano III (2) i
Continuation of MUS 145.
Prerequisite: MUS 145 or approval of instructor.

MUS 247 Class Piano IV (2) ii
Continuation of MUS 246.
Prerequisite: MUS 246 or approval of instructor.

## INDIVIDUAL INSTRUCTION

Special Fees are assessed in these courses.

## MUS 370 Applied Voice (1-3) i, ii

May be repeated for a total of 8 credit hours toward a degree. ${ }^{1 / 2}$ hour for each credit hour. Prerequisite: Approval of instructor.

MUS 371 Applied Piano (1-3) i, ii
May be repeated for a total of 8 credit hours toward a degree. $1 / 2$ hour for each credit hour. Prerequisite: Approval of instructor.

MUS 372 Applied Strings (1-3) i, if
May be repeated for a total of 8 credit hours toward a degree. $1 / 2$ hour for each credit hour. Prerequisite: Approval of instructor.

MUS 373 Applied Brass (1-3) i, ii
May be repeated for a total of 8 credit hours toward a degree. $1 / 2$ hour for each credit hour. Prerequisite: Approval of instructor.

MUS 374 Applied Percussion (1-3) i, $\mathbf{i j}$
May be repeated for a total of 8 credit hours toward a degree. $1 / 2$ hour for each credit hour. Prerequisite: Approval of instructor.

MUS 375 Applied Woodwinds (1-3) i, ii
May be repeated for a total of 8 credit hours toward a degree. $1 / 2$ hour for each credit hour. Prerequisite: Approval of instructor.

MUS 376 Applied Organ (1-3) i, ii
May be repeated for a total of 8 credit hours toward a degree. $1 / 2$ hour for each credit hour.
Prerequisite: Approval of instructor.

MUS 377 Composition (1-3) $\mathbf{i}$, $\mathbf{i i}$
Private Lessons in composition, $1 / 2$ hour lessons for each credit hour. May be repeated for credit.
Prerequisite: Approval of instructor.

Fall Semester
MUS 100 Recital ...................................... . . . . 1
*MUS 146 Class Voice I ...................................... . . . 2
*MUS 160 Elementary Theory I
*MUS 161 Elementary Sight-Singing I ................ . . . . . 2
MUS 370 Applied Voice . 1
MUS 311 Choir ............................................ 1
****MUS 144 Class Pianol................................... . . . . . 2
English . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Humanities . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
P.E. Concepts . . . . . . . . . . . . . . . . . . . . . . . . 1

## Spring Semester

MUS 100 Recital ....................................... . . . . 1
MUS 147 Class Voice II . . . . . . . . . . . . . . . . . . . . . . . . . 2
MUS 162 Elementary Theory II .................. . . . 3
MUS 163 Elementary Sight-Singing II.............. . . . 2
MUS 169 Introduction Music Literature . . . . . . . . . 2
MUS 370 Applied Voice ............................. 1
MUS 311 Choir ............................................ 1
***MUS 145 Class Piano II ................................... 2
English . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Mathematics................................ . . . 3
P.E. Activity . . . . . . . . . . . . . . . . . . . . . . . . 1

## Sophomore Year <br> Fall Semester

MUS 100 Recital . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1
MUS 370 Applied Voice . . . . . . . . . . . . . . . . . . . . . . . . 1
*MUS 240 Elements of Conducting . . . . . . . . . . . . . 2
*MUS 260 Advanced Theory I . . . . . . . . . . . . . . . . . . . . 3
*MUS 261 Advanced Sight-Singing I ................ 2

* ***MUS 246 Class Piano III . . . . . . . . . . . . . . . . . . . . . . . . . 2

MUS 311 Choir ................................................
Speech........................................................... . . . . . . . 3
1

Social Science. . . . . . . . . . . . . . . . . . . . . . . . . 3
P.E. Activity . . . . . . . . . . . . . . . . . . . . . . . . . 1

## Spring Semester

MUS 100 Recita1
MUS 241 Choral Conducting ..... 2
MUS 247 Class Piano IV ..... 2
MUS 262 Advanced Theory II3
MUS 263 Advanced Sight-Singing II ..... 2
MUS 370 Applied Voice ..... 1
MUS 311 Choir ..... 1
P.E. Activity ..... 1
Social Science. ..... 3
SED 202 Introduction to Secondary Education ..... 2
SED 203 Part. in Secondary Teaching I ..... 1
MUS 370 Applied Voice ..... 1
MUS 449 Advanced Music Literature (b) ..... 2SED 303 Experience inSecondary Teaching II3
SED 304 Psychology in Secondary Teaching ..... 4

## Spring Semester

MUS 100 Recital ..... 1
MUS 311 Choir ..... 1
MUS 349 Pedagogical Practices (e) ..... 2
MUS 351 Music History II ..... 3
MUS 370 Applied Voice ..... 1
MUS 465 Secondary Methods \& Materials ..... 2
Science .....  515
Senior YearMUS 100 Recital . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1
MUS 311 Choir ..... 1
*MUS 350 Music History I. ..... 3
MUS 370 Applied Voice1
Science ..... 4
Social Science ..... 3
Humanities .....  316
Spring Semester
MUS 370 Applied Voice ..... 1
SED 404 Found. in Secondary Education3
SED 407 Education of Exceptional Student ..... 2
SED 409 Secondary Student Teaching III$\frac{15}{15}$
*Courses offered only Fall Semester
**Courses offered every other year.
***Student should audition for placement in piano sequence.

Majors will also pass piano proficiency, present a senior recital, and take the U.P. Music Test and Aural Music Test.
Fall Semester
Recital
*MUS 160 Elementary Theory I
*MUS 161 Elementary Sight-Singing I ..... 2

* ***MUS 144 Class Piano I ..... 2
Social Science ..... 3
English ..... 3
P.E. Concepts ..... 1


## Spring Semester

MUS 100 Recital ..... 1
MUS 334 Symphonic Winds ..... 1
MUS 142 Class Brass ..... 2
Applied Music ..... 1
MUS 162 Elementary Theory II ..... 3
MUS 163 Elementary Sight-Singing II ..... 2
MUS 169 Introduction to Music Literature ..... 2
***MUS 145 Class Piano II ..... 2
English ..... 3
Mathematics ..... 3
P.E. Activity .....  121
Sophomore Year
Fall Semester
MUS 100 Recital ..... 1
*MUS 135 Marching Band ..... 1
*MUS 148 Class Percussion ..... 2
Applied Music ..... 1
*MUS 240 Elements of Conducting ..... 2
*MUS 260 Advanced Theory 1 ..... 3
*MUS 261 Advanced Sight-Singing I ..... 2

* ***MUS 246 Class Piano III ..... 2
Speech .....  3
Humanities ..... 3
P.E. Activity ..... 1


## Spring Semester

MUS 100 Recital ..... 1
MUS 334 Symphonic Winds ..... 1
Applied Music ..... 1
MUS 242 Instrumental Conducting ..... 2
MUS 262 Advanced Theory II ..... 3
MUS 263 Advanced Sight-Singing II ..... 2
MUS 247 Class Piano IV ..... 2
Social Science ..... 3
P.E. Activity ..... 1
SED 202 Introduction to
Secondary Education ..... 2
SED 203 Part. in Secondary Teaching I ..... 1
*MUS 330 El. Meth. \& Mat. . . . . . . . . . . . . . . . . . . . . . 3
*MUS 140 Class Strings I . . . . . . . . . . . . . . . . . . . . . . . . . 2
*MUS 462 Form \& Analysis . . . . . . . . . . . . . . . . . . . . . . 3
**MUS 337 Marching Band Tech. .................... 1
SED 303 Experience in Teaching II ............... 3
SED 304 Psychology in Secondary Teaching . . . . . 4

The social sciences study human societies to understand their history, their components, their varieties, and their behavior. These sciences study the changes, organization, and disorganization of societies. In addition, they examine the varieties of people in society,
their character and conduct, and the evidences of their "human nature." Students in the department of Social Science generally prepare for careers in teaching, government, law, and social work.
an 18 credit hour minor. The course work for this minor area should be worked out with the student's major advisor.

## MAJOR IN POLITICAL SCIENCE

The requirements for the BS are the same as the requirements for the BA except that the foreign language requirement is replaced by an 18 credit hour minor. The course work for this minor area should be worked out with the student's major advisor.

## MAJOR IN SOCIOLOGY

The requirements for the BS are the same as the requirements for the BA except that the foreign language requirement is replaced by an 18 credit hour minor. The course work for this minor area should be worked out with the student's major advisor.

## BACHELOR OF SCIENCEIN EDUCATION DEGREE

## MAJOR IN SOCIAL SCIENCE

Course work in the Social Sciences must total a minimum of 50 credit hours including at least 11 credit hours in Social Science courses numbered 300 or above. Specific requirements are: 12 credit hours European or World History including HIS 100, 110; 12 credit hours American History including HIS 140, 150; 9 credit hours Political Science including PSC 101; 9 credit hours Sociology; 3 credit hours Geography; 3 credit hours Economics, SSC 465.

## BACHELOR OF SOCIAL WORK DEGREE

Courses in Social Work must total 41 credit hours with an additional 33 credit hours in related areas. The following specific courses are required: SWK 250, 310, 320, 330, 340, 350, 410, 420, 460 (two semesters), 470, 490; SOC $110,230,330$, plus an additional 3 credit hours sociology elective; PSC 101, 110, either PSC 330 or SOC 320 , PSY 101, 325; ECO 260; MAT 201.

GEO 210 Geography of the United States and Canada (3) $i$ (even numbered years)
A regional study of the physical, cultural, and economic geography of the United States and Canada.
Prerequisite: A course in geography.
GEO 220 Map Evaluation \& Interpretation (3) ii (odd numbered years)
General purpose and thematic maps of various scales; use in teaching and research. Uses and abuses of maps wit a minimum of map drafting.
GEO 320 Geography of Europe (3) i (odd numbered years)
The nations and regions of Europe west of the Soviet Union, with present economics as a result of cultural and physical differences in the environment; trends of development as affected by new political and economic factors. Prerequisite: A course in geography or European history.
GEO 330 Economic Geography (3) ii (even numbered years)
Patterns of distribution, production and consumption of the world's goods; causal factors of geographic location of agriculture, industrial, and extractive production; world trade routes, increasing industrial production, problems of non-industrial nations.

## HISTORY

HIS 100 Ancient and Medieval Civilization (3) i, ii
The Western World from antiquity to the fifteenth century; the emergence of civilization in the Nile and Tigris-Euphrates valleys, the political, social, economic, and intellectual contributions of Greece, Rome, and Medieval Europe.

HIS 110 Modern Civilization (3) i, ii, iii
The Western World from 1500 to 1815; national states, the geographical revolution and the founding of European Empires, the Reformation, the emergence of constitutional governments, the Scientific Revolution, and the American and French Revolutions.

HIS 140 American History to 1865 (3) i, ii, iii
The discovery of America to the end of Civil War; Colonial America, the Revolution, National Development, Sectionalism, and the Civil War.

HIS 150 American History Since 1865 (3) i, ii, iii
Continuation of History 140; Reconstruction, Industrialization, Urbanization, emergence as a world power, Progressivism, World War I, the New Deal, World War II, and Post-war America.
HIS 200 Europe 1815-1814 (3) i
Europe from the Congress of Vienna to 1914: Reaction and Revolution, Nationalistic movements, Rise of Socialism-Communism, the diplomatic background of World War I.
HIS 220 History of Missouri (3) ii (even numbered years) Missouri under French and Spanish rule, the American acquisition, the role of the state in the slavery crisis and in the settlement of the West; study of the state's contributions to politics, art, literature, education, industry, and transportation.

Negro on American politics from the writing of the Constitution to the modern civil rights legislation.

HIS 300 American Colonial History (3) i
The founding of the British North American colonies; origins of American cultural, religious, and racial diversity; British colonial administration to the Revolution.
Prerequisite: Six hours of American History.
HIS 305 The American Frontier (3) ii (odd numbered years)
Westward expansion of the United States over three centuries: colonial frontier, trans-Appalachian frontier, trans-Mississippi frontier; significance of the frontier in American history. Prerequisite: Six hours of American History.

HIS 310 English History I (3) i (even numbered years)
Anglo-Saxon England, the Norman influence, development of English political, social, economic, and intellectual ideas, Tudor England, the Stuarts, the Glorious Revolution, 1688.

HIS 320 English History II (3) ii (odd numbered years)
The founding of the British Empire, and the role of England in the modern world.

HIS 330 Recent United States History (3) i
The United States since World War I, with emphasis on current problems.
Prerequisite: HIS 140 and 150 or consent of instructor.

HIS 340 Recent European History (3) ii
Europe in World War I, the rise of dictatorships, the League of Nations, new alignments, World War II and the post war period.
Prerequisite: HIS 200.
HIS 350 History of the Far East (3) i (odd numbered years on demand)
East Asia and the Pacific from antiquity to the present; Oriental religion, politics, and the economy; impact of European and American traders and missionaries, the founding of the European Empires, Oriental resistance to Westernization, and the emergence of modern China, Japan, and Pacific nations.
Prerequisite: HIS 110 or 200.
HIS 360 The British Empire (3) i (odd numbered years)
The Age of Discovery and the founding of the old British Empire, the Empire after the American Revolution, the Commonwealth of Nations, and the decline of Empire after 1945.
Prerequisite: HIS 310 and 320 .
HIS 370 History of Latin America (3) ii
A survey course including Indian cultures, colonial period, independence movements, national developments, relations with the United States and Europe.

HIS 380 The French Revolution and Napoleon (3) iii (on demand)
The Old Regime in France, failure of the Bourbon monarchy, the Revolution, the rise of Napoleon, the Napoleonic Wars to the Congress of Vienna 1815.
Prerequisite: Six hours of European History.

English Legal and Constitutional History (3) ii (even number years) (on demand)
Magna Carta to the twentieth century; the Petition of Rights, the Puritan Revolution, the Glorious Revolution, the Bill of Rights and the Act of Secession, the development of cabinet government, the Reform Bills of 1832 and 1867, the Budget Act of 1911, the Statue of Westminster.
Prerequisite: HIS 110 and 310.
HIS 420 History of Africa (3) ii (even numbered years) North Africa in the ancient world, Africa during the Age of Geographical Discoveries, 19th century European imperialism, the emergence of modern African states and their problems.
Prerequisite: Six hours European history.
HIS 430 European Intellectual History (3) i (odd numbered years)
Greek and Roman contributions, the Church Fathers, the Carolingian, Ottonian, and Twelfth Century Renaissance, Italian and Northern Humanism, the Age of Reason, Romanticism, and modern European thought.
Prerequisite: Six hours of European History.
HIS 450 Independent Study in History (1-5) i, ii, iii
Investigation of selected problems or topics on an individual conference basis.
Prerequisite: The student must have: (1) completed the major-minor application form, (2) obtained the consent of the department chairman, and (3) earned a minimum 2.5 grade point average in his major field of study.

HIS 460 American Economic History (3) i (even numbered years)
English mercantilism, laissez-faire and its effect on Americari economic development, the emergence of the corporation and the trust, the issue of government regulation, and the role of government in the economy of today. Prerequisite: Six hours of American History.
HIS 470 American Social and Intellectual History (3) ii (on demand)
Education, religious, intellectual, and artistic development from Colonial times; Puritanism, the Enlightenment, Transcendentalism, Realism. Prerequisite: Six hours of American History.

## POLITICAL SCIENCE

PSC 101 American National Government (3) i, ii, iii
The American constitutional system; government finance, regulation of commerce, agriculture, labor, conservation of resources.

PSC 110 American State and Local Government (3) i, ii, iii
State and local government and its colonial and revolutionary origins; state constitutions, legislatures, governors, courts, state services and functions, and problems in twentieth century America.
Prerequisite: PSC 101.
PSC 200 International Politics (3) i, ii
The nature of politics at the international level, the national state system, state capabilities, foreign policy objectives, formulation and execution, international organizations, alignments, and contemporary world tensions.
Prerequisite: PSC 101.

Political Parties and Interest Groups (3) ii (even numbered years)
The evolution of the American two-party system. The place of the interest group in decisionmaking through interaction with executive and legislative branches.
Prerequisite: Six hours of political science.
PSC 310 Political Theory (3) i
Political theories of the Ancients, Aristotle and Plato; the Church Fathers; Renaissance thought of Machiavelli and More; the Age of Enlightenment and Locke, Montesquieu, and Jefferson; the theories of Marx, Welfare State ideas of Roosevelt; the theories of Fascism and Nazism.
Prerequisite: PSC 101.
PSC 320 Public Administration (3) ii
Organization, functions, and problems of public administration in the United States.
Prerequisite: Six hours of political science.
PSC 330 Municipal Government (3) i (odd numbered years)
The growth of cities, their legal status, municipal politics and elections, forms of city government, municipal services and functions.
Prerequisite: Six hours of Political Science.
PSC 340 Latin American Political Systems (3) i (even numbered years)
A comparative approach to Latin American political institutions with a view towards causes for political instability; revolution, the new military, Socialism v. Communism, and economic development and U.S. policy.
Prerequisite: Six hours of Political Science.
PSC 400 American Foreign Policy (3) ii (odd numbered years)
Policy-making, the role of the public in decisions, formulation and implementation of national policy, U.S. policy goals in various areas of the world, decision-making in crisis situations.
Prerequisite: PSC 101 and 200.
PSC 410 The Legislative Process (3) ii (odd numbered years)
The American Congress, its organization, its rules, its role in the law making; the role of interest groups, congressional investigations, and the modern Presidency in the legislative process.
Prerequisite: Six hours of political science.
PSC 420 Constitutional Law (3) i (odd numbered years) The role of the Supreme Court in the American system; judicial review and its significance under Marshall, Fuller, Taft, Hughes, and Warren; majority and minority opinions; the process of decision making.
Prerequisite: Six hours of political science.
PSC 430 The American Presidency (3) it (even numbered years)
The place of the President in decision-making in the American federal system. His constitutional roles, the legal and extra-legal checks on presidential power.
Prerequisite: Six hours of political science.
ion conecuive aerense, the development of economic-political units. Prerequisite: PSC 101 and 200.

PSC 450 Independent Study in Political Science (1-5) i, ii, iii
Investigation of selected problems or topics on an individual conference basis.
Prerequisite: The student must have: (1) completed the major-minor application form, (2) obtained the consent of the department chairman, and (3) earned a minimum 2.5 grade point average in his major field of study.

## SOCIAL SCIENCE

SSC 465 Methods of Teaching the Social Studies (2) i Principles and methods of teaching the Social Studies in the secondary school. An in-depth study of current objectives, problems, materials, and methods as applied to each discipline within the social studies curriculum.

## SOCIAL WORK

SWK 250 Introduction to Social Work (3) i, ii
Basic patterns of professional social work practice; generic framework for the scientific practice of social work.

SWK 310 Social Work: A Profession (3) i
The profession of social work, its values, and its view in approaching problems; social work methods and settings; approaches and innovations within the profession and the function of the individual social worker.
Prerequisite: SWK 250.
SWK 320 Philosophy and Policy in Social Services I (3) ii Historical significance of social legislation, its impact on the individual and society; social philosophy, social service, and social change.
Prerequisite: SWK 250.
SWK 330 Human Behavior \& Social Environment (3) i
Social work concepts of human growth and development in all stages of the life cycle from conception to death: normal physical and emotional growth patterns; assisting people with problems in growth and development.
Prerequisite: SWK 250.
SWK 340 Ethnic \& Race Relations (3) i
Inter-racial and inter-cultural relations in various cultures; minority groups in the U.S.; conflict, accommodation, and assimilation.
Prerequisite: SOC 110, SWK 250.
SWK 350 Social Work Methods I (4) ii
Beginning exploration of the helping relationship and social systems theory. 3 hours lecture, 3 hours laboratory per week.
Prerequisite: SWK 250, junior status in social work.
SWK 410 Social Work Methods II (3) i
Continuation of SWK 350. Social interventive skills: generalist practice skills systems, integration of experiences and current practice literature.
Prerequisite: SWK 350, senior status in social work.

SWK 450 Independent Study in Social Work (1-5) i, ii, iii Investigation of selected problems or topics on an individual conference basis.
Prerequisite: The student must have: (1) completed the major-minor application form, (2) obtained the consent of the department chairman, and (3) earned a minimum 3.0 grade point average in his major field of study.

SWK 460 Practicum in Social Work (5) i, ii, iii
Field experience under the supervision of trained professionals in the field of social work. 16 hrs. per week in an agency setting. (Two semesters required for a total of 10 credit hours.)
Prerequisite: SWK 350, senior status in social work.
SWK 470 Social Work Methods III (3) ii
Senior seminar in social work. Individual reports, group discussion, guest speakers on selected topics in social work.
Prerequisite: SWK 410, 460.
SWK 490 Research in Social Work (3) ii
Evaluation and utilization of social science research; research methods and experimental design.
Prerequisite: MAT 201, SWK 410, 460.

## SOCIOLOGY

SOC 110 General Sociology (3) i, i, iif
Sociological concepts: social organization, human interaction with individuals and groups, population, and social change.

SOC 120 Cultural Anthropology (3) i, ii, iii
The nature of culture, language, society, and personality with emphasis on the cultural forms, processes, evolution and change.
SOC 200 Physical Anthropology (3) ii (on demand)
The living races of man, the growth and differentiation cultures of man from their origins to the development of civilizations.
SOC 230 Social Institutions (3) i, ii
The structure of human society; social stratification, and the familial, religious, and educational institutions.
Prerequisite: SOC 110.
SOC 310 Social Deviation (3) i, ii, iii
Individual and social disorganization; delinquency, alcoholism, minority groups, discrimination; and marital conflict.
Prerequisite: SOC 110 and 230.
SOC 320 Urban Sociology (3) ii
The modern city and metropolitan area, ecological and demographic aspects; urban problems and programs of action.
Prerequisite: Six hours of sociology.
SOC 330 The Family (3) $i$, ii, iii
The family as a basic institution; the structure and functions of the modern family in a changing urban environment.
Prerequisite: Six hours of sociology.
SOC 340 Personality and Culture (3) i
The inter-relationships of society, culture, personality.
Prerequisite: SOC 110, 120.

Analysis of collective phenomena, propaganda, crowds, public opinion polls, pressure groups, and social movement.
Prerequisite: Six hours of sociology.
SOC 430 Criminology (3) i
Theories of criminal behavior, legal concepts, criminal statistics, corrective treatment, and crime control.
Prerequisite: SOC 110, 230, 310.
SOC 440 Sociological Theory (3) i
Historical and empirical treatment of the development, structure, and functioning of human social systems.
Prerequisite: Twelve hours of sociology.

## SAMPLE PROGRAM BACHELOR OF ARTS DEGREE MAJOR IN HISTORY

## Freshman Year <br> Fall Semester

ENG 104 English Composition............................ . . 3
PSC 101 Amer. National Govt. . . . . . . . . . . . . . . . . . . . . . . . 3
Science . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4-5
HIS 140 American History to 1865 . . . . . . . . . . . . . . . . . . . 3
P.E. Concepts ..................................... . . 1

## Spring Semester

ENG 108 English Composition............................ . . 3
HIS 100 Ancient and Medieval Civ. . .................... 3
Mathematics..................................... . 3
PSC 110 State and Local Govt. . . . . . . . . . . . . . . . . . . . . . . 3
HIS 150 Amer. History since 1865 ....................... . . 3
P.E. Activity . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1

## Sophomore Year <br> Fall Semester

GEO 100 World Geography . . . . . . . . . . . . . . . . . . . . . . . . 3
Foreign Language . . . . . . . . . . . . . . . . . . . . . . . . . 4
Speech........................................... . . 3
HIS 110 Modern Civilization ...................................... . . . . 3
SOC 110 General Sociology . . . . . . . . . . . . . . . . . . . . . . . . . . 3
P.E. Activity . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1
average in his major field of study.

## SOC 460 Research Methods in Sociology (3) ii

Ethical, epistemological and theoretical foundations of the research process; basic assumptions, derivation of hypothese, techniques for empirically testing the validity of the propositional structure of sociological and anthropological theories.
Prerequisite: MAT 201 and 15 credit hours of Sociology, including SOC 440.

## Spring Semester

Foreign Language ............................... 4
Science .......................................... 4-5
Humanities ..................................... . 3

P.E. Activity . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1

15

## Junior Year

Fall Semester
SOC 110 Social Institutions ............................... 3
HIS 200 European History (1815-1914) ................. . . 3
Foreign Language . . . . . ........................ 4
HIS 330 Recent U.S. History . . . . . . . . . . . . . . . . . . . . . . . . 3
Elective .......................................... 3 16

## Spring Semester

PSC 210 Comparative Polit. Systems . . . . . . . . . . . . . . . . . 3
Foreign Language ............................. 4
Electives in Major .............................. 9 16
Senior Year
Fall Semester
Electives in Major ............................. . 12
Free Elective . . . ................................... . 3

## Spring Semester

Electives in Major . . . . . . . . . . . . . . . . . . . . . . . . 12
Free Elective .................................... 3
ENG 104 English Composition ..... 3
PSC 101 American Nat'l. Govt. ..... 3
Science ..... 4-5
Foreign Language ..... 4
P.E. Concepts ..... 1

## Spring Semester

ENG 108 English Composition. ..... 3
Mathematics ..... 3
PSC 110 State \& Local Government ..... 3
Foreign Language ..... 4
HIS 140 American History to 1865 ..... 3
P.E. Activity ..... 117
Sophomore Year
Fall Semester
HIS 100 Ancient \& Medieval Civ. ..... 3
HIS 150 American History since 1865 ..... 3
Foreign Language ..... 4
Science ..... 4-5
P.E. Activity ..... 115
Spring Semester
HIS 110 Modern Civilization ..... 3
GEO 100 World Geography ..... 3
Foreign Language ..... 4
ECO 260 Principles of Economics I ..... 3
Speech. ..... 3
P.E. Activity ..... 117
Junior Year
Fall Semester
SOC 110 General Sociology. ..... 3
PSC 200 International Politics. ..... 3
PSC 310 Political Theory ..... 3
Elective in Major ..... 615
Spring Semester
PSC 210 Comparative Political Sys. ..... 3
PSC 320 Public Administration. ..... 3
Electives in Major ..... 915
Senior Year
Fall Semester
Electives in Major ..... 12
Free Elective ..... 315
Spring Semester
Electives in Major ..... 12
Free Elective ..... 3
ENG 104 English Composition ..... 3
Science ..... 4-5
Foreign Language ..... 4
SOC 110 General Sociology ..... 3
P.E. Concepts ..... 1
Spring Semester
ENG 108 English Composition ..... 3
HIS 100 Ancient \& Medieval Civ. ..... 3
Speech ..... 3
Foreign Language ..... 4
SOC 120 Cultural Anthropology ..... 3
P.E. Activity ..... 117
Sophomore Year
Fall Semester
PSC 101 American Nat'I. Gov't. ..... 3
Foreign Language ..... 4
Science ..... 4-5
SOC 230 Social Institutions ..... 3
P.E. Activity ..... 115
Spring Semester
GEO 100 World Geography ..... 3
Math ..... 3
Humanities ..... 3
Foreign Language ..... 4
ECO 260 Principles of Economics I ..... 3
P.E. Activity ..... 117
Junior Year
Fall Semester
PSC 110 State \& Local Gov't. ..... 3
Humanities ..... 3
Electives in Major ..... 915
Spring Semester
HIS 140 American History to 1865 ..... 3
PSC 320 Public Administration ..... 3
Free Electives ..... 915
Senior Year
Fall Semester
HIS 150 American History since 1865 ..... 3
SOC 310 Social Deviation ..... 3
SOC 440 Sociological Theory ..... 3
Electives in Major ..... 615
Spring Semester
SOC 460 Research Methods in Sociology ..... 3
Electives in Major ..... 12

Fall Semester
Fall Semester
ENG 104 English Composition ..... 3
PSC 101 American Nat'l Gov't. ..... 3
Science ..... 4-5
HIS 140 American History to 1865 ..... 3
P.E. Concepts ..... 1

## Spring Semester

ENG 108 English Composition ..... 3
100 Ancient \& Medieval Civilization ..... 3
Mathematics ..... 3
Humanities ..... 3
HIS 150 American History since 1865 ..... 3
P.E. Activities .....  1
Sophomore Year
Fall Semester
GEO 100 World Geography ..... 3
Speech ..... 3
HIS 110 Modern Civilization ..... 3
Humanities ..... 3
HIS 200 European History (1815-1914) ..... 3
P.E. Activity ..... 116
Spring Semester
Humanities .....  3
Science ..... 4-5
PSC 110 State \& Local Government ..... 3
ECO 260 Principles of Economics I ..... 3
Elective ..... 3
P.E. Activity ..... 1
Spring Semester
State and Local Govt. ..... 3
Sophomore Year
Fall SemesterHIS 150 American History since 1865
Spring SemesterJunior YearFall Semester
SOC 110 General Sociology ..... 3
Electives in Major ..... 12
Spring Semester
PSC 210 Comparative Political Systems ..... 3
Electives in Major ..... 1215
Senior YearFall Semester
Electives in Major ..... 12
Free elective ..... 315
Spring Semester
Electives in Major ..... 12
Free elective ..... 3
ENG 104 English Composition ..... 3
American Nat'l. Gov't ..... 3
Science ..... 4-5
Speech .....  3
P.E. Concepts ..... 115
ENG 108 English Composition ..... 3
Math ..... 3
HIS 140 American History to 1865 ..... 3
Humanities .....  3
P.E. Activity ..... 116
HIS 100 Ancient \& Medieval Civilization ..... 33
PSC 200 International Politics ..... 3
Science ..... 4-5
P.E. Activity .....  117
HIS 110 Modern Civilization ..... 3
GEO 100 World Geography ..... 3
Humanities ..... 3
ECO 260 Principles of Economics ..... 3
PSC 300 Political Parties and Interest Groups ..... 3
P.E. Activity ..... 116
Junior Year Fall Semester
SOC 110 General Sociology ..... 3
PSC 310 Political Theory ..... 3
Electives in Major .....  915
Spring Semester
PSC 210 Comparative Political Systems ..... 3
PSC 320 Public Administration. ..... 3
Electives in Major ..... - 915
Senior Year
Fall Semester
Electives in Major ..... 15
Spring Semester
Electives in Major ..... 9
Free elective ..... 6

Fall Semester


## Spring Semester

ENG 108 English Composition.......................... 3
HIS 100 Ancient \& Medieval Civilization .............. 3
Math
. 3
SOC 120 Cultural Anthropology . . . . . . . . . . . . . . . . . . . . . 3
Humanities . . . . . . . . . . . ........................... 3
P.E. Activity . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 16

## Spring Semester

PC 101 American Nat'I. Govt. . . . . . . . . . . . . . . . . . . . . . . 3
HIS 110 Modern Civilization . . . . . . . . . . . . . . . . . . . . . . . . 3
Humanities . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Electives. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 6
P.E. Activity . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1

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## Junior Year

Fall Semester
SC 110 American State \& Local Government ......... 3
SOC 310 Social Deviation . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
SOC 330 The Family . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
SOC 440 Sociological Theory ............................... ${ }^{3}$
Free elective . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 15

## Spring Semester

GEO 100 World Geography . . . . . . . . . . . . . . . . . . . . . . . . 3
HIS 150 American History since 1865 . . . . . . . . . . . . . . . . 3
SC 320 Public Administration . . . . . . . . . . . . . . . . . . . . . . 3
SOC 460 Research Methods in Sociology . . . . . . . . . . . . . 3
Free elective . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3

Senior Year
Fall Semester
Electives in Major or Minor . . . . . . . . . . . . . . . . . 15

Spring Semester
Electives in Major or Minor .15

ENG 104 English Composition. .......................... . . . 3
HIS 100 Ancient \& Medieval Civilization ............... 3
GEO 100 World Geography . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Science . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4-5
MAT Elective . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
PED P.E. Concepts ....................................... 1 17

## Spring Semester

ENG 108 English Composition. . . . . . . . . . . . . . . . . . . . . . . 3
PC 101 American Nat'l. Govt. . . . . . . . . . . . . . . . . . . . . . . . 3
SOC 110 General Sociology . . . . . . . . . . . . . . . . . . . . . . . . . 3
HIS 140 American History to 1865 . . . . . . . . . . . . . . . . . . . . 3
Humanities . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
P.E. Activity . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 16

## Sophomore Year

Fall Semester
SC 110 State \& Local Gov't. . . . . . . . . . . . . . . . . . . . . . . . 3
HIS 150 American History since 1865
Humanities ........................................... 3
Humanities . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Elective . . . . . . . . . 3
Speech. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
P.E. Activity . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1

## Spring Semester

HIS

SUD
SUD
Modern Civilization .............................. 3
Science . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4-5
Humanities . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Elective . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ${ }^{3}$
Introduction to Secondary Education . . . . . . . . 2
Participation in Secondary Teaching I . . . . . . . . 1
P.E. Activity

## Junior Year <br> Fall Semester

HIS 200 Europe 1815-1914 . . . . . . . . . . . . . . . . . . . . . . . . . 3
GED 303 Experience in Secondary Teaching II ........ . 3
SED 304 Psychology in Secondary Teaching . . . . . . . . . . 4
HIS 330 Recent U.S. History . . . . . . . . . . . . . . . . . . . . . . . . . 3
CSC 465 Methods of Teaching SS . . . . . . . . . . . . . . . . . . . . 215

Spring Semester
Political Science Elective3

Electives in Social Science . . . . . . . . . . . . . . . . . . . . . 12

## Senior Year

## Fall Semester

ECO 261 Principles of Economics II .................... . . . 3
SUD 422 Behavior Mod, in Classroom. . . . . . . . . . . . . . . . 2
Electives in Major . . . . . . . . . . . . . . . . . . . . . . . 12

Spring Semester
SUD 404 Foundations in Secondary Education ......... 3
SED 407 Education of the Exceptional Student . . . . . . . . . 2
Secondary Student Teaching III . . . . . . . . . . . . . 9

Fall Semester
ENG 104 English Composition ..... 3
Science ..... 4-5
Humanities ..... 3
PSC 101 American Nat'l. Gov't ..... 3
P.E. Concepts ..... 115
Spring Semester
ENG 108 English Composition ..... 3
Math ..... 3
Speech ..... 3
SOC 110 General Sociology ..... 3
Humanities ..... 3
P.E. Activity ..... 1
Sophomore Year
Fall Semester
PSY 101 General Psychology ..... 3
SOC 230 Social Institutions
3
3
Science ..... 4-5
ECO 260 Principles of Economics I ..... 3
HUM 340 Ethics ..... 3
P.E. Activity ..... 117
Spring SemesterPSC 110 American State \& Local Government3
SOC 120 ..... 3
PSY 200 Intermediate Psychology ..... 3
MAT 201 Elementary Statistics ..... 3
SWK 250 Intro. to Social Work ..... 3
P.E. Activity ..... 13SWK 340 Ethnic and Race Relations$-3$
Spring Semester
SOC 310 Social Deviation ..... 3
SWK 320 Philosophy \& Policy in Social Services I. ..... 3
PSY 325 Psychology of Personality ..... 3
SWK 350 Social Work Methods I ..... 4
SWK 490 Research in Social Work ..... 3
Senior YearSWK 410 Social Work Methods II . . . . . . . . . . . . . . . . . . . . 3
SWK 420 Philosophy \& Policy in Social Services II ..... 3
SWK 460 Practicum in Social Work ..... 5
Electives. ..... 415
Spring Semester
SWK 460 Social Work Practicum ..... 5
SWK 470 Social Work Methods III ..... 3
Electives. ..... 614


The department of Speech, Theatre, Humanities comprises several diversified areas of knowledge and experience. The humanities center on the human being-his aspirations, his potentialities, his relationships with his fellow man-especially as they are reflected in literature, drama, philosophy, and religion. The department is concerned with communicative transactions between human beingsthe expression, comprehension, and exchange of ideas through either oral or written discourse or artistic endeavor. It is through an understanding of these processes that a picture of the total human being emerges. Students in the department are in-

## BACHELOR OF ARTS DEGREE

(Requires $\mathbf{1 6}$ credit hours in a foreign

## MAJOR IN SPEECH COMMUNICATION

Courses in Speech must total 36 credit hours. The following specific courses are required: SPH 124, 305, 312, 314, 324, 334, 335, 475, plus 12 additional credit hours in Speech.

## MAJOR IN THEATRE

Courses in Theatre and related areas must total 39 credit hours. The following specific courses are required: SPH 124; THR 217, 239, $249,259,318,338,457,467$, plus an additional 13 credit hours selected from theatre coursework, 9 hours of which must be numbered 300 or higher. ( 6 credit hours may be selected from non-theatre coursework, but must have departmental approval).

## MINOR IN SPEECH COMMUNICATION

Courses in speech must total 21 credit hours. The following specific courses are required: SPH 305 or $324,312,314,334,335$, plus 6 additional credit hours in speech.

## MINOR IN THEATRE

Courses in theatre must total 20 credit hours. The following specific courses are required: THR $140,218,249$, or $259,338,457$, or 467 , plus elective credits in theatre or departmentally approved coursework to total 6 credit hours, 3 credit hours of which must be numbered 300 or higher.
troduced to many aspects of man's social and creative life thereby acquiring a background for careers in numerous fields such as linguistics, law, politics, journalism, public relations, communications, teaching, and many others.
The department of Speech, Theatre, Humanities offers majors in Speech and Theatre applicable to both the Bachelor of Arts and the Bachelor of Science in Education degrees. Moreover the department as a whole contributes to the general education of all students, the objective being to provide meaning to the term "humanities."

## MINOR IN HUMANITIES

Courses in humanities and approved electives must total 21 credit hours. The following specific courses are required: HUM 203, 205, 210,340 , or 420 , plus an additional 9 credit hours chosen from HUM 219, 330, 340, 360, 420; ENG 220; FRE 320; GER 320; SPA 320; ART 205 or 206; MUS 350 or 351 ; THR 457 or 467; HIS 430, or other courses approved by the humanities faculty.

## BACHELOR OF SCIENCE IN EDUCATION DEGREE

## MAJOR IN SPEECH AND THEATRE

Courses in Speech and Theatre must total 39 credit hours. The following specific courses are required: SPH 124, 305 or $324,312,314$, 334,465 , plus an additional 3 credit hours in Speech; THR 217, 218, 249, 318, 338, plus an additional 3 credit hours in Theatre, numbered 300 or higher.

## MINOR IN SPEECH AND THEATRE

Courses in Speech and Theatre must total 21 credit hours. The following specific courses are required: SPH 124, 305 or 324,312 or 334 , 465; THR 218, 249, 338.

## SPEECH

## SPH 104 Oral Communication (3) i, ii, iii

Principles of speech as applied in meaningful participation in society. Not available for credit to students with previous or concurrent credit in either SPH 105 or 106.

Public Speaking (3) i, ii
Analysis and application of concepts used in public speaking; informative and persuasive platform speeches. Not available for credit to students with previous or concurrent credit in either SPH 104 or 105.

SPH 124 Voice and Articulation (3) ii
Theories and techniques of improving voice and articulation. Includes mastery of a working knowledge of phonetics.

Mass Communication (3) ii
Basic concepts of mass communication. Interpretation of mass communication as a persuasive, artistic, and social force.
SPH 251 Laboratory Forensics (1) i, ii
Participation in collegiate forensic activities including debate, oratory, manuscript reading, oral interpretation and extempore speaking. May be repeated for a maximum total of four credit hours.

SPH 305 Interpersonal Communication (3) i
An analysis of communication interactions in relatively unstructured, person-to-person settings with application of interpersonal communication concepts to resolving problems emerging from human interactions.

SPH 312 Advanced Public Speaking (3) i
Refinement of speech preparation and presentation; platform experience, extemporaneous and manuscript speeches for various occasions. Prerequisite: SPH 104 or 105 or 106.

SPH 314 Persuasion (3) ii
Persuasion as a process of influencing attitude and behavior; preparation and delivery of suasory discourse. Emphasis on experimental research as reflected on the persuasive process.
Prerequisite: SPH 104 or 105 or 106.
SPH 317 Speech for the Classroom Teacher (3) ii (odd numbered years)
Analysis of speech formats for classroom instruction: oral reports, group discussion, interviews, oral interpretation, storytelling, minilecture, and formal lecture.

SPH 324 Small Group Communication (3) ii
Major concepts of small group communication: group roles, leadership styles, group structure, thought processes, and consensus methods upon the outcome of small group communication behavior. Application of concepts to communication interaction in vocational and social group settings.
SPH 334 Argumentation and Debate (3) i
Philosophical and theoretical foundations of logic and argumentation to the persuasive process; experience in preparation and presentation through debate and discussion formats. Prerequisite: SPH 104 or 105 or 106.
SPH 335 Rhetorical Theory \& Criticism (3) ii (odd numbered years)
Development of rhetorical theories from classical period to modern; application to analysis and criticism of selected speeches.
Prerequisite: 9 semester hours of speech.

SPH 345 Nonverbal Communication (3) i
Nonverbal aspects of communication; factors which affect and modulate verbal messages. Interpretation of nonverbal information; kinesics (body motion), proxemics (social/personal space), and paralanguage (vocal cues accompaning words).
Prerequisite: SPH 104 or 105 or 106.
SPH 410 Organizational Communication (3) ii (even numbered years)
Analysis of concepts affecting communication patterns and behavior outcomes in social, political, religious, educational, and business organizations.
Prerequisite: SPH 305 or 324 or permission of instructor.

SPH 450 Independent Study in Speech (1-5) i, ii, iii
Investigation of selected problems or topics on an individual conference basis.
Prerequisite: The student must have: (1) completed the major-minor application form, (2) obtained the consent of the department chairman, and (3) earned a minimum 2.5 grade point average in his major field of study.
SPH 465 Methods of Teaching Speech and Drama (3) i (even numbered years)
Philosophies, issues, and problems in contemporary speech education. Content, structure, presentation, and evaluation of curriculum and teaching in speech and theatre.
Prerequisite: Consent of instructor.
SPH 475 Modern Theories of Rhetoric and Communication (3) i (odd numbered years)
Contemporary theories of rhetoric and communication, with emphasis upon research; critical, historical and experimental approaches to deriving and testing the validity of theories and communication.

## THEATRE

THR 113 Introduction to Theatre (3) $\mathbf{i}$, ii
The contributions made by directors, actors, designers, technicians, and playwrights to modern dramatic productions. Participation in a production as performer, member of stage or construction crew, or member of production committee is an optional activity but is not required.

THR 140 Production Participation (1-3), i, ii, iii
Forty hours of supervised practical work in any area of theatrical activity for each hour of credit. May be repeated for a maximum of six hours credit.

THR 217 Play Analysis (2) i (odd numbered years) Study of the written script from the standpoint of the actor, director and designer; strategies of plotting, characterization, thematic development, and style; descriptive analysis of the principal dramatic genres and styles.

THR 218 Oral Interpretation (3) i
Oral reading and analysis of prose, poetry, and drama.

Prerequisites: THR 229, 239, 249, 259 or 339 and

THR 239 Costume History and Construction (2) i (even numbered years)
An historical study of stage costume and the techniques involved in the construction of the varying period costumes.

THR 249 Stagecraft: Stages and Construction (4) i
Stages, staging techniques and construction in relation to theatrical production requirements. 3 hours lecture-demonstration, 4 hours \}ab.

THR 259 Stage Lighting (3) ii
A continuation of THR 249; emphasizes the element of stage lighting as a production requirement. 2 hours lecture-demonstration, 2 hours lab.

THR 318 Acting (3) i
Basic principles of acting and stage movement developed through improvisational techniques.
Prerequisite: THR 217 or consent of instructor.
THR 338 Directing (3) ii
Principles of play direction: selection, casting, blocking, staging a production.
Prerequisite: THR 217, 249 or consent of instructor.
THR 339 Design for the Theatre (3) i (odd numbered years)
Theory and techniques involved in the creative process of theatrical design with applications culminating in a completed set of designs. Emphasis in scene and costume design.

THR 358 Readers Theatre (3) ii (odd numbered years) Principles and techniques involved in readers theatre.
Prerequisite: THR 218 or consent of instructor.

THR 368 Shakespeare (3) i
Same as ENG 368. Shakespearean drama.
Prerequisite: ENG 210 or 220, or consent of instructor.
THR 370 Summer Theatre Workshop (3) iii
Practical experience in designing, staging, acting and producing the play or plays with individual assignments designated by the instructor. Prerequisite: Consent of instructor.
THR 418 Independent Projects in Acting (1-3) i, ii, iii Specialized research, performance problems. Scholarly projects in the theory of acting for advanced students. Written project proposals must have instructor's approval prior to student's registration. May be repeated for a maximum of six credit hours.
Prerequisites: THR 217, 318 and/or consent of instructor.

THR 438 Independent Projects in Directing (1-3) i, ii, ii Advanced study in script analysis, staging techniques, rehearsal procedures, and technical coordination. Project involves directing a laboratory production. Formal production prospectus must have instructor's approval prior to student's registration. May be repeated for a maximum of six credit hours.
Prerequisites: THR 217, 239, 249, 259, 338 and/or consent of the instructor.
consent of instructor.

THR 457 History of the Theatre: Greek to Restoration (3) $i$ (even numbered years)
A study of the theatre from ancient Greece through the Restoration period. Theatre and stage architecture, scene design, costuming and acting styles are discussed and their relation to dramatic literature analyzed. 3 hours lecture.

THR 467 History of the Theatre: Restoration to the Present (3) ii (odd numbered years)
A continuation of History of the THR 457, a study of the theatre from Restoration period to the present. 3 hours lecture.

THR 478 Modern Drama (3) ii (even numbered years) Same as ENG 478. Ibsen to the present.
Prerequisite: ENG 210 or 220 , or consent of instructor.

## HUMANITIES

HUM 203 Humanities I (3) i, ii, iii
The social and intellectual history of man as reflected by the literature, art, music, drama and discourse of man from classical period to Renaissance.

HUM 205 Humanities II (3) i, ii
The social and intellectual history of man as reflected by the literature, art, music, drama and discourse of man from Renaissance to present.
HUM 210 Introduction to Philosophy (3) i, ii, iii
A survey of the origins and development of philosophic thought.

HUM 219 Logic (3) i
Basic forms of reasoning with emphasis on the evaluation of arguments.

HUM 330 Comparative Religions (3) i (odd numbered years)
A survey of the nature and effects of major and minor religions on the culture and civilization of mankind.

HUM 340 Ethics (3) ii
Definition, meaning, scope and application of ethics to every phase of mankind as comprehended by an analysis of ethics in ancient, medieval and modern times.
HUM 360 Readings in the Humanities (3) ii
Specialized course work in the humanities of Western Civilization; emphasis on analysis of humanistic works of leading authors.
Prerequisite: HUM 203 and 205, or consent of instructor.

HUM 420 Readings in Philosophy (3) (odd numbered years)
A seminar course directed toward the analysis of principal works of leading philosophers: ancient, medieval and modern.
Prerequisite: HUM 210.
ENG 104 English Composition ..... 3
PED 101 P.E. Concepts ..... 1
P.E. Activity ..... 1
Humanities ..... 3
Social Science ..... 3
Speech ..... 3
Spring Semester
ENG 108 English Composition ..... 3
P.E. Activity ..... 1
Humanities ..... 3
Humanities ..... 3
Social Science ..... 3
SPH 124 Voice \& Articulation ..... -16
Sophomore Year
Fall Semester
P.E. Activity ..... 1
Math ..... 3
Social Science. ..... 3
Science ..... 4
SPH 305 Interpersonal Communication ..... 3
SPH 312 Advanced Public Speaking ..... 317
Spring Semester
P.E. Activity ..... 1
Science ..... 5
SPH 324 Small Group Communication ..... 3
Speech Elective ..... 3
Elective ..... 315
Junior Year Fall Semester
Foreign Language ..... 4
SPH334 Argumentation \& Debate ..... 3
SPH 475 Modern Theories ..... 3
Speech Elective ..... 3
Elective ..... 316
Spring Semester
Foreign Language ..... 4
SPH 314 Persuasion. ..... 3
Speech Elective ..... 3
Electives. ..... 616
Senior Year
Fall Semester
Fall Semester
Foreign Language ..... 4
Speech Elective ..... 3
Electives. ..... $\underline{9}$
16
Spring Semester
Foreign Language ..... 4
SPH 335 Rhetorical Theory \& Criticism. ..... 3
Electives ..... 714

## Fall Semester

ENG 104 English Composition ..... 3
PED 101 P.E. Concepts ..... 1
Math ..... 3
Social Science. ..... 3
Math ..... 3
THR 217 Play Analysis ..... $\underline{2}$15
Spring Semester
ENG 108 English Composition ..... 3
Social Science ..... 3
Social Science ..... 3
Speech ..... 3
P.E. Activity ..... 1
SPH 124 Voice \& Articulation ..... 316
Sophomore Year Fall Semester
Science ..... 4
P.E. Activity ..... 1
THR 239 Costume History \& Construction ..... 2
THR 249 Stagecraft ..... 4
THR 318 Acting ..... 3
Theatre Elective ..... 317
Spring Semester
Science ..... 5143
P.E. Activity ..... 1
Humanities ..... 3
THR 259 Stage Lighting ..... 3
Theatre Elective ..... 315
Junior Year
Fall Semester
Foreign Language ..... 4
Theatre Elective ..... 3
Electives ..... 9
Spring Semester
Foreign Language ..... 4
THR 338 Directing ..... 3
Theatre Elective ..... 3
Electives ..... 616
Senior Year Fall Semester
Foreign Language ..... 4
THR 457 History of Theatre ..... 3
Theatre Elective ..... 1
Electives. ..... 614
Spring Semester
Foreign Language ..... 4
THR 467 History of Theatre II ..... 3
Electives ..... 8
ENG 104 English Composition ..... 3
PED 101 P.E. Concepts ..... 1
Social Science ..... 3
Math .....  3
Speech ..... 3
THR 217 Play Analysis ..... 2
Spring Semester
ENG 108 English Composition ..... 3
Social Science ..... 3
Social Science. ..... 3
P.E. Activity ..... 1
SPH 124 Voice \& Articulation
3
SPH 324 Small Group Communication ..... 16
Sophomore Year
Fall Semester
Humanities ..... 3
SED 202 Introduction to Secondary Education ..... 2
SED 203 Secondary Teaching I ..... 1
3
SPH 218 Oral Interpretation ..... 3
3
Advanced Public Speaking ..... 4
THR 249 Stagecraft16

## Spring Semester

Science ..... 5
P.E. Activity ..... 3
SED 303 Experience in Secondary Teaching II ..... 4
SPH 314 Persuasion ..... 316
Elective ..... 3

## Spring Semester

THR 338 Directing

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SPH 465 Methods of Teaching Speech \& Drama

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## EVENING AND SATURDAY PROGRAM

A variety of programs is offered at Missouri Western State College designed to meet the needs of the college community. These programs are identified as:

Degree Programs. In the fields of Business and Psychology, course work is designed to enable a student to complete the total requirements in the Evening and Saturday Program.
Professional and Career Advancement. Programs and courses in Evening and Saturday Programs are available for employees to upgrade their skills for professional or career advancement.
The office of the Director of Evening and Saturday Programs helps to identify the
needs and desires of the adult community and to coordinate these needs with the college program.
The Office assists the student in enrollment plans and serves as a communication center for both students and faculty in the Evening and Saturday Program.
A student who finds it necessary to withdraw from college while a semester is in session is required to notify the Records Office which is accomplished by contacting the Director of Evening and Saturday classes in person, by telephone or by letter. A student will be given a "failing" grade in each subject if the formal notification of withdrawal has not been made.

## SUMMER SESSION

## Missouri Western State College summer sessions are designed for:

Students who wish to accelerate their progress.
Students who carry only a partial course load during the regular semesters.

June high school graduates who wish to get an advanced start in their college studies.
Missouri Western welcomes summer students from other collegiate institutions.

# THE CENTER FOR CONTINUING EDUCATION 

Through the Center for Continuing Education, Missouri Western State College provides a variety of programs ranging from oneday seminars and workshops to evening classes which may meet for one session or may meet each week for the entire term. The resources of the campus and community are utilized through the center in the college's efforts to meet the educational needs of area adults.

Specifically, the activities of the Center for Continuing Education are guided by the following statement of purposes:

1. Offer opportunities to citizens of the community to pursue educational experiences which:
lead to re-training for new or up-dated careers in vocational or technological fields.
promote improvement of professional competencies.
enable the individual to broaden his cultural knowledge.
enhance the pursuit of avocational interests.
II. Provide services to the community by organizing, sponsoring or co-sponsoring specialized short courses, workshops, and seminars designed to be of value to identifiable groups or organizations and to the public at large.
Classes or courses offered by the Center for Continuing Education do not produce academic credit hours. CEU (Continuing Education Units) credits may be assigned to a class or series of classes if they will be of value to the student in meeting certification or recertification requirements for certain agencies.

## ADMISSION AND REGISTRATION PROCEDURES

I. Admission is open to anyone who may profit from the class. In some instances, a competency level is needed to be eligible to enroll in an advanced class.
II. Enrollment is usually accomplished during the initial meeting of the class. If the class meets for four or more sessions, a student may enroll during the second session. Enrollment consists of the completion of a short form needed for report and roster purposes.

## FEES

The fees for the courses are paid during enrollment. Because of the diverse nature of programs offered through the Center for Continuing Education, registration fees vary from one offering to another. Fees are set by the Center and published at the time a particular program announcement is made.
NOTE: For information concerning programs being offered, fees, or suggestions for programs of interest to the community, contact the Director of the Center: phone 233-7192, extension 221.


Dwight R. Crane, Jr.
Fred Eder
Thomas V. Teare
(Expiration of terms-See
provisions of Senate Bill 214
to become effective July 1, 1977)

Dr. Cecil Albright
Elected: April, 1974
Term Expires: April, 1980
Mrs. Shirley Bradley
Elected by Board Nov. 1974
Elected: April, 1976
Term Expires: April, 1982
Dwight R. Crane, Jr.
Elected by Board May, 1973
Elected April, 1974, 1976
Term Expires: April, 1982
Fred Eder
Elected: April, 1972
Term Expires: April, 1978
Richard Hopkins
Elected: April, 1974
Term Expires: April, 1980

# DIRECTORY OF CORRESPONDENCE 

Missouri Western State College is an equal opportunity employer, and follows a policy of nondiscrimination on the basis of race, religion, sex or national origin in regard to all employment practices.

Academic Affairs ........ Dr. Robert Nelson, Vice President
Administrative Affairs and Special Programs George Ashworth, Vice President Admissions ..........Tom Robinson, Director Alumni Association

Dr. George S. Richmond, Executive Director Athletics............. Charles Burri, Director Bookstore . . . . . . . Donald R. Miller, Manager Building and Grounds. . . Larry Smith, Director

Business Affairs Kenneth Hawk, Vice President
Business Office . . . . Donald R. Miller, Director
Career Programs $\qquad$ Dr. Stephen Capelli, Dean
Computer Center ......... J. Douglas Heath, Director
Continuing Education. . . . . . . . . Lowell Clark,
Director
Counseling . .... Marvin McDonald, Director Dean of Students ................ . Forrest Hoff Education and Applied Sciences

Dr. Charles E. Coyne, Dean Evening and Saturday Classes

Dr. George S. Richmond, Director Foreign Student Adviser ........... Counselor

Director
Housing . . . . . Joseph Vigliaturo, Coordinator Institutional Research . . . . . . . . . . Lowell Clark, Director
Liberal Arts and Sciences
Dr. Bob R. Scott, Dean
Library ........... . Helen Wigersma, Director Off-Campus Services ..... William Kuechler, Director
Placement William Kuechler, Director Planetarium . . . . . . Russell Maag, Coordinator

Scheduling Facilities
Frank Smith Sports Information .... Jerry Myers, Director Student Affairs . ........ . Dr. Nolen Morrison, Vice President Student Financial Aid ... Bob Berger, Director Testing . . . . . . . . . Marvin McDonald, Director Theatre............. . Rick Leahy, Coordinator
Tours ............................. Frank Smith Traffic and Security ... Allen Forsen, Director Transcripts Veterans Affairs ........ Bob Berger, Director

## Administration

## ASHWORTH, George M.

Vice President for Administrative Affairs and Special Programs
B.S.-Northwest Missouri State University M.Ed.-University of Missouri

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B.S.-University of Kansas
M.S.-Northwest Missouri State University

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M.Ed.-University of Missouri

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M.A.-Trenton State College, New Jersey

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M.S.-Kansas State University

COYNE, Charles E.
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B.A.-lowa State Teachers College
M.A.-Northeast Missouri State College

Ed.D.-North Texas State University

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Systems Analyst Programmer
B.S. (in Computer Science)-Missouri

University-Rolla

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M.A.-University of Denver
M.A.-University of Colorado

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B.S.-University of Missouri
M.Ed.-University of Missouri

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B.S.-University of Akron
M.S.-University of Akron

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GRAHAM, Dorothy B.
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M.A.-San Diego State College

HARLOW, Clifford
Purchasing Agent

## HAWK, Kenneth L.

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M.S.-Fort Hays Kansas State College

HEATH, J. Douglas
Director, Computer Center
B.S.-Kansas State University

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M.S.-Central Missouri State University

Assistant Dean of Students
B.S.-Concordia Teachers College
M.A.-Southeast Missouri State University

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M.A.-University of Minnesota

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M.S.-University of Missouri

## LEAHY, Richard

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## LOONEY, Marvin 0.

President
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M.Ed.-University of Arkansas

Ed.D-University of Arkansas

## MAAG, Russell

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McDONALD, Marvin
Director, Counseling and Testing
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M.A.-Western Colorado State

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M.A.-University of Iowa

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M.Ed.-University of Arkansas

Ed.D.-University of Arkansas

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Director, Sports Information
B.S. in Ed.-Missouri Western State College

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Vice President for Academic Affairs B.S.-Montana State University M.S.-Montana State University Ph.D.-Purdue University
B.A.-Douglass College
D.M.-Kansas University Medical School

Pediatric Residence-Washington University

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B.S.-Bloomsburg State College
A.A.S.-Rochester Institute of Technology
M.S.-Rochester Institute of Technology

## SCHNEIDER, Julia

Technical Processes Librarian
B.A.-Northwestern Oklahoma State College
M.A. (in L.S.)-University of Missouri

## SCOTT, Bob R.

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B.S.-University of Missouri
M.A.-Washington University

Ed.D.-University of Missouri

## SMITH, Frank R.

Director, Publications
B.J.-University of Missouri

## SUMRELL, Rhesa

Coach and Coordinator of Women's Physical Activities

> B.S.-Middle Tennessee State University M.E.-Middle Tennessee State University

## VIGLIATURO, Joseph

Director, Housing
B.S. in Ed.-Missouri Western State College M.S. in Ed.-Colorado State University

## WIGERSMA, Helen C.

Director, Learning Resources Center
B.A.-University of Missouri
M.L.S.-University of Illinois

## Faculty

ADAIR, MSG Paul
Instructor of Military Science
ADAMS, Charles E. (on leave)
Assistant Professor of Mathematics
B.S.-Peru State College
M.A.-University of Missouri

ALLEN, Margaret
Assistant Professor of Social Work
B.A.-Mississippi College
M.S.W.-Tulane University

Professor of Biology
B.A.-Wayne State Teachers College
M.S.-University of Nebraska

Ph.D.-University of Nebraska

## ARCHER, Leonard

Assistant Professor of Chemistry
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[^0]:    *Courses offered only Fall Semester.
    **Courses offered only Spring Semester.
    ***Courses offered on alternate years.

[^1]:    **Courses offered Spring Semester onl

