Missouri Western State College



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GENERAL CATALOG

1979 - 1980



4525 Downs Drive St. Joseph, Missouri 64507 (816) 271-4200

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 student financial aid, recruitment, admission, housing and retention of students as required by Title IX of the Education Amendments Act of 1972.

Missouri Western State College actively follows a policy of non-discrimination on the basis of physical or mental handicap as set forth in Section 504 of the Rehabilitation Act of 1973.

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, 1979.

FOREWORD

This Missouri Western State catalog is designed to serve as the student's introduction and guide to the college. We hope you will use it to learn about the college's programs and services and how you may take advantage of them.

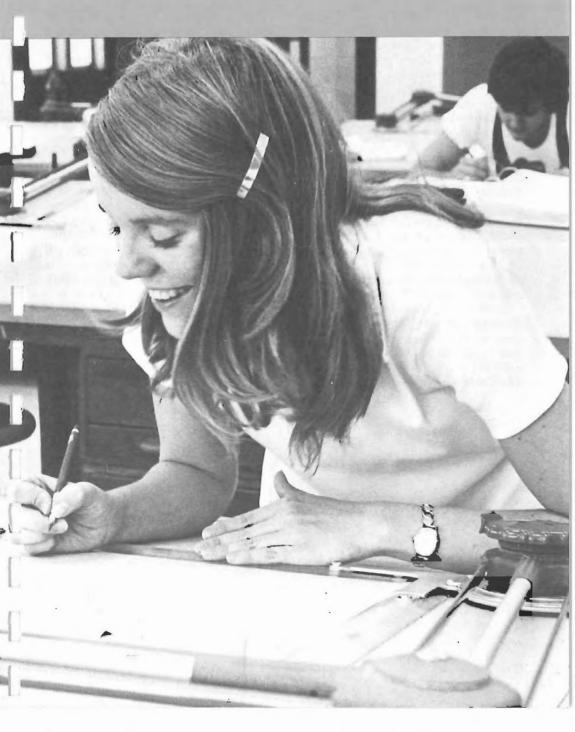
As you read, you'll find general information about the college, specific information about admissions procedures, details about all academic programs, and a word or two about the people you'll meet as faculty members and administrators.

The primary purpose of this catalog is for it to be helpful to you, the student, although it is also used as a reference by college staff. If you have questions, please ask us. We would like you to visit the campus, but if you can't do that, then please call or write. We'll try to provide you with the information you need.

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ABOUT THE COLLEGE



THE COLLEGE

Missouri Western State College is a four-year, state supported institution providing a blend of traditional liberal arts and newer career oriented degree programs. Specifically, MWSC is authorized under Missouri statute to offer one-year certificates, two-year associate degrees and four-year baccalaureate programs. In addition, the college offers some three-year, preprofessional transfer programs.

Accredited by both the North Central Association of Colleges and Secondary Schools and the National Council for Accreditation of Teacher Education, Missouri Western State is entering its second decade with an enrollment approaching 4,000 students, with some 150 faculty, and a recently constructed campus offering modern laboratories, new classrooms and an up-to-date library and learning resources center.

Established by act of the General Assembly in 1965, the college has its roots in the eighth-oldest junior college in the nation. St. Joseph Junior College, when it was established in 1915, was a liberal arts institution for area students usually preparing to transfer to the state university or the regional teacher colleges.

Today, Missouri Western State enjoys an expanding enrollment, and the strong support of its local community. As we head into the 1980's, Missouri Western State expects to continue serving both the needs of its traditional students, who enter upon their graduation from high school, and of adult students, who are seeking the opportunity to continue their education or develop some new skill.

This mix in the student body — of adults with experience in the world of work and young men and women entering directly from high school provides an exciting and dynamic learning environment. It affords all Missouri Western State students the opportunity to learn from one another. It brings life to the classroom and challenge to our faculty. Above all, it provides you with a special experience intended to help you grow as a person and help you with whatever career choice you may make.

OUR GOALS

Cognizant of its obligations to the state, to you 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 Board of Regents, undertakes to:

I. Provide educational opportunities suited to your needs 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;

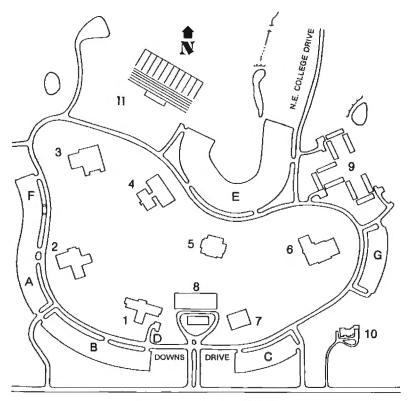
Pre-professional and transfer programs in designated fields; general education components in all degree and certificate programs;

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 you 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.

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CAMPUS MAP



MITCHELL AVENUE

Main Campus

- 1. Frank Popplewell Classroom-Administration Building
- 2. Dr. Thompson E. Potter Fine Arts Center
- 3. Health, Physical Education and Recreation Building
- 4. Engineerng 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
- 11. Spratt Memorial Stadium
- A-G Parking Lots

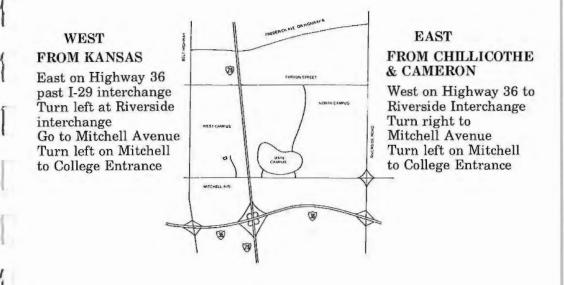
ACCESS MAP

NORTH

FROM MOUND CITY, SAVANNAH & MARYVILLE

South on I-29

Take Highway 36 east exit at interchange with I-29 Go east on Highway 36 to Riverside Interchange Turn left to Mitchell Avenue Turn left on Mitchell to College Entrance



SOUTH

FROM KANSAS CITY

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

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COLLEGE CALENDAR 1979-80

Summer Session 1979

May 29 (Tuesday) May 30 (Wednesday, 7:00 a.m.) July 4 (Wednesday) July 25 (Wednesday, 10:00 p.m.) Freshmen Orientation July 16-17 August 4, August 14

Fall Semester 1979

Aug. 16, 17 (Thursday, Friday) Aug. 20, 21 (Monday, Tuesday) Aug. 22 (Wednesday, 7:00 a.m. Sept. 3 (Monday) Oct. 26 (Friday) Nov. 21 (Wednesday, 7:00 a.m.) Nov. 26 (Monday, 7:00 a.m.) Dec. 10 (Monday, 10:00 p.m.) Dec. 11 (Tuesday, 7:00 a.m.) Dec. 18 (Tuesday, 10:00 p.m.)

Spring Semester 1980

Jan. 14, 15 (Monday, Tuesday) Jan./6 (Wednesday, 7:00 a.m.) Mar. 17-21 (Monday thru Friday) Mar. 24 (Monday, 7:00 a.m.) Apr. 4 (Friday) May 6 (Tuesday, 10:00 p.m.) May 7 (Wednesday, 4:30 p.m.) May 14 (Wednesday, 4:30 p.m.) May 15 (Thursday, 8:00 p.m.)

Summer Session 1980

May 29 (Thursday) May 30 (Friday, 7:00 a.m.) July 4 (Friday) July 25 (Friday, 10:00 p.m.) Registration Classes begin Holiday Classes end

Faculty Plan Days Registration Classes begin Holiday Student Activity Day Thanksgiving Vacation begins Classes resume Classwork ends Final Exams begin Fall Semester close

Registration Classes begin Spring recess Classes resume Holiday (Good Friday) Classwork ends Final Exams begin Spring Semester closes Commencment

Registration Classes begin Holiday Classes end

COLLEGE CALENDAR 1980-81

(tentative)

Fall Semester 1980

Aug. 14, 15 (Thursday, Friday) Aug. 18, 19 (Monday, Tuesday) Aug. 20 (Wednesday, 7:00 a.m.) Sept. 1 Monday) Oct. 17 (Friday) Nov. 26 (Wednesday, 7:00 a.m.) Dec. 1 (Monday, 7:00 a.m.) Dec. 8 (Monday, 10:00 p.m.) Dec. 9 (Tuesday, 4:30 p.m.) Dec. 16 (Tuesday, 4:30 p.m.)

Spring Semester 1981

Jan. 12, 13 (Monday, Tuesday) Jan. 14 (Wednesday, 7:00 a.m.) Mar. 16-20 (Monday thru Friday) Mar. 23 (Monday, 7:00 a.m.) Apr. 17 (Friday) May 5 (Tuesday, 10:00 p.m.) May 6 (Wednesday, 4:30 p.m.) May 13 (Wednesday, 4:30 p.m.) May 14 (Thursday, 8:00 p.m.)

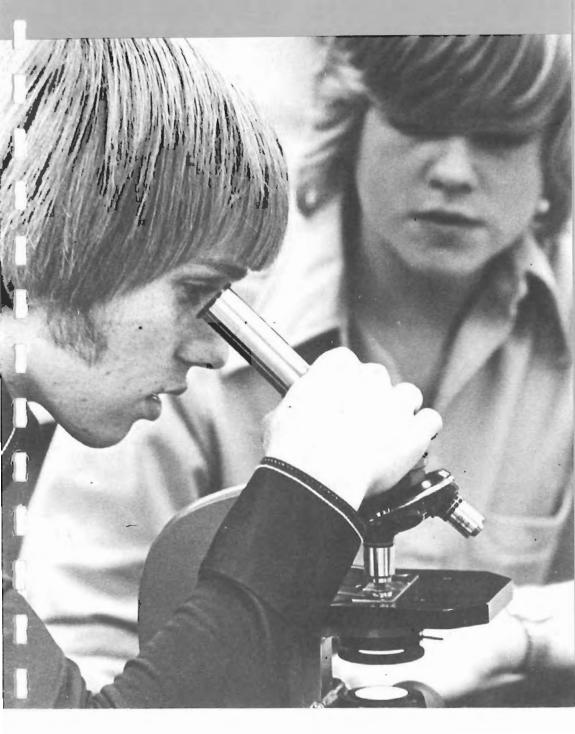
Summer Session 1981

May 28 (Thursday) May 29 (Friday, 7:00 a.m.) July 3 (Friday) July 24 (Friday, 10:00 p.m.) Faculty Plan Days Registration Classes begin Holiday Student Activity Day Thanksgiving Vacation begins Classes resume Classwork ends Final Exams begin Fall Semester Closes

Registration Classes begin Spring Recess Classes Resume Holiday (Good Friday) Classwork ends Final Exams begin Spring Semester Closes Commencement

Registration Classes begin Holiday Classes end

ABOUT MATRICULATION



ADMISSION

If you wish to take credit courses at Missouri Western State, you are admitted to the college in one of the following three categories. If you plan to work toward a college degree and have not attended any college before, you should read "First Time in College." If you are transfering from another institution, you are obviously a "College Transfer". And if you are not seeking a degree and wish to take credit courses, you are a "Special Student."

If you're the holder of an Associate

of Arts degree from an accredited Missouri public institution, then we will consider you to have satisfactorily completed our general studies requirements, which are described on page 41, and you will be admitted as a junior.

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, in-state students will be given first priority.

I. First Time in College

If you have not previously attended a college or university you 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)

If you are a foreign student you must provide an Application for Admission, Application Supplements (2), a \$5 Matriculation Fee, results of the Test of English as a Foreign Language (TOEFL) with a minimum score of 500, documentary evidence of financial ability to attend MWSC, proof of completion of high school or its equivalent.

The approximate deadlines for receipt of all admission requirements for the foreign student are: Fall Semester, July 10; Spring Semester, December 5; Summer Session, April 21.

Freshmen Orientation Dates: July 16-17, August 4 and August 14, 1979.

II College Transfer

If you are a person who has previously attended a college or university you 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.

If you are a foreign student transferring to MWSC from other U.S. institutions you must contact the Office of Admissions and Records for information regarding additional admission requirements.

If you are a transfer student seeking a bachelor's degree you must complete at least 30 of the 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.

If you are a transfer student seeking the associate degree you must complete the last 15 hours at this institution (exclusive of credit by examination). A minimum of six credit hours of the residence requirements must be in the major field.

III Special Student

This category is for those of you who are not seeking a degree at Missouri Western State College but desire to enroll in credit courses. If you are a student under suspension from Missouri Western State you are NOT eligible to be admitted under this category.

To be admitted, you must provide an application for admission and a \$5.00 matriculation fee.

In you are a high school student who has completed the junior year, you are eligible to attend Missouri Western State College as a special student upon your high school principal's certification that you are academically capable of pursuing college level work. You must provide:

an application for admission,

a \$5.00 matriculation fee, and certification from the high school principal.

If you are admitted under this category and later decide to seek a degree you must reapply for admission under the appropriate admissions category. (Consult the Admissions and Records Office).

Non-resident credit and Credit by Examination will not be entered on the permanent record of a Special Student until you reapply as a degree-seeking student and have met all admission requirements under the appropriate category of admission.

IV Non-resident Credit

Missouri Western State College may accept a total of 30 credit hours work (maximum applicable to a degree) obtained through Non-resident credit or Credit by Examination.

United States Armed Forces Institute and other armed services 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.

V Credit by Examination

If your travel, employment, extensive reading or other unique educational experience appears to have given proficiency in courses required in the curriculum equivalent to that ordinarily attained by that taken in the traditional classroom manner, you may be granted permission to attempt college credit through examination. College Credit by Examination is available for all courses required in general education and some courses required by majors.

Credit for general studies courses may be obtained by taking the CLEP General Examination. 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 you 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.

You are eligible to receive credit by examination only if you meet the following requirements:

you must have applied for admission to MWSC and paid the matriculation fee.

you must be enrolled in MWSC before credit obtained through examination is awarded,

you must not be enrolled in a course for which an exam is being requested,

you 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 if you are a transfer student you must have complete transcripts of previous college credit in the Records Office before written permission for the test out will be granted.

Your are ineligible to take a test for

"Credit by Examination" if the credit you would earn on that test makes you eligible for graduation at the end of that semester.

You are not eligible to receive credit by examination if you have:

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, you request credit by examination early in your college career to avoid ineligibility at a later date. You must earn a minimum of 30 credit hours of resident credit excluding any credit by examination.

The College-Level Examination Program (CLEP) General Examinations are administered by the University of Missouri Extension Center located on the Missouri Western State College campus. In addition to the local test site, the CLEP is administered at various locations throughout the nation. Applications 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 tests.

For you 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 10, 1979

(application deadline October 12, 1979)

April 19, 1980

(application deadline March 21, 1980)

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. You 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.

Your request 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:

you must present a written request in which you state your reasons for asking for the special date,

the department chairperson will decide whether or not the petition is justified and may ask for verification, and

if the circumatances warrant it, the department may set up a special test time.

The two types of Subject Examinations are: Single-level Subject Matter tests; You are required to take a separate test for each course for which you desire to obtain credit. The test fee is \$20.00 if the test used for that course is CLEP, and \$15.00 if the exam used for test out is a departmental college test.

Multi-level Subject tests;

In the case of sequence courses, an academic department may use a single test in determining proficiency in the skills/knowledge demanded by the courses in said sequence. If you desire 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 you will be given credit for each course in the sequence for which you demonstrate 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 cr. hrs.

HUMANITIES Subscores High in Fine Arts Low in Literature General Studies Requirement Met Art/Music/Theatre & 3 cr. hrs. Humanities elective (excluding Lit) 3 cr. hrs. Subscores Relatively equal subscores or High in Literature Low in Fine Arts

General Studies Requirement Met Humanities elective 3 cr. hrs. ENG 210 3 cr. hrs.

MATHEMATICS	
General Studies	Requirement Met
MAT 100 &	3 cr. hrs.
MAT 105	3 cr. hrs.

NATURAL SCIENC	E
Subscores	7
Higher in Biolog	rical
Lower in Physic	
General Studies Re	
BIO 101	6 cr. hrs.
Subscores	
Lower in Biologi	cal
Higher in Physic	cal
General Studies Re	quirement Met
One of the follow	ving:
CHE 101 or	6 cr. hrs.
PHY 101	6 cr. hrs.
SOCIAL SCIENCE A	AND HISTORY
General Studies Re	quirement Met
Two of the follow	
HIS 140 or	3 cr. hrs.
HIS 150 or	3 cr. hrs.

If you 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.

English Honors

Entering students who score 24 or above on the English section of the American College Test (ACT) are ordinarily placed in 112 Honors Composition and Rhetoric, and upon its successful completion, are also awarded 3 hours credit in 104 Composition and Rhetoric. This process fulfills written composition requirements in general studies for you. The English major who successfuly completes this program enters 224 Advanced Composition and Literature, a course required of all English majors.

ACT Test Schedule

Test Dates	Registration Deadlines
October 20, 1979	September 21, 1979
December 8, 1979	November 9, 1979
February 16, 1980	January 18, 1980
April 12, 1980	March 14, 1980
June 14, 1980	May 16, 1980

REGISTRATION

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

Residence

It is your responsibility to register under the proper residence and pay proper fees. Rules of residency are available in the Admissions and Records Office. If you claim residency in the State of Missouri you may be required to furnish evidence in support of the claim.

The Admissions and Records Office will rule on all questions regarding residency, but you have the right to appeal the decision to the Admissions and Graduation Committee.

If, after enrollment, you are eligible for a different residency classification, a petition form for this purpose is available in the Admissions and Records Office.

Schedule of Fees

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

Residents of	Non-Residents of
Missouri	Missouri
#of credit hours	# of credit hours
Fees (includes	Fees (includes
SGA Fees)	SGA Fees)
1 = \$ 29.00	1 = \$ 50.00
2 = \$ 53.00	2 = \$ 95.00
3 = \$77.00	3 = \$140.00
4 = \$101.00	4 = \$185.00
5 = \$125.00	5 = \$230.00
6 = \$149.00	6 = \$275.00
7 = \$173.00	7 = \$320.00
8 = \$197.00	8 = \$365.00
9 or more \$221.00	9 or more \$410.00

Veterans

The college is approved for training veterans and eligible persons.

If you have completed a minimum of one year of active military service you 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 DD214 or NGB55 form to the Admissions and Records office.

Veterans application forms and general information are available in the office of Veterans Affairs.

Other Fees

Application Fee (non-refundable)	\$	5.00
Applied Music Fee (per credit hour)	\$	20.00
Audit Fee Same as	regula	ar fee
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)	\$	508.00
Dormitory Security Deposit (subject to refund)	\$	50.00
Graduation Fee (all candidates) Laboratory Materials and/or	\$	15.00
Breakage		Cost
Physical Education Facility Fee	\$	3.00
Transcript Fee	\$	1.00
(The college reserves the right to without notice.)	chang	e fees

Payment of Fees

Fees will be payable at registration and registration will not be considered complete unless all fees have been paid.

Refund of Fees

Refunds are given you only if you drop out of college entirely; no refund is given if you drop individual classes or make schedule changes that result in a reduced semester hour class load. Withdrawal during first week

of classes80% of Fee Withdrawal during second and third

week of classes50% of Fee

FINANCIAL AID

The college's financial aid program is designed to assist those of you who would not otherwise 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 all applicants 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 at MWSC.

You are expected to assist yourself 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 State. Your parents are expected to contribute funds from their income and assets. The amount expected from your 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 of you but an appropriate allowance is made for this in the aid computation.

The institution budgets used to calculate the educational cost at Missouri Western State for the 1979-80 school year are as follows:

IN-STATE

	On	Off
	Campus	Campus
Tuition & Fees	\$ 442	\$ 442
Room Board	1,016	1,100
Books & Supplies	150	150
Travel	350	350
Personal	300	300
Misc.	300	300
TOTALS	\$2,558	\$2,642

OUT-OF-STATE

Tuition & Fees	On Campus \$ 820	Off Campus \$ 820
Room & Board	1,016	1,100
Books & Supplies	150	150
Travel	350	350
Personal	300	300
Misc. TOTALS	300 \$2,936	300 \$3,020

In packaging financial aid, this office considers in priority order; (1) Grants, (2) Work-Study, and (3) Loans. It is our desire to meet the full need of each of you without the use of loans whenever possible. Since the amount of aid awarded to you is a reflection of the financial position of your family, it is regarded as confidential between you, your family and the college. The amount awarded is determined on the basis of need, and any additional prizes or awards received by you from outside agencies must be reported to the Financial Aid office.

Application Procedure

When you apply for admission and wish to be considered for financial aid opportunities, you must have a copy of the Family Financial Statement forwarded to Missouri Western State College by the American College Testing Program. An institution 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 if you are a returning student and 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 are considered, awards made, and you are notified. Applications will be accepted after May 1, but chances of receiving financial assistance will be much less since most aid will already have been awarded.

Student Aid Programs

BASIC EDUCATIONAL OPPOR-TUNITY GRANT: This federal grant entitles every student wishing to attend college \$1800 minus 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 by applying yearly.

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. The deadline for filing of this grant is April 30.

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 \$1,000. 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 PRO-GRAM: Under Title I, Part C, of the Economic Opportunity Act of 1964, a student may be employed part-time while attending college. Prospective students who qualify under the guidelines of the College Work-Study Program may be employed in the summer months preceding the academic year. The number of hours of employment per week is determined by the financial need of each qualified student, academic schedule and amount of other assistance. Eligibility is determined by the Family Financial Statement.

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 STU-DENT 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.

LAW ENFORCEMENT EDUCA-TION PROGRAM (LEEP): The Law Enforcement Education Program (LEEP) began operation in the spring of 1969, following passage of the Omnibus Crime Control and Safe Streets Act of 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 full-time students to achieve careers in nursing by providing longterm low interest loans to help meet costs of education.

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.

INSTITUTIONAL LOAN: The col-

lege 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 tuition, fees and books, not to exceed \$300. The interest charge for the use of these funds is Liberal minimal. repayment schedules are available, however, the loan is a short-term emergency loan and must be paid back the same semester. An interested individual is encouraged to visit or write the Financial Aid office.

PART-TIME EMPLOYMENT: Each year there are opportunities for students to find part-time employment on the campus or in the community. Information concerning job opportunities may be secured from the Financial Aid office.

Fee Waiver Scholarships

- 1. The college reserves the right to limit the number of fee waiver scholarships awarded each year by scholarship catagories.
- 2. Applications for new or renewable fee waiver scholarships must be made annually to the college by May 1 and written acceptance of the scholarship from you by July 1.
- 3. If you have applied for a fee waiver scholarship you will be notified of the status of your scholarship by June 15.
- 4. Fee waiver scholarships are awarded only if you carry 12 or more semester hours each semester.
- 5. You must have made application for admission to MWSC to receive a scholarship.
- 6. When qualified applicants exceed the number of fee waiver scholarships to be awarded the application

date will be the determining factor.

REGENTS HONOR SCHOLAR-SHIP: Awarded by the college annually to all full time Missouri students who rank in the top 20% of their Missouri high school graduating class. The award is a \$130 per semester waiver of tuition and fees. This award is renewable for seven consecutive semesters if you maintain a 3.0 grade point or better for each semester. The Regents Honor Scholarship is restricted to full time students entering Missouri Western State College for the first time the first regular semester after graduating from high school.

ACADEMIC SCHOLARSHIP:

Awarded by the college annually to all full time Missouri students who rank in the top 33% of their Missouri high school graduating class. The award is a \$100 per semester waiver of tuition one semester only if you have attained a 3.0 grade point the first semester. The academic scholarship is awarded only to those of you enrolling the first regular semester after graduating from high school.

SPECIAL AWARD: Awarded by the college annually to the full time student selected by 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. This award is renewable for one semester if you attain a 3.0 grade point average for the first semester. This award is a \$100 per semester waiver of tuition and fees. The Special Award can be used only by those of you enrolling the first regular semester after graduating from high school.

GED AWARD: Awarded by the college annually to any full time Missouri student scoring 265 points or higher on the General Education Development Test. The award is a \$130 per semester waiver of tuition and fees. This award is renewable for seven consecutive semesters if you maintain a 3.0 grade point average for each semester. This is available only to those of you enrolling the first regular semester after completing the GED test.

COMMUNITY COLLEGE SCHO-LARSHIP: Awarded by the college annually to full time Missouri students who have completed 57 hours at a junior or community college with a cumulative grade point average of 3.00 or above as computed by the registrar's office at Missouri Western State College. This award is in the amount of \$130 per semester waiver of tuition and fees. The award is renewable for three semesters provided you maintain a 3.00 GPA each semester. This award is available only to those of you enrolling the first regular semester after completing 57 hours or more at a junior or community college.

ART AND MUSIC SCHOLAR-SHIPS: These departments offer a number of scholarships each year in the amount of incidental fees to those of you who show particular ability. Selections are made by the Scholarship Committe with recommendations from the department faculty.

SPEECH AND THEATRE SCHO-LARSHIPS: The Speech, Theatre, and Humanities Department offers a number of scholarships each year in the amount of incidental fees to those of you who actively participate in the speech or theatre programs. Recipients of these scholarships must maintain a 2.0 grade point average as freshmen and a 2.5 thereafter. Selections are made by the Scholarship Committee with recommendations from the department faculty.

ROTC FEE WAIVER: Fee waiver scholarship. Contact the Department

Chairperson.

BANKING AND FINANCE SCHOLARSHIP: Missouri Western State College offers fee waiver scholarships to eligible non-resident students enrolled in courses leading to a major in banking and finance. To be eligible a student must be a full time employee of a banking institution and a member of the American Institute 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 Director of Financial Aid no later than ten days prior to class registration. Scholarship MUST be renewed each semester with a letter of nomination.

NATIONAL GUARD SCHOLAR-SHIP PROGRAM: This program is offered to members of the Missouri National Guard, by Missouri Western State College, and 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 obtained from high school counselors, the local National Guard recruiter or the nearest Guard Commander.

Competitive 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 notify all applicants of their decision by May 1. Generally, students applying for scholarships should have at least a 2.0 grade point average and be a full-time student. Scholarships are broken down into two general categories, those having specific requirements and those with no specific requirements.

Scholarships Having Specific Requirements For Eligibility

AGRICULTURE SCHOLAR-SHIPS: 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 who shows financial need and academic excellence.

OUTSTANDING SOPHOMORE

AWARD: Hall Implement Company has given a scholarship of \$200 to be awarded to a sophomore student majoring in agriculture. The recipient selected by the Agriculture Scholarship Committee must be an outstanding sophomore student. This scholarship will be awarded to a student upon completion of the sophomore year in 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, majoring in agriculture, who has demonstrated leadership abilities, academic excellence and financial need.

OUTSTANDING AGRICULTURE STUDENT AWARD: Carter Cattle Company has given a \$200 scholarship to the student who is chosen by the Agriculture Scholarship Committee and Mr. Carter.

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.

BUCHANAN COUNTY SOIL & WATER CONSERVATION SCHO-LARSHIP: This scholarship of \$200 is to be given to a junior student with a 2.75 cumulative GPA or a senior student with a 3.0 cumulative GPA, majoring in agriculture, interested in pursuing a career in the general area of soil and water conservation, fulltime resident of Buchanan County.

ST. JOSEPH STOCK YARDS AWARD: This award is one made to a student selected by the Agriculture Scholarship Committee. The student is to be an agriculture student majoring in animal science and the standards will be determined by the committee.

VETERINARY MEDICAL CENTER AWARD: This award is presented to a student selected by the Agriculture Scholarship Committee. The student should be a declared animal science major that has shown financial need and academic excellence.

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 Aid office or from a member of the organization.

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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 tax-free 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 \$100 per month for the duration of each school year, not to exceed ten months per year.

DEPARTMENT OF MILITARY SCIENCE SCHOLARSHIP: This scholarship has been 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 college GPA, and not receiving another scholarship from any other source. Application should be made to the scholarship committee.

ATHLETIC SCHOLARSHIPS: The governing Board has 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 SCHOLAR-SHIP: 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. ULLMAN TEACHER EDUCATION SCHO-LARSHIP: The Missouri Congress of Parents and Teachers 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 Aid office.

THE CULVER-GETTYS **MEMORIAL SCHOLARSHIP: 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 should have a cumulative grade point average of 2.5 or better and show evidence of need of financial assistance. The scholarship shall be in the amount of \$100 for the first semester, and, if the student continues to achieve a cumulative grade point average of 2.5, it may be continued for the second semester. Preferably, the student should be planning to go into education.

DeSOTO McCABE MEMORIAL SCHOLARSHIP: The DeSoto McCabe Memorial Scholarship has been established to fund one \$300 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 award 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 premedical course. Application is made to the Scholarship Committee.

EAST HILLS MERCHANTS AS-SOCIATION 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 first awarded to a member of the 1962 graduating class. It is expected to be made available to former graduates of one of the 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 Mis-

souri Western State College is making for the betterment of St. Joseph and 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. Should conditions warrant, a student may be awarded the scholarship for a second year, however, student must reapply. Application is made to the Scholarship Committee. From the applicants, the Committee selects the three students who are best qualified from the standpoint of scholarship and financial need.

FRANK H. GEE CHEMISTRY SCHOLARSHIP: A \$320 scholarship has been established by Frank H. Gee to be awarded to a freshman student in the field of chemistry. The student must maintain a grade point average of 3.0 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 premedical 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 SCHOLARSHIP: 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.

NATIONAL ASSOCIATION OF POWER ENGINEERS, MISSOURI CHAPTER NO. 1, ST. JOSEPH SCHOLARSHIP: This organization has made a scholarship available to a pre-engineering 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 the best record in English courses. The recipient of this award is chosen by an evaluating committee from the English Department.

OPAL KEARBY SCHOLARSHIP AWARD: Students majoring in Social Science are eligible to apply for one of these awards. Information concerning eligibility factors and application blanks may be obtained in the Social Science Department.

SOCIETY FOR THE PRESER-VATION AND ENCOURAGEMENT OF BARBERSHOP QUARTET SINGING IN AMERICA, INC.: Annual scholarships will be offered to students majoring in vocal music. Missouri Western State College Scholarship Committee will ask the vocal music department for assistance in naming these individuals awards.

ST. JOSEPH DRIVE-IN INC.: Henry's Drive-In, 600 South 28th 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.

V. FRAN QUAMMEN SCHOLAR-SHIP: This award was established by friends and relatives of Fran Quammen, a former Missouri Western State College instructor in the Speech Department. The interest earnings from the trust fund is used each year to award a scholarship to encourage potential in the area of forensics. Applications should be submitted to the Scholarship Committee but applicants will be screened by a panel of judges selected from the Speech Department staff.

EASTSIDE ROTARY CLUB: The Eastside Rotary Club has established a scholarship of \$225 per semester for a qualified individual majoring in a field leading to a career in business, industry, public service, or health care. Once awarded, the scholarship may be retained as long as the student maintains a 2.50 cumulative grade point average. Selection will be made by the Missouri Western State College Scholarship Committee.

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UNITED MISSOURI BANK OF ST. JOSEPH SCHOLARSHIPS: The Park Bank Scholarships were established in 1969 to assist students 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.

F. GREGG THOMPSON MEMOR-IAL SCHOLARSHIP: A scholarship fund has been established by a contribution from the F. Gregg Thompson Foundation. The interest from this fund will be awarded annually by the Missouri Western State College Scholarship Committee with preference given to a student in the pre-medical field. If a pre-medical student is not available, the scholarship committee may select a biological science student to receive the scholarship. Financial need is not necessarily the major element regarding the award of the scholarship, however, if students are equal in academic standing, financial need will be the deciding factor.

Scholarships Having No Specific Requirements

ALMA PLETCHER ENDOW-MENT TRUST SCHOLARSHIP: A \$100 scholarship a year for upperclassmen. The applicant must be a full-time student (12 hours) and be in good standing.

AMERICAN BUSINESS WOMEN'S ASSOCIATION AWARD: Officers of the organization select the

recipient. The award is made on the basis of scholastic achievement and financial need. Information concerning applicants is forwarded to officers of the organization who make the final selection and inform the student well in advance of the time for final registration at the college. Applications can be obtained from the Financial Aid office or from a member of the organization.

ANDREWS-WHITAKER MEMORIAL SCHOLARSHIP: This scholarship is provided by Mr. and Mrs. Patrick H Whitaker of St. Joseph, Missouri in memory of their parents, Madeline Keil Andrews and George H. Andrews and Cora Ann Johnson Whitaker and James W. Whitaker. Interest from the \$10,000 scholarship fund is awarded annually to a Missouri Western State College student or students who have demonstrated academic excellence and a financial need. The recipient or recipients will be selected by the Missouri Western State College Scholarship Committee.

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. The selection of the recipient is made by the Scholarship Committee.

B'NAI B'RITH WOMEN'S DIVI-SION AWARD: Selection is made from a list of eligible students by a committee from the organization. This award has been made for many years. Applications can be obtained from the Financial Aid office or from a member of the organization. FIRST TRUST BANK SCHOLAR-SHIP: 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.

MELMED SCHOLARSHIP: The income from the Melmed Trust Fund is to be used for scholarships of not less than \$100 each annually at Missouri Western State College. Selection will be made by the Scholarship Committee.

MISSOURI WESTERN STATE COLLEGE FOUNDATION SCHO-LARSHIP: Designated monies of the Foundation will be used in the awarding of scholarships in the amount of not less than \$100 annually, the distribution to be on a semester basis. Selection will be made by the Scholarship Committee.

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 and the earnings are used to grant some young person a scholarship. Application should be submitted to the Scholarship Committee.

PROFESSIONAL FOOD SER-VICE MANAGEMENT: One \$250 scholarship for every 100 boarding students each year. 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.

ADDITIONAL FINANCIAL AID/ SCHOLARSHIP INFORMATION MAY BE OBTAINED UPON RE-QUEST FROM THE FINANCIAL AID OFFICE, SS/C 101.

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 you may choose to take.

Before you formally declare a major, you should maintain close contact with the Counseling Center and those academic departments in which you are particularly interested.

You officially declare a major by contacting the academic department in which your major is lodged and file a Major-Minor Application form. In order to prevent misunderstandings, this formal declaration should be done early in your college career. The college catalog in effect at the time of completion of the Major-Minor Application will be used to determine your graduation requirements. The Major-Minor Application remains effective for no more than six (6) years following its approval date.

In the final analysis, you are responsible for the requirements of your educational program and should work closely with an advisor.

Counseling

Counselors assist you in becoming oriented to the college, selecting courses, making a career choice, and understanding and attempting to resolve your personal problems.

A modern Career Information Center is available for you to broaden your understanding about different careers which are in alignment with individual student profiles evidenced by the interpretation of Career Planning instruments such as the Career Planning Profile, the StrongCampbell Interest Inventory and the American College Testing result.

Trained counselors are available to assist you in resolving personal and social problems so that you may more effectively pursue your college education.

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

Testing

The College serves as a testing center for the American College Test. Other tests are available to you on an individual basis. You may find it helpful to take the Career Planning Profile (CPP), the Strong-Campbell Interest Inventory, 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.

You 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.

Student Conduct

The college expects you, as a condition to remaining in the college, to conduct yourself so as to maintain an effective environment for learning; to act responsibly in accordance with good taste, to observe college regulations and the city, state and federal laws, and to respect fully the rights 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. Each suite also has its own outside entrance, a patio and self contained air-conditioning and heating units. For additional information concerning occupancy contact the Housing Coordinator.

The Vice President for Student Affairs maintains a list of off-campus housing. The college does not make individual rental agreements. It is advisable for you to come to St. Joseph prior to the beginning of the academic year to locate suitable housing.

College Center

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

Bookstore

The college bookstore is on the first floor of the College Center. It sells all college textbooks and supplies as well as a full line of accessories. A 5% discount is given on all student purchases.

Health Services

Health Services are under the direction of part-time medical doctors and a full-time registered nurse. Registered nurses are on duty during class hours. The nurses provide first aid, administer authorized medication, counsel in health related problems, and assist you when referrals are made to a doctor, dentist, or public health offices. The physicians prescribe treatment if you seek medical attention.

Prior to treatment, you must supply a complete medical history form.

All health records, including a permanent daily record of your visits to the Health Services Center and of the care given to you, are filed in the Health Service office.

As a service to students, a health insurance plan is made available to you 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 you obtain the coverage if you are not covered by a family health insurance plan. It is extremely important for you if you are living away from home.

Library

In the pleasant atmosphere of the Hearnes Learning Resources Center you 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 you 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. You also have seminar rooms for group study available.

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.

In this capacity, the Director works with Division Deans, Department Chairpersons, 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 officials in business and industry in the college district regarding educational programs.

A placement service is maintained to assist present and former graduates of the College in finding employment.

It assists you 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.

You are urged to avail yourselves of the services by registering with the Placement Service in the first semester of your senior year. Alumni are urged to keep their records up-to-date.

Alumni Association

The MWSC Alumni Association exists for several purposes. First, it is a way for former students to keep up their interest in the college. Second, members are given the opportunity to continue using the library and certain other college facilities. Third, it is an organization that works with the college to help it achieve its long range goal of educational service to the community.

Association members receive a regular Alumni Bulletin, with news of former classmates and campus developments, and are offered the opportunity to participate in reduced-rate national and international group travel tours.

The Association is governed by a 24-member Board of Directors, with an executive director providing oncampus administrative support. Two of the Association's most visible activities during the school year are the Homecoming Luncheon and the Commencement Breakfast for all MWSC graduates each spring. The latter is free to graduates and is usually attended by parents, faculty and administrators and is highlighted by a short speech by a distinguished former student. In addition, all new MWSC graduates are provided one year's free membership (normally \$5) in the Association.

Foundation

Established in 1969 as a separate corporate entity, the MWSC Foundation, Inc., exists to act as the college's non-government fund raising arm. With efforts coordinated by a 25-member Board of Directors, the Foundation works closely with the college administration to identify needs, approach possible fund sources, and, when successful, disburse grants to appropriate college areas.

Among the Foundation's contributions to the college in recent years have been approximately \$10,000 per year for the 9:1 federal matching Guaranteed Student Loan Program, (this generates some \$100,000 per year for students with financial needs), funds for construction of the foyer of the Fine Arts building, completion of the McGlothlan Biology Laboratory, and, most recently, a major portion of the funds for the Spratt Memorial Athletic Stadium.

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, activites, regulations and student oriented decisions in general are to be formed or acted upon by the Student Government Assembly.

Athletics

The college has an athletic program of intercollegiate competition for both men and women including football, basketball, baseball, golf, tennis, track and volleyball. 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 your interest will the athletic program grow and continue to provide exciting activities enjoyed on campuses today. The Athletic Department urges each of you to BACK THE GRIFFONS!

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 you 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 you maintian better health through exercise. In general, Missouri Western State provides the opportunity for every individual, regardless of ability, to realize the fun of participation in a 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 you.

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, they are open to all students.

Social Life

The social life changes from year to year in an effort to meet the current needs and interests of you and the college community. Some of the traditional events are: The Icebreaker Dance at the beginning of the year, The Homecoming Dance, The Christmas 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

These 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 Forensics Society Griffon Guard Journalism Club Le Circle Francais Music Educators National Conference National Society of Pershing Rifles Phi Beta Lambda Psychology Club Pre-Law Club Sigma Tau Delta Students Art League Students Nursing Association Association of Leisure & **Recreation Majors** Students Accounting Society

Social Clubs

Delta Zeta Phi Mu Sigma Kappa Lambda Chi Alpha Tau Kappa Epsilon Sigma Phi Epsilon Gamma Delta Iota Panhellenic Inter-Greek Council Sisters of the Golden Heart

Religious Clubs

Baptist Student Union Campus Christian House Newman Club

Miscellaneous

International Students Organization Judo Club Input, Inc. Association of Black Collegiates Volleyball Club Western Athletic Association

ABOUT ACADEMIC PROGRAMS



DEGREE PROGRAMS

The degree requirements in this catalog become effective beginning the fall semester of 1979. If you are a candidate for a degree you may use as a basis for degree requirements, the general catalog in effect at the time of completion of the Major-Minor Application. This application remains effective for no more than six (6) years following its approval date.

Baccalaureate Degree Programs

Missouri Western State College offers six baccalaureate degrees with majors in various fields. In order to earn one of these degrees, you 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

The Bachelor of Arts degree is broadly based in the liberal arts and sciences. It is usually pursued if you plan, upon graduation, to enter graduate school or a professional school such as law, medicine, or dentistry 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 persued if you plan to apply this knowlege 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 science, sociology, general agriculture, agricultural economics, agronomy, animal science, leisure management, natural science (Chemistry), data processing, and criminal justice.

The Bachelor of Science in Business Administration degree is designed for those of you who desire 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, minimum cumulative grade point of 2.5, and a minimum grade of C in student teaching the candidate may receive a State of Missouri Teaching Certificate, and be prepared for graduate study in education or 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 and chemistry.

The Bachelor of Science in Technology degree is designed for those of you 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 electronics engineering technology and construction engineering technology.

The Bachelor of Science in Technology "Two plus Two" degree is designed for those of you who have completed a career-oriented associate degree program and desire the bachelor's degree with an additional emphasis in an approved cognate field. You must complete 24 to 30 credit hours in a cognate field as well as the general degree requirements for baccalaureate programs. An earned associate degree with a careeroriented major is a prerequisite for admission into this degree program.

The Bachelor of Social Work degree is designed for those of you 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

General Studies at Missouri Western State College constitute a common core of curriculum offerings which is necessary to produce an individual who demonstrates the skills, knowlege, and characteristics of an educated person.

The required general studies curriculum consists of a common core which assures that all baccalaureate degree seeking students will be provided the opportunity to acquire knowledge and/skills to:

- a. Think critically and reason analytically.
- b. Write and speak clearly and effectively.
- c. Understand common phenomena in the physical, natural, and social environments and methods by which they are studied.
- d. Gain a greater awareness of the present through an understanding of other cultures and times.
- e. Understand and appreciate moral values and ethical choices.
- f. Understand and enjoy aesthetic experiences and share in related creative activities.
- g. Understand and appreciate the means of gaining and maintaining mental and physical health.
- h Understand and appreciate technological concepts and their influence on society.

The courses meeting objectives a and b will concentrate on the development of basic learning skills such as reading, speaking, writing, and critical thinking. All other courses in the general studies curriculum must, where possible, reinforce these basic learning skills.

Basic Guidelines

A student may attempt credit by μ_1 .

Philosophy See inside front ures As See inside procedures As cover for procedures program. cover for proting lies program. for implementing lies program. for implementing to use. examination in most of the general studies courses.

CATEGORY ONE -

Basic Skills 12 Credit Hours

- 1. Mathematics (3 hours) MAT 101 or any higher level mathematics course
- 2. English Composition (6 hours) ENG 104 and 108 or 112
- Speech Select one course from the following (3 hours) SPH 104 or 105 or 106

CATEGORY TWO -

Natural Sciences

8-10 Credit Hours Select a minimum of eight (8) hours from two of the following disciplines:

- 1. BIO 101 (BIO 111 and 112 may be substituted)
- 2. CHE 101 or 104 or 111
- 3. PHY 101 or 110 (PHY 210 and 211 may be substituted)

CATEGORY THREE -

Social Sciences 6 Credit Hours Select one course from each of the following groups:

- 1. PSY 101, SOC 110, 120, GEO 100, or ECO 101
- 2. HIS 140 or 150 or PSC 101

CATEGORY FOUR -

Humanities 9 Credit Hours Select one course from each of the following groups:

- 1. HIS 100, 110, HUM 203, 205
- 2. HUM 210, 230, 250, Eng 210
- 3. ART 100, ENG-240, MUS 101, THR 113

CATEGORY FIVE -

Physical Health 4 Credit Hours 1. PED 101 (3 hours)

 Physical Education Activity or MIL 101, 102, 103, or 104 (1 hour) TOTAL 39-41 Credit Hours

Associate Degree Programs

Missouri Western State College offers the associate of science degree with majors in various fields. In order to earn this degree, you 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 those of you who desire 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, corrections, criminal justice, electronic engineering technology, executive secretary, lawyers' assistant, midmanagement, nursing, pilot training, and teacher's aide.

2 Year

General Studies Program Philosophy

The required general studies curriculum consists of a common core which assures that all associate degree seeking students will be provided the opportunity to acquire knowledge and/or skills to:

- a. Think critically and reason analytically.
- b. Write and speak clearly and effectively.
- c. Function as an enlightened citizen in our democratic society.
- d. Develop an appreciation of the cultural aspects of civilization.
- e. Appreciate the means for gaining and maintaining mental and physical health.

Basic Guidelines

COMMUNICATIONS 6 Credit Hours

 ENG 104 Composition and Rhetoric (3 hours)

Select one of the following courses (3 hours):

- 2. SPH 104 Oral Communication
- 3. SPH 105 Business and Professional Speech
- 4. SPH 106 Public Speaking
- SOCIAL SCIENCE 3 Credit Hours Select one of the following courses (hours):
 - 1. HIS 104 American History to 1865
 - 2. HIS 150 American History Since 1865
 - 3. PSC 101 American National Government

HUMANITIES 3 Credit Hours Select one of the following courses (3 hours):

- 1. HUM 203 Humanities I
- 2. HUM 205 Humanities II
- 3. HUM 210 Introduction to Philosophy
- 4. ART 100 Introduction to Art
- 5. MUS 101 Perspectives in Music
- 6. THR 113 Introduction to Theatre
- 7. HIS 100 Ancient and Medieval Civilization
- 8. HIS 110 Modern Civilization

PHYSICAL HEALTH3 Credit Hours

1. PED 101 Concepts of Physical Activity (3 hours)

TOTAL 15 Credit Hours

1 Year Certificate Programs

Missouri Western State College of-

fers certificate programs with majors in various fields. In order to earn the certificate, you must complete a minimum of thirty semester credit hours with a minimum cummulative grade point average of 2.00 (C average). Certificates are offered in clerical, lawyers' assistant, and secretarial. Specific course requirements are listed under the area housing the certificate.

Transfer Programs

Pre-professional programs in specialized fields are offered for those of you who plan to transfer to a university for the completion of your studies. If you choose these programs you should select a transfer institution early and should work closely with your academic adviser and counselor here.

The following areas are those which serve most students interested in transfer programs:

Architecture	Mortuary Science
Chiropractic	Optometry
*Dentistry	Pharmacy
Engineering Law	Physical Therapy
Journalism *Medicine	*Veterinary Medicine

*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 your educational experience, and a requirement for an adequate evaluation of your academic progress.

Each instructor will determine and make known to the class requirement for attendance.

Class Auditors

You may audit a course for no credit but for informational instruction. You may audit a course for a number of reasons ranging from skill improvement through a review prior to registering for credit. Regardless of your purpose, it is important that you get a meaningful experience from instruction and make satisfactory progress toward your purpose. It is the role of the instructor to aid you in this determination. Therefore, you should expect to work closely with your instructor.

If you enroll in a class for credit, you may choose to change that registration to audit 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 maximum number of credits that you may take is 18 credits per semester or 9 credits in a summer term. This includes day and evening enrollment combined.

Upon recommendation of the fa-

culty adviser and the approval of the division dean, if you have a 3.0 term grade point average you may take additional credit the following semester.

You cannot enroll as an auditor in excess of a normal load.

If you find it necessary to work in order to attend college you should adjust your course load to your work load. You should use the following schedule as a guideline to determine your course load:

Hours Worked Per Week	Course Load
15-20 hrs.	12 credit hrs.
20-30 hrs.	9 credit hrs.
30-35 hrs.	6 credit hrs.
35-40 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 you 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 10th week.

Courses dropped through the fourth week will not appear on the transcript as attempted classes.

Courses dropped from the fifth week through the 10th week will be assigned a grade of "W".

After the 10th week of classes and

before the beginning of final examinations you may drop a course only by official, complete withdrawal from the college, in which case a "W" is recorded for each course in which you enrolled.

Summer Session (8 Weeks)

Add — First three days only.

Drop — First through the fifth week.

Courses dropped through the second week will not appear on the transcript as attempted classes.

Courses dropped from the third week through the fifth week will be assigned a grade of "W".

From the sixth week through the end of the Summer Session you may drop a course only by official, complete withdrawal from college, in which case a "W" is recorded for each course in which you were enrolled.

Grading System

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

Le	tter Grade and	Grade	
Level of Performance		Points Earned	
A	superior	4 for each credit hr.	
В	good; above	3 for each	
	average	credit hr.	
C	average	2 for each credit hr.	
D	minimum passing; below average	1 for each credit hr.	
F	failing	0 for each credit hr.	
Inc.	incomplete		
W	withdraw, no grade	9	

assessment

Aud. audit

Cr. credit

If you take courses that are evaluated by pass-fail criteria you 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 your class standing and eligibility for graduation, the Dean's and President's Honor Lists, and membership in honor societies.

Pass-Fail

The major objective of the Pass-Fail option is to encourage you to explore academically. You may choose 100 and 200 level courses normally avoided because of the regular grading system and lack of background.

You may enroll for courses on a pass-fail basis within these guidelines:

You may accumulate no more than six semester hours of Pass-Fail credit towards your degree and the Pass-Fail option is only allowed for 100 and 200 level courses.

If you pass the course (instructor indicating a letter grade of A, B, C, or D) you receive credit without a grade while if you fail you receive a grade of F. The attempted hours are included in the GPA.

You may take all six semester hours credit on a Pass-Fail basis in one semester if you so desire.

Although course pre-requisites are not as important in the Pass-Fail option, if you do not meet a pre-requisite you should consult the chairperson of the department in which the course is offered if a Pass-Fail option is considered.

You must designate in the Office of Admissions and Records, the Pass-Fail option during the fourth week after the first day of classes.

Your instructor will not be informed that you are enrolled under the Pass-Fail option. Current procedures will be followed by sending the mid-term grades and final grades from the instructor to the Registrar. In the Admissions and Record Office your 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.

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 chairperson 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, you must be carrying twelve or more credit hours of work with a grade point average of 4.00 exclusive of pass/fail credit or audits.

A Dean's Honor List is published at the end of each semester. To be included on the Dean's List, you 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 of audits.

Records of Academic Work and Transcripts

Unofficial transcripts will be

stamped, "Unofficial, For Missouri Western State 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.

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

You are placed on scholastic probation if either your Cumulative Grade Point Average (CGPA) or your Resident Grade Point Average (RGPA) drops below the Probation Grade Point Average in the Table of Academic Standards (see page 45) which corresponds to your cumulative semester hours attempted.

Scholastic Suspension

You are placed on scholastic suspension if either your Cumulative Grade Point Average (CGPA) or your Resident Grade Point Average (RGPA) drops below the Suspension Grade Point Average in the Table of Academic Standards (see page 45) which corresponds to your cumulative semester hours attempted, subject to the provisions which follow. To be placed on scholastic suspension, you:

1. must have attempted 20 or more semester hours of course work and have been on scholastic probation during the previous

Table of Academic Standards

Cumulative Hours	Probation if GPA is less than	Suspension If GPA is less than	Cumulative Hours Attempted	Probation If GPA is less than	Suspension if GPA is less than
Attempted					
1	N/A	N/A	60	2.000	1.700
2	N/A	N/A	61	2.000	1.705
3	0.333	N/A	62	2.000	1.710
4	0.750	N/A	63	2.000	1.714
5	1.000	N/A	64	2.000	1.719
6	1.167	N/A	65	2.000	1.723
7	1.286	N/a	66	2.000	1.727
8	1.375	N/A	67	2.000	1.731
9	1.444	N/A	68	2.000	1.735
10	1.500	N/A	69	2.000	1.739
11	1.545	N/A	70	2.000	1.743
12	1.583	N/A	71	2.000	1.746
13	1.615	N/A	72	2.000	1.750
14	1.643	N/A	73	2.000	1.753
15	1.667	N/A	74	2.000	1.757
16	1.688	N/A	75	2.000	1.760
17	1.706	N/A	76	2.000	1.763
18	1.722	N/A	77	2.000	1.766
19	1.737	N/A	78	2.000	1.769
20	1.750	1.100	79	2.000	1.772
21	1.762	1.143	80	2.000	1.775
22	1.773	1.182	81	2.000	1.778
23	1.783	1.217	82	2.000	1.780
24	1.792	1.250	83	2.000	1.783
25	1.800	1.280	84	2.000	1.786
26	1.808	1.308	85	2.000	1.788
27	1.815	1.333	86	2.000	1.791
28	1.821	1.357	87	2.000	1.793
29	1.828	1.379	88	2.000	1.795
30	1.833	1.400	89	2.000	1.798
31	1.839	1.419	90	2.000	1.800
32	1.844	1.433	91	2.000	1.802
33	1.848	1.455	92	2.000	1.804
	1.853	1.471	93	2.000	1.806
34	1.857	1.486	94	2.000	1.809
35 36	1.861	1.500	95	2.000	1.811
37	1.865	1.514	96	2.000	1.813
	1.868	1.526	97	2.000	1.814
38	1.872	1.538	98	2.000	1.816
39 40	1.875	1.550	99	2.000	1.818
	1.878	1.561	100	2.000	1.820
41	1.881	1.571	101	2.000	1.822
42 43	1.884	1.581	102	2.000	1.824
	1.886	1.591	103	2.000	1.825
44	1.889	1.600	104	2.000	1.827
45	1.891		104	2.000	1.829
46	1.894	1.600	105	2.000	1.830
47		1.617	108	2.000	1.832
48	1.896 1.898	1.626		2.000	1.833
49		1.633	108		
50	1.900	1.640	109	2.000	1.835
51	1.902	1.647	110	2.000	1.836
52	1.904	1.654	111	2.000	1.838
53	1.906	1.660	112	2.000	1.839
54	1.907	1.667	113	2.000	1.841
55	1.909	1.673	114	2.000	1.842
56	1.911	1.679	115	2.000	1.843
57	1.912	1.684	116	2.000	1.845
58	1.914	1.690	117	2.000	1.846
59	1.915	1.695	118	2.000	1.847
			119	2.000	1.849
			120 & Over	2.000	1.850

semester and

 must have a Term Grade Point Average lower than 2.0 (C).

If you are suspended from the college and feel your case warrants special consideration you may petition the Academic Regulations & Standards Committee provided such appeal is made immediately following notification of suspended status. Circumstances beyond your control must be presented before reinstatement will be considered. If reinstatement is granted, you will be on scholastic probation. (Refer to Table of Academic Standards.)

Readmission

If you are placed on scholastic suspension the first time you may be readmitted after the lapse of one academic semester provided a written petition for return is filed 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.

If you are placed on scholastic suspension the second time after being readmitted you may again be readmitted after the lapse of the academic year provided a written petition for return is filed 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 Vice-President for Student Affairs.

Reinstatement after any type of suspension will be granted on a probationary basis.

Repeating Courses

You are 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.) When a course is repeated, only the last grade is used in the calculation of the resident grade point average.

Withdrawal From College

You will be given a "failing" grade in each subject if the formal notification of withdrawal has not been accomplished. You must notify the Admissions and Records Office in writing. The effective date of withdrawal will be on the date on which you made the initial contact.

Description of Courses

All courses offered at the college are listed by divisions and departments. Prior to the opening of each term a Class Schedule is published 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 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 experiement 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 semestrer. 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.

REQUIREMENTS FOR GRADUATION

Major-Minor Application

If you are a degree candidate you must have on file in the Admissions and Records Office an approved Major-Minor Application form. This application is normally completed early in your college career. For additional information consult the Student Affairs section of this catalog.

Grade Point Averages

Your "resident grade point average" is a numerical ratio of total credits attempted and total grade points received. The following are examples of the method of computing the resident grade point ratio:

A. If you complete 16 semester hours credit with 16 hours of "B" you have earned 48 grade points. The RGPA is $48 \div 16 =$ 3.0.

> If you complete 16 semester hours of credit with 8 hours of B and 8 hours of C you have earned 40 grade points. The RGPA is $40 \div 16 = 2.5$.

Credit earned in courses in which a grade of "Cr" is given are not included in the computation of the resident grade point average.

Only courses taken at MWSC are used in computing the RGPA. When a course is repeated, only the last grade is used in the calculation of the RGPA.

Grades of "Inc.", "W" or "Aud" do not represent credit earned and are not included in the computation of RGPA. When a grade of "F" is received, the credit hours attempted are included in the computation of the RGPA.

NOTE: If you were enrolled at MWSC prior to August 1, 1978, your college transfer earned at other accredited institutions will be treated as if earned at Missouri Western State College. Thus, your resident grade point average and your cumulative grade point average are the same.

Cumulative Grade Point Average (CGPA)

Your cumulative grade point average is calculated in the same fashion as the resident grade point average and includes all undergraduate credit earned at institutions accredited by the North Central Association or a similar regional agency.

General Degree Requirements for Baccalaureate

Programs

You must meet the general studies requirements.

You must have a minimum of 124 credit hours (including 60 from a senior college).

You must have resident and cumulative grade point averages of at least 2.0 to graduate.

You must have resident and cumulative grade point averages of at least 2.0 in courses comprising the major in order to graduate.

You 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 twoplus-two programs).

You must earn 30 of the last 45 semester hours at MWSC in resident course work.

You 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

You must meet the general studies requirements.

You must have a minimum of 62 credit hours.

You must have resident and cumulative grade point averages of at least 2.0 to graduate.

You must earn the last 15 semester hours at MWSC in resident course work.

You must have resident and cumulative grade point averages of at least 2.0 in courses comprising the major in order to graduate.

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." You 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.

Application for Graduation

To be considered as a candidate for graduation, it is required that you declare candidacy by filing an Application for Graduation in the Office of Admissions and Records, SS/C 114, prior to the following deadlines:

Fall graduates — July 1

Spring graduates — November 1 Summer graduates — April 1

Applications for Graduation will be accepted and processed after the above dates and will not affect your actual graduation. Late applications will, however, possibly curtail the ability of the college to provide all services to you.

Multiple Degrees

The college offers six baccalaureate degrees:

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.

The college will confer two bac-

calaureate degrees provided:

You meet graduation requirements for each degree;

You have earned a minimum of 144 hours;

You pay an additional \$5.00 fee for the additional diploma

Double Majors

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.

Graduate Honors

Those of you completing degree requirements with a cumulative grade point average of 3.9 or higher will be graduated with Highest Honors (summa cum laude). Those who have earned a grade average of 3.75 or higher but below 3.9 will be graduated with High Honors (magna cum laude). Those who have earned a grade average of 3.5 or higher but below 3.75 will be graduated with Honors (cum laude).

Commencement

Commencement is held at the end of the spring semester. It is a voluntary activity on your part. Candidates for degrees who will complete all requirements for the degree during the summer session, may elect to attend spring commencement. Names will appear on the commencement program and the candidates will be recognized. The degree will not be awarded until the close of the summer session.

THE DIVISION OF CAREER PROGRAMS

The division includes the departments of Criminal Justice and Nursing as well as programs in Automotive Technology, Lawyers' Assistant, Secretarial Science, Pilot Training, Agriculture Technology, Construction Engineering Technology, Electronic Engineering Technology, and Mid-Management. The Division of Career Programs is organized to provide career-oriented education leading to one-year certificates, the Associate of Science, and Bachelor of Science Degrees. Programs of study are offered which prepare you 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 your individual 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 you;

To promote an environment conducive to learning not only the skills and knowledge, but also the proper attitudes necessary to achieve and become productive in your chosen career area;

To advise you in selecting educational experiences which will facilitate your educational development in your career field and in general education;

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

DEPARTMENT OF CRIMINAL JUSTICE

L. Maxwell — Chairperson J. Carmichael

The Department of Criminal Justice offers two separate degrees for those of you with interests in the criminal justice area. These degrees are:

Associate of Science

This degree is offered with either a major in criminal justice or a major in corrections.

Bachelor of Science

This degree is offered with a major in criminal justice.

The Criminal Justice Program seeks to prepare you for entry into or advancement within the criminal justice system in any of the numerous areas existing within this dynamic career field. Such areas would include:

Investigative Agencies: Federal, state, county, and local agencies including private investigative agencies.

Corrections Agencies: Institutions and probation/parole systems within federal, state, and county governmental levels.

Industrial Security: Corporate interests nationwide.

The Associate of Science Degree Requirements:

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 plus 9 hours of supporting electives. A major in Corrections requires the completion of the following specific courses: LAW 100, 110, 160, 200, 205, 210, 215, 230, 250, 270, 290; SOC C. Butcher J. Miller

110, 230; PSC 101; and PSY 101 plus 6 hours of supporting electives.

The Bachelor of Science Degree Requirements:

Entry into the baccalaureate program in Criminal Justice is through completion of an accredited Associate Degree program, preferably in a criminal justice area. This two year program may be completed at Missouri Western State College or at another accredited college. The major in criminal justice consists of 43 credit hours in criminal justice coursework plus 30 credit hours of coursework in related areas. The following specific courses are required: LAW 100, 110, 150, 160, 180, 200, 215, 220, 260, 290, 470 (2 semesters), plus 9 credit hours of electives in criminal justice; PSC 101, 110; PSY 101, 210, 309; SOC 110, 230, 310, 400, 430.

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) i, 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, iiii

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. Em-

phasis 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

LAW 160 Principles of Investigation (3) i, ii, (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 205 Institutional Procedures,

53

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 Essential of Interviewing (3) i, ii

An examination of fundamental concepts of verbal communication as applied to interview situations within the criminal justice system. Emphasis is placed upon interviewing theories and techniques, legal aspects of interviewing and interrogation, and actual and mock interview experiences.

Prerequisite: Introductory Speech.

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 230 Contemporary Practices in Corrections (3) i

Modern trends in corrections, such as the community-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 260 Criminal Law (3) i, (iii even vears)

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.

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 280 Criminalistics (3) ii

An introductory survey of modern methodology for police laboratories. Reviews the need for professional investigations while introducing the student to the means of achieving high degrees of proficiency in the field of scientific criminal inquires.

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

LAW 290 Practicum in Criminal Justice (3) i, ii, iii

A course of instruction designed to provide students with practical experience in a supporting capacity within a local criminal justice agency. **Prerequisite:** A completed major application in Criminal Justice or Corrections and consent of instructor.

LAW 450 Independent Study in Criminal Justice (1-5) i, ii, iii Investigation of selected problems or topics on an individual conference basis. Application for this course must be made in the Department Chair-

person's office well in advance of registration.

Prerequisite: Approval by the department Chairperson

LAW 470 Senior Seminar in Criminal Justice (2) i, ii

> Individual reports, group discussion, guest speakers on selected topics in Criminal Justice. Must be taken both semesters during the senior year for a total of four credit hours.

> **Prerequisite:** Senior status in Criminal Justice Program and student must have completed a major application.

LAW 490 Advanced Practicum in Criminal Justice (3-6) i, ii, iii Field experience under the supervision of trained professionals in top level Criminal Justice positions. Application for placement must be made at least 9 weeks before registration for this course.

> **Prerequisite:** Senior status in Criminal Justice Program and student must have completed a major application.

DEPARTMENT OF NURSING

C. Esry — chairperson J. Hoagland H L. Bade S. McGinley J

H. Buckles J. Campbell K. Noland J. Utz

The department offers a nursing program leading to an Associate of Science degree. Specific course content and planned learning experiences emphasize nursing concepts of the well person and progresses to nursing concepts of the ill person.

These objectives are believed to be essential learning needs for you in the nursing program:

To relate the basic biophysical and psychosocial factors that influence an individual's behavior and ability to maintain homeostasis,

To apply the body of knowledge that is a basis for direct nursing care to patients,

To utilize 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 long-range goals,

To identify responsibilities and relationships of the professional nurse with other members of the health team and,

To practice nursing adhering to the principles of safe and legal client care.

If you are in the associate degree program you must maintain a minimum lecture average of seventy percent and a clinical evaluation of Satisfactory in each nursing course. A minimum grade of C in each course in the major is required for graduation from the Nursing program.

Upon completion of the program the graduate is endorsed 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 who will be admitted to each class. To be eligible for possible selection for the fall class, you must contact the department chairperson for an application form which must be returned by Feb. 1. Other requirements for admission will be explained upon contact with the chairperson.

The laboratory experience in the nursing program requires special uniforms. The cost for these will be approximately \$40.00.

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 150 Nursing I (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 chairperson.

NUR151 Nursing II (Physical and Mental Illness I) (10) ii

The first course in Physical and Mental Illiness 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 general hospitals and selected observation experiences. 5 hours lecture, 15 hours lab. Prerequisite: Nursing 150

- NUR 250 Nursing III (Physical & Mental Illness II) (10) i The course Physical and Mental Illness II is a continuation of Nursing 151 and provides the student with opportunities to give total patient care to individuals and groups of adults and children with identical and similar illnesses. Guided laboratory experience in a general hospital, a psychiatric setting and selected health agencies. 5 hours lecture, 15 hours lab. **Prerequisite:** Nursing 151
- NUR 251 Nursing IV Maternal and Child Health (8) II

A family centered approach to Maternal & Child Health, building upon the concept of wellness and homeostasis and incorporating the medical and surgical complications introduced in the prerequisite courses. Guided laboratory experience in a general hospital and selected clinic, outpatient and day care experience. 4 hours lecture, 12 hours lab. Prerequisite: Nursing 250

PROGRAM IN AUTOMOTIVE TECHNOLOGY

D. Prock

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

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

Automotive Technology

AUT 111 Automotive Engine Theory & Analysis (5) i

A beginning course in theory and practical mechanics of the internal combustion engine. Emphasis on operation principles of four-cycle engines. Students work in the laboratory with engines to learn mechanical relationships and usage of tools and gauging instruments. Three hours lecture and four hours lab.

AUT 120 Automotive Suspension and Chassis (4) i

A course designed to acquaint the student with various automotive chassis and suspension systems and the related components which initiate braking, steering, and spring controls of present-day automobiles. Includes front-end geometry, front-end alignment, acquaintance of manual and power assist steering units, manual and power assist braking design and service, and front and rear susvice Departments of various sizes companies.

An Associate of Science degree with 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; and MGT 110.

> pension design and service. Two hours lecture and four hours lab.

AUT 150 Automotive Electrical and Fuel Systems (5) ii

A beginning course in au-tomotive electricity, basic automotive ignition systems, fuels and lubricants, production and testing. Emphasis is on electrical fundamentals as related to spark ignition and carburetion principles. Laboratory periods provide opportunity to learn mechanical relationships of parts in carburetors. starters, generators, regulators, relays, and distributors. Three hours lecture and four hours lab. Prerequisite: EGT 103.

AUT 180 Power Transmission (4) ii A course encompassing components of the modern automotive power train mechanisms. It is designed to familiarize the student with the total automotive drive train covering components located between the engine and the drive wheels. Included are clutches, fluid couplings and torque converters, standard tcansmissions, overdrives, fundamentals of automatic transmissions, universal joints, drive shafts, differentials, and transaxles. Two hours lecture and four hours lab.

AUT 199 Automotive Technology Practicum (3-5) ii, iii

Designed to provide the student with the opportunity to apply formal training to actual work situations. The studfent will work in a job related to his area of interest and will be evaluated by the participating employer for course credit.

Prerequisite: A completed Automotive Technology Major application and all lower numbered automotive classes.

AUT 200 Principles of Diesel Power (5) i

> Design principles and maintenance of two-stroke 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.

AUT 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.

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.

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, transmissions, hydraulic 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.

PROGRAM IN LAWYERS' ASSISTANT

D. Dye

The Lawyers' Assistant programs are designed to prepare you to enter into or advance in careers related to legal services. Career opportunities include positions with:

Law Firms, Banking Institutions, Real Estate Agencies, Local, State, and Federal Prosecuting Attorneys, Title Companies, and Municipal Legal Departments.

An Associate of Science degree with a major in Lawyers' Assistant re-

LAT 100 Introduction to Legal Services (3) i, ii

> An introduction to the Legal system with emphasis upon the various fields of law, the court system, federal, state, and local, the role of the lawyer and lawyers' assistant, the ethical and professional practice standards applicable to lawyers and assistants.

LAT 110 Legal Bibliography and Brief Writing (3) i This course introduces the student to the law library and the processes of legal research. Emphasis will be placed upon the use of research materials, briefs of cases, footnoting, showing citations, drafting of pretrial documents, and other fact gathering related to the preparation for trial.

LAT 130 Real Property Law (3) ii

A study of the law of real property with emphasis upon

quires completion of the following specific courses: LAT 100, 110, 130, 160, 190, 210, 240, 260, 270, 290; ENG 108; LAW 215; 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.

> 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, crossexamination, impeachment, objections, competency, privileges, relevancy, demonstrative evidence, best evidence rule, parole evidence rule, hearsay, burdens of proof and persuasion, judicial notice.

Prerequisite: LAT 100

LAT 190 Estates and Trust Administration (3) i

A study of the laws applicable to decedents' estates and common forms of wills and trusts. The role and jurisdiction of the Missouri Probate Court will be examined as it relates to the administration of estates. Special emphasis will be placed upon will drafting, incompetents' estates, and probate proceedings and procedure.

LAT 210 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.

LAT 240 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 ongoing business organizations.

LAT 260 Taxation (3) ii

The study of taxation at the Federal, State, and Local levels. Emphasis is placed upon income taxation, estate taxation, gift taxation, fiduciary taxation, the preparation of tax returns, and other tax related documents. **Prerequisite:** LAT 190;

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.

Prerequisite: LAT 100

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: A completed major application for a Lawyers' Assistant propram and consent of instructor.

PROGRAM IN PILOT TRAINING

The Pilot Training program is designed to prepare you 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.

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 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 lecense. 2 hours lecture, 4 hours lab. Prerequisite: PTR 120.
- PTR 129 Commercial Ground (3) i, ii Advanced weights and balances, meterorology, flight computers, navigation, and radio. Federal Aviation regulations, and flight maneuvers. To be taken concurrently with PTR 126.

Prerequisite: PTR 123.

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) 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 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.

PROGRAM IN SECRETARIAL SCIENCE

S. Downey M. Rogers

P. Shaw

The Secretarial Science Program, with individualized typewriting and shorthand classes, is designed to prepare you for clerical and secretarial careers in various public and private organizations, such as: educational institutions, government agencies, manufacturing companies, law firms, medical institutions, and insurance agencies.

An Associate of Science Degree with a major in Executive Secretary requires the completion of the following specific courses: SEC 141, 145, 230, 240, 340, 341, 350, 351, and 352; MGT 110, 116, or 210; ACC 230; ECO 260; and CSC 182.

Secretarial Certificate:

- Option 1 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.

SEC 140 Elementary Typewriting (3) i, ii, iii

Beginning typewriting with

emphasis on techniques of typewriter operations, skill development, and typing of letters and manuscripts. 3 hours lecture, 2 hours lab.

- SEC 141 Intermediate Typewriting (3) i, ii, iii 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. 3 hours lecture and 2 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 Storthand 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 minuts 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, completed major application form in Secretarial Science, 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, 3 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. 3 hours lecture and 2 hours lab.

> Prerequisite: SEC 141 with "C" grade or better.

SEC 340 Advanced Shorthand (3) i, ii, iii

A continuation of Inter-

mediate 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. 3 hours lecture and 2 hours lab.

Prerequisite: SEC 145 with "C" 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 "C" grade or better.
- SEC 350 Office Communications (3) i, ii

A course designed to teach effective oral and written communications from the standpoint of a secretary. Includes business letters and reports. 6 hours lecture, 3 hours lab. Meets first half of semester.

Prerequisite: ENG 104 or equivalent and SEC 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, 3 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, 3 hours lab. Meets second half of semester.

Prerequisite: SEC 351.

General Electives

ALH 100 Emergency Medical Technology (9)

> A basic course designed to prepare persons for service with emergency medical units. Emphasis is placed on the techniques of emergency medical care and rescue operation.

Prerequisite: Consent of instructor.

- ALH 106 Medical Terminology (2) i Medical terms with reference to human anatomy and disease processes, for the paramedical professions.
- ALH 200 Mobile Emergency Medical Technology (16)

An advanced course for emergency medical service personnel. Emphasis is placed upon the knowledge and skills necessary for emergency care personnel to diagnose and treat acutely ill and seriously injured patients under the control and supervision of a licensed physician.

Prerequisite: ALH 100 and consent of instructor.

ASSOCIATE DEGREES IN OTHER DEPARTMENTS

Agricultural Supply Technology

(for details, see Department of Agriculture)

An Associate of Science degree with an emphasis 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 402.

Agri-Business Technology

(for details, see Department of Agriculture)

An Associate of Science degree with an emphasis in Agri-Business Technology requires the completion of the following specific courses: AGR 111, 120, 130, 150, 200, 204, 222, 236, 290, 324, 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 specific 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 and 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 and Economics)

An Associate of Science degree with a major in Mid-Management-Banking and 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 and 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 and 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.

THE DIVISION OF EDUCATION AND APPLIED SCIENCES

The division includes the departments of Agriculture, Business and Economics, Education, Engineering Technology, Health-Physical 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.

You 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 you gain maximum benefits and enjoyment from your College program. The objectives of the division are to provide you an opportunity for:

Professional Development, in which you are prepared to enter the field of your 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 you may broaden and enrich your understanding of yourself, man and society;

Career Exploration, which through a blend of on-campus theory courses and off-campus experiences you can explore the field of your choice early in your academic program.

The semester course designations may be adjusted according to need, enrollment, demand of students, availability of instructional resources.

DEPARTMENT OF AGRICULTURE

Dr. G. Johnson — chairperson J. Dauve G. Wilson J. Duncan

Agriculture has changed tremendously in recent years and is continuing to do so. It is no longer simply "farming". Today 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. Undergraduate curricular offerings in the Department of Agriculture are designed to provide you 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.

The Department of Agriculture offers programs leading to the Bachelor of Science Degree with an emphasis in agricultural economics, agronomy, animal science and general agriculture.

An Associate of Science Degree is offered with an emphasis in agricultural supply technology or with an emphasis in agri-business technology.

The agricultural economics curriculum is designed to provide an exposure to most areas of agricultural business and management allowing an emphasis in a particular area. It is organized to prepare you for employment in sales, distribution, purchasing, price analysis, banks, government affiliated or operated agencies, farm management and other less general fields.

The agronomy curriculum is organized to prepare you for professional positions with agencies of the state and federal government, as well as private industry.

You are prepared to fill the positions of soil scientist, soil conservationist, farm manager, feed, seed and fertilizer distributors, soil laboratory technician, and other related agronomic positions.

The animal science curriculum is designed to prepare you for careers in the animal industry as farm manager, feed distributor, order buyer and other related occupations.

The general agriculture curriculum is designed so that you may select courses from several areas of study, thereby enabling you to hold positions in the general field of agriculture.

The Associate of Science degrees are designed so that you may gain professional knowledge and experience as quickly as possible 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, 308

Agronomy 120, 222, 320 Animal Science 130, 236

Bachelor of

Science Degree **Core Curriculum** AGR 111 Orientation 1 **Plant Science** AGN 120 4 AGN 222 Soil Science **ASI 130** Animal Science 4 ASI 330 **Applied Animal Nutrition** 4 3 **ASI 339** Livestock Evaluation **AEC 150** Agriculture Economics 4 **AEC 200 Agricultural Marketing** Total MAJOR - Agriculture (Agri. Economics Emphasis) **Agricultural Economics Core AEC 304** Farm Finance & Accounting 4 **AEC 305** 3 Farm Management **AEC 308 Commodity Marketing** 3 **AEC 310 Agriculture** Policy 3 **AEC 400** 3 **Farm Price Analysis AEC 402** Agricultural Law 3 3 ECO 260 Principles of Economics I Animal Science Elective* 4 6 Agriculture Electives* Agronomy Electives* 4 36 Total

BIO 101, CHE 104 & MAT 105 are required courses.

*Recommend: 490 Special Problems, farm projects, max. 8 hrs.

MAJOR — Agriculture (Agronomy Emphasis) **Agronomy Core** AGN 224 Grain Handling & Grading 4 AGN 320 Soil Fertility 4 AGN 322 Forage Crop 3 Management

AGN 324	Disease of
	Field Crops
AGN 326	Agricultural Chemicals
AGN 420	Soil Conservation
, AGN 426	Soil Genesis
	& Classification
AGN 429	Corn & Soybean
	Production
AGN 436	Soil Microbiology
AEC 402	Agricultural Law
ASI	Animal Science
	Elective
	Agriculture Electives*
AEC	Agriculture Economics

	TOTAL	46	
	BIO 101, CHE 104, 204 and 3	04 are	
	required courses.		
	Recommended: AGR 490, Specia	Prob-	
	lems, farm projects, max. 8 hrs.		
	MAJOR - Agriculture (Animal S	science	
	Emphasis)		
	Animal Science Core		
	ASI 265 Meat Science	3	
	ASI 236 Fundamentals of		
	Animal Nutrition	3	
	Three of the following courses:		
-	ASI 332 Beef Production	3	
	ASI 333 Dairy Science	2	
	ASI 334 Horse Production		
	ASI 334 Horse Production ASI 335 Poultry Science	2 2 2	
	ASI 336 Sheep Production	2	
	ASI 337 Swine Production	3	
	ASI 338 Animal Breeding	3	
	ASI 475 Diseases of Live-		
	stock Animals	3	
	Agronomy Electives*	2	
	Agricultural Economics		
	Elec.*	7	1
	Agriculture Electives*	4	ł.
	TŎTAL	34-36	;
_	CHE 104, 204 & 304 are re	quired	L
	courses.		

*Recommended: 490, Special Problems, farm projects, max. 8 hrs.

MAJOR — Agriculture (General Agriculture Emphasis)

General Agriculture Core

AGN 322	Forage Crop Management	3
AGN 429	Corn & Soybean Production	3
AEC	electives*	10
	ASI electives*	10
	AGN electives*	10
	TOTAL	36
*Recom	mandad: 100 Spacial Droble	ma

Recommended: 490, Special Problems, farm projects, max. 8 hrs.

Associate of Science Degree

2

3 3

3

MAJOR	- Agriculture (Agri-Supply	
	y Emphasis)	
Agricultu	al Supply Technology Core	
	Orientation to	
	Agriculture 1	
AGR 290	Occupational Experience* 4-8	
AEC 150	Agricultural Economics 4	

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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
		50-54
	90, Special Problems (farm)	
	be substituted for AGR 2	290,
Occupation	nal Experience.	
	- Agriculture (Agri-Busir	iess
	y Emphasis)	
	ness Technology Core	
AGR 111	Orientation to	
	Agriculture	1
AGR 290	Occupational Experience*	
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	~
1 OT 000	Nutrition	3
ACT 230	Principles of	
1.000 1.40	Financial Acct.	3
MGT 110	Business Organization	3
MGT 312	Principles of Management	3
MKT 374	Salesmanship	3
CHE 104	Fundamentals of	
	Chemistry	4
100 10		54-58
	0, Special Problems, (farm	
jects) can	be substituted for AGR 2	290.

jects) can be substituted for AGR 290, Occupational Experience.

Agricultural Economics

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 (odd years)

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 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 310 Agricultural Policy (3) i (even years)

The study of programs, both past and present, that affect the situation of agriculrualists and what the alternatives are for the future. Three hours lecture per week. **Prerequisite:** AEC 150

AEC 400 Farm Price Analysis (3) i (odd years)

> Economics 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 frame work 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.

Recommended: CHE 104.

AGN 224 Grain Handling and Grading (4) ii (odd years)

> 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.

Principles of production and AGN 326 Agricultural Chemcials (3) i management. Importance and (odd years)

An introduction to the field of agricultural chemicals including herbicides, insecticides,

73

fungicides. Types of materials, caliburation 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 (even years) 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 426 Soil Genesis and Classification (3) i (even years) Identification and mapping of

soils and soil systems. Interpretation and utilization of soil survey information. Two hours lecture and two hours lab.

Prerequisite: AGN 222.

AGN 429 Corn and Soybean Production (3) i

The study of the lates research and production practices concerningvarieites, cultural practices, fertilization, rotations, insects, disease and weed control problems, and including harvesting and marketing. 3 hrs. lecture.

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

The study of soil microorganisms and their relation to the fertility of the soil, with special emphasis on the decomposition of organic matter, rocks and minerals. 3 hrs. lecture.

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

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 130

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 333 Dairy Science (2) i (odd years) Development of dairy cattle breeds, principle and practices of dairy cattle feeding, management and selection of breeding animals for dairy herds. Two hours lecture per week.

Prerequisite: ASI 236

ASI 334 Horse Production (3) i (even years)

Basic principles of horse breeding, color, inheritance, health, management, nutrition, and marketing of equine. Three hours lecture.

Prerequisite: ASI 130 and junior standing.

ASI 335 Poultry Science (2) i (odd years)

> A study of breeds, breeding, common diseases, housing, efficient management nutrition and marketing of eggs and poultry. Two hours lecture per week.

Prerequisite: ASI 236

ASI 336 Sheep Production (2) i (even years)

Production, management, marketing, and nutrition of breeding flock and feedlot lambs. Three hours lecture.

Prerequisite: ASI 130 and junior standing.

ASI 337 Swine Production (3) ii (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.

ASI 338 Aninal Breeding (3) I The study of mating systems and application of genetic principles and practices to the improvement of domestic animals. The use and value of Performance Testing. Physiology of Farm Animals. Two hours lecture and two hours lab per week.

Prerequisite: ASI 130

ASI 339 Livestock Evaluation (3) ii Selection of beef, horses, sheep, and swine for specific uses. Comparative terminology, grading, juding and presentation of oral reasons. Six hours lab per week.

Prerequisite: ASI 130.

ASI 439 Intercollegiate Juding Training and Competition (3) on demand

> Specialized training in evaluating and grading live animls. Field trips to farms and livestock expositions. Six hours lab per week (plus trips to contests)

> Prerequisite: ASI 339 and Permission of instructor.

ASI 475 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 210 Farm Mechanization (3) i (even years)

A study of the basic principles of the power unit, equipment, their major components, their management and the operators safety.

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 ofdepartment 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) 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) (1-4) i, ii, iii 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 perference.

Prerequisite: This arrangement available by consent of department chairman.

AGR 490 Special Problems (1-8) i, ii, iii

Open to senior students majoring in agricultural economics, agronomy, animal science, and general agriculture. Research topics are assisgned on an individual interest basis. Times of Conferences will be arranged.

Prerequisite: Consent of department chairman should be obtained the semester preceding enrollment.

DEPARTMENT OF BUSINESS AND ECONOMICS

Dr. E. Shrout — Chairperson

- B. Blankenship
- G. Dilley
- B. Greenwald
- L. Hawley
- P. McMurry
- J. Mitchell C. Pettijohn J. Pettijohn G. Pyle

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

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 a major in business education.

The curricula for these majors are as follows:

For t	he Bachelor of Sci	ence	in
	s Administration Deg		
FRESHM	AN-SOPHOMORE CORE		
ACC 230	Principles of		
	Accounting I	3	
ACC 231	Principles of		
	Accounting II	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		
	Requirements — may		
	not be taken Pass/Fail)		

G. Segbebarth M. Septon Dr. M. Strader I. Williams J. Wise

line. The programs have been designed to prepare you for a career in the challenging and ever-changing field of business as well as the pursuance of advanced degrees. The Department is actively involved in student placement and assists you in meeting potential employers through annual seminars.

PROFESSIONAL CORE 3 MGT 310 Business Law I MGT 312 Principles of Management 3 3 MGT 315 Financial Management MGT 319 Business 3 Communications MKT 370 Principles of Marketing 3 Total core hours 30 **Additional Major Requirements** ACCOUNTING ACC 330 Intermediate 3 Accounting I ACC 331 Intermediate 3 Accounting II 3 ACC 333 Cost Accounting 3 ACC 336 Tax Accounting 3 ACC 433 Auditing 6 **Electives** in Accounting 3 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 **Investment Analysis** MGT 411 MGT 412 **Personnel Management** MGT 415 Administrative Supervision

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MGT 419 Business Policy	
One of the following:	3
CSC 245 Introduction to COBOL	
MGT 311 Business Law II	
MGT 313 Business Statistics II	30-60

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 Economics Systems		
ECO 466	Current Economic Problems		
Business elective (non-economics,			

upper level)	3

24-54

MANAGEMENT

ACC 333 Cost Accounting	3
MGT 412 Personnel Management	3
Three of the following:	9
MGT 316 Principles of Insurance	9
MGT 410 Small Business Managemen	nt
MGT 411 Investment Analysis	
MGT 413 Real Estate	
MGT 415 Administrative Supervision	
MGT 416 Production Management	
MGT 417 Credit Management	
	~
One of the following:	3
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	
COO 045 Internet and CODOI	

CSC	245	Introduction	to	COBOL	

- PSY 310 Industrial Psychology SOC 400 Minority Groups SOC 420 Collective Behavior
- 21-51

MARKETING	
MKT 376 Advertising	3
MKT 470 Marketing Mana	gement 3
MKT 472 Sales Manageme	nt 3
MKT 473 Marketing Resea	rch 3
MKT 474 Marketing Semin	nar 3
Two of the following:	6
ECO 361 Price Theory	
MKT 371 Principles of 1	Retailing
MKT 372 Physical Dist	ribution
MKT 374 Salesmanship	
MKT 375 Industrial Ma	rketing
MKT 377 International	Marketing
MKT 378 Product Strat	egy
MKT 471 Consumer Rel	ations and
Behavior	21-51

For the Bechelor of Science in Education Degree

BUSINESS EDUCATION CORE

	T A TTAK		
SEC :	140	Beginning Typing	3
SEC :	141	Intermediate Typing	3
ACC	230	Principles of Accounting I	3
ACC		Principles of Accounting II	3
ACC	330	Intermediate Accounting I	3
ECO	260	Principles of Economics I	3
MGT	116	Business Mathematics or	
MGT	210	Business Statistics	3
MGT	310	Business Law I	3
BUS	455	Methods of Teaching	
		Business Subjects	3
MAT	105	College Algebra (Use to	
		fulfill General Studies	
		Requirement — may	
		not be taken Pass/Fail)	27
Ado	litio	nal Major Requirements	
Sever	oft	he following:	
SEC	144	Elementary Shorthand	3
SEC	145	Intermediate Shorthand	3
SEC	340	Advanced Shorthand	3
SEC	240	Office Typing Problems	3
SEC	230	Office Machines	
SEC	351	Model Office I	3 3
ECO	261	Principles of Economics II	3
MGT	110	Business Organization	3
MGT	311	Business Law II	3
MGT	312	Principles of Management	
MGT		Business Communications	3 3
MKT	374	Salesmanship	3
CSC	182	Introduction to	
		Data Processing	3
		•	21-48

In addition to the above requirements for the baccalaureate degrees, you must have at least a 2.0 grade point average in courses comprising your major as well as a minimum of 21 hours of upper level courses (numbered 300 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.

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 chairperson. 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	3
ACC 230	Principles of Accounting I	3
ACC 231	Principles of Accounting II	3
ECO 260	Principles of Economics I	3
ECO 261	Principles of Economics II	3
MGT 312	Principles of Management	3
	Total core hours	21
ACCOUN	TING EMPHASIS	
ACC 330	Intermediate Accounting I	3
ACC 331	Intermediate Accounting II	3
ACC 333	Cost Accounting	3
	Elective in business	
	(upper level)	3
		12-33
BANKING	G AND FINANCE EMPHASIS	1
BAN 253	Bank Management	3

ECO 363	Money and Banking	3
	Business Law I	3
MGT 315	Financial Management	3
	e following:	6-7
	04 Farm Finance and Acco	unting
	50 Principles of Bank Ope	
	51 Savings and Time	
	Deposit Banking	
BAN 2	52 Trust Functions and Se	rvices
		18 39-40
DATA PE	ROCESSING 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
CSC 250	Computer Operations	
	Practicum	3
		15-36
and the second sec	NG EMPHASIS	
	Principles of Marketing	3
	Principles of Retailing	3
	Salesmanship	3 3
MKT 376	Advertising	
		12-33
Prere	quisites for courses	listed

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

Accounting

ACC 230 Principles of Accounting I (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 Accounting II (3) i, ii

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 330 Intermediate Accounting I (3) i, ii

Analysis and interpretation of fundamental processes, assets, and equity values with related revenue and expense aspects.

Prerequisite: ACC 231.

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-and-ink 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

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) (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.

cluding forms design, internal ACC 430 Advanced Accounting Probcontrol concepts, and other lems (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 cost, budget and distribution costs. **Prerequisite:** ACC 333.

ACC 433 Auditing (3) ii

Verification of records, valuation and analysis of accounts and presentation of conditions. Practical audit cases. **Prerequisite:** ACC 331.

ACC 439 Advanced Tax Accounting (3) ii

Special problems in the area of individual, partnership, and corporate taxation. This includes sales and disposition of property, pension plans, liquidation and reorganization 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) ii, (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 distinction 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 well as experienced bank personnel with a working knowledge of bank management.

Business Education

BUS 455 Methods of Teaching Business Subjects (3) i

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 101 Current Issues in the Economy i, ii Introductory course dealing with economic events and the problems facing our economy today. Specific topics of current interest will be discussed using economic thinking in analyzing these problems and possible solutions.

- 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 economics 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

A continuation of economic fundamentals but with emphasis on supply and demand analysis, factor markets, different market structure, international economics, and various current economic problems.

Prerequisite: ECO 260.

ECO 360 Macroeconomic Theory (3) ii Intermediate level theory course that examines closely the determinants of GNP, employment, and inflation. Emphasis is placed upon economic model building (both Classical and Keynesian) and the use of monetary and fiscal policies to control the business cycle and inflation.

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 of 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 its ECO 2011

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 new-Keynesian theories.

- Prerequisite: ECO 261.
- ECO 463 Comparative Economic Systems (3) i, (even years) Analytical study of the major alternative economic systems — capitalism, socialism, planned economies and mixed capitalism — with emphasis of the different economic and social problems associated with each type.

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 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

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) i, ii

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) i, ii

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. P1 requisite; MGT 310 or

LAT 100.

MGT 319 Business Communications (3) i, ii Designed to meet the needs of business for better communications — written or oral.

Covers principles of research, organization, and presentation of written memoranda, letters, and reports. Oral presentations help develop necessary skills required in a business environment.

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

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 supervisorsubordinate 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.

MGT 420 Small Business Counseling Practicum (3) i, ii

Provides an opportunity to address real problems of the business entrepreneur by integration of concepts developed in accounting, economics, management, and marketing courses. Student teams act as management consultants to local business entrepreneurs whose problems have been screened by the SBA.

Prerequisite: Completion of Freshman/Sophomore and Professional Cores, senior standing, and consent of department chairperson.

MGT 421 Small Business Counseling Practicum (3) i, ii

A continuation of MGT 420, permitting a student an opportunity for an additional 3 hours of experience with real problems of the business entrepreneur. May not be taken concurrently with MGT 420. **Prerequisite:** MGT 420 and

consent of department chairperson.

Marketing

MKT 370 Principles of Marketing (3) i, ii

A basic course defining the role of the marketer and marketing within our society and economy. Attention is paid to all interacting 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 salesperson.

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) 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 or 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.

MKT 471 Consumer Relations and Behavior (3) i A consideration of the influences on consumer motivation and behavior. Discussion of how the behavioral sciences relate to marketing.

Prerequisite: MKT 370.

MKT 472 Sales Management (3) ii 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.

Prerequisite: senior standing and twelve hours of marketing.

TEACHER EDUCATION

Dr. S. Haynes — Chairperson Dr. J. Aschermann N. Edwards M. J. Fields Dr. T. Hansen

The Department of Education is concerned with the total process of helping you become a teacher. If you wish to become an elementary or secondary teacher you will learn to understand and utilize the principles of learning, human growth and development, and interpersonal relationships. The department also provides you with specialized educational experiences in participating elementary and secondary schools under the supervision of experienced master teachers. Your professional training as a prospective teacher is normally scheduled throughout the sophomore, junior and senior years, culminating with a final professional semester. Your professional education sequence complements a broad general education curriculum. A sound command of a major teaching field is integrated throughout your 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 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 Dr. F. Kump Dr. D. Mahaffy Dr. L. Marion D. Minnis

certified to teach you 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 Education offers an Associate of Science degree with a major in Elementary Education — Teacher Aide.

To gain admission to the Teacher Education Program you must meet the following requirements.

GENERAL REQUIREMENTS

Your record must be without incident which could be found detrimental to future success as a teacher.

You must be of good moral character as demonstrated by objective evidence.

You must be free from gross physical and mental defects which could make success as a teacher unlikely. At Department discretion test evidence could be required.

You must have command of standard acceptable English usage and be able to communicate as expected of a teacher.

You must 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, you must submit an application as determined by those in charge of the teacher education program, and have a 2.0 cumulative grade point average.

For admission to the Experience in Teaching II Program, you must:

Successfully complete Participation in Teaching I; submit the designated application; have a 2.3 cumulative grade point average, and have the recommendation of college and cooperating school personnel.

For admission to the Student Teaching III Program, you must:

Successfully complete Experience in Teaching II;

submit the designated application; have a 2.5 cumulative grade point average;

have at least a 2.0 for each course in the professional sequence.

If you have a grade lower than C in

your major field, you could upon review be denied admission to student teaching;

have the recommendation of college and cooperating school personnel.

Completion: To be recommended for certification you must have at least a 2.0 in your student teaching experience, and a cumulative GPA of 2.5. Such refusal of certification will be so stated on your transcript.

Special Programs

Academic Contracts (1-and 2-year temporary Missouri Certification):

Academic Contracts are available at Missouri Western State College. Interested persons should contact the Chairperson of the Department of Education.

Summer Student Teaching is offered for experienced teachers only and will be arranged with the Chairperson of the Department of Education.

ELEMENTARY and SPECIAL EDUCATION

The department of Education Faculty 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,

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 ir. the profession of teaching.

Degree Requirements

The following general studies requirements for elementary majors must be satisfactorily completed: MAT 101, ENG 104 and 108, SPH 104 105 or 106, BIO 101 or 111 and 112, CHE 101 or 104 or 111 or PHY 101 or 110 or 210 and 211, PSY 101, HIS 140, HUM 203 or 205, ART 100 or MUS 101 or THR 113, ENG 210, PED 101, PED or MIL Activity.

In addition to the general studies and the professional sequence, the elementary major is required to successfully complete the following courses:

EED 310, EED 320, EED 330, EED 340, SED 331, (Comps. II and III), EED 360, EED 409, ART 300, ENG 300, GEO 100, MAT 350*, MAT 351, MUS 300 or MUS 330, PED 300, PED 380 or PED 382, PHS 230, and PSC 101._

*To meet the wide variance of individual mathematical backgrounds,

elementary majors may elect to be placed after consulting the Mathematical Sciences and 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 C/D grade — take MAT95, 101, 350, and 351; Algebra 1 with A/B within past five years enroll in MAT101, 350, and 351; Three or more years of college — prep, high school math A/B enroll in MAT 350 and 351.

The elementary major must also select an emphasis area. The requirements are determined by the Department of Education in consultation with the various academic departments.

The emphasis areas include:

ART	PHYSICAL
ENGLISH	EDUCATION
FOREIGN	GENERAL
LANGUAGE	SCIENCE
MATHEMATICS	SOCIAL
MUSIC	SCIENCE

Special certificates also fulfill the emphasis area requirements and are available in the areas of:

EARLY CHILDHOOD EDUCATION REMEDIAL READING

TEACHING OF THE MENTALLY RETARDED CHILD

TEACHING OF THE EMOTION-ALLY DISTURBED CHILD

TEACHING OF THE LEARNING DISABLED CHILD.

The requirements for emphasis areas and specialized certificate programs are available from the elementary education advisor. Early plan-

ning of your total program is hig	hly
desirable.	
Professional Sequence is:	
EED 202 Introduction to Elem.	
Education	2
EED 203 Participation in Elem.	
Teaching I	1
EED 303 Experience in Elem.	
Teaching II	3
EED 305 Psychology in Elem.	
Teaching	4
EED 403 Seminar in Elem.	
Education and Human	
Relations	3
EED 408 Elem. Student	
Teaching III	9
EED 410 Psychology and Education	
of the Exceptional	
Child	2
TOTAL	24
The Professional	

The Professional Semester

Elementary Student Teaching III (EED408) is to be taken during the student's senior year. Seminar in Elementary Education and Human Relations (EED403), and Elementary Problems in Reading (EED409) are to be taken concurrently with Elementary Student Teaching III. This semester is designated as a Professional Education semester and covers work usually limited to EED403, EED408, and EED409.

Petition for any additional course work must be submitted to the Coordinator of Student Teaching in the semester prior to Elementary Student Teaching III. If granted, approval will be endorsed by the cooperating teacher to whom you are to be assigned.

If you are enrolled in Elementary Student Teaching III you will assume the daily teaching schedule of the cooperating teacher.

EED 101 Speed Reading (2)

The course is designed to improve the skills, speed, and comprehension of those individuals who feel a need for such improvement in school, profession, business, or recreational pursuits. The course is open to both regularly enrolled students or any interested individual.

EED 202 Introduction to Elementary Education (2)

A basic introduction to professional education. An oncampus 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 EED 203. Prerequisite: ENG 104 and

108 or 112. EED 203 Participation in Elementary Teaching I (1)

> A laboratory course following EED 202. During this offcampus experience, the participant will serve as a teacher assistant. This exploratory course will provide the participant with concrete exposure to teaching, to students, and to the school.

> Prerequisite: EED 202 and Approved admission to the Teacher Education Program.

EED 303 Experience in Elementary Teaching II (3)

> (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: EED 203 and EED 310, and Approved admission to the Teacher Education Program.

EED 305 Psychology in Elementary Teaching (4)

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A study of psychological principles as applied to educational settings. To be taken concurrently with EED 303.

Prerequisite: PSY 101 and EED 203.

- EED 310 Introduction to Reading (3) Developmental reading, the techniques of teaching reading in the elementary school. Prerequisite: ENG 104, 108 or 112.
- EED 311 Teaching Reading in the Secondary School (3) Techniques of teaching upper-level reading. Prerequisite: ENG 104, 108 or 112.
- EED 320 Language Arts Methods (3) A general survey course to integrate the skills of listening, writing, and speaking with the reading skills.
- EED 322 Language Arts Components (1-6)

A component course designed to give students in-depth experiences in selected sections to meet special need 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 j. Language Arts for Children.

EED 330 Science Methods in Early Childhood and Elementary School (2)

A course designed for teachers of early childhood and elementary school emphasizing the methodology, strategies, materials, and curriculum development of elementary science.

Prerequisite: PHS 230 331 Audio-Visual Education (1-3)

- (See Secondary Education)
- EED 340 Social Studies Methods for Elementary Teachers (2)

A general survey course of skills, concepts, methodology, strategies, and curriculum development of elementary social studies. Includes the following inquiry learning, problem solving, current events, interpretation of pictures, charts, graphs, tables, maps, time lines, location and evaluation of information. **Prerequisites:** HIS 140, PSC

101, GEO 100

EED 342 Measurements and Evaluation in Education (3)

Principles and techniques of administration, application, and interpretation of tests, test results, and data.

Prerequisites: EED 303 and EED 305 or SED 304, MAT 201 or consent of Department Chairman.

EED 360 Assessing and Individualizing Reading (3)

Designed to acquaint the classroom teacher with the philosophy, theories, pertinent studies and findings, and test instruments available which aid in more perceptive awareness and analysis of performance levels and behaviors in learning to read; to develop expertise in determining the areas of strengths and weaknesses of each pupil, and the cause and effect relationship of the total reading performance pattern by keen observation and evaluation to study, develop, and utilize selected evaluation instruments, both standardized and informal, so that the teacher may gain facility in adapting class methods and materials to the needs and indicated ability levels of students.

Prerequisite: EED 310 or EED 311

EED 385 Explorations in Reading Approaches (1-6)

A component course designed to give student in-depth experiences in selected sections to meet special needs and interests. The refinement of teaching techniques using particular reading methods to prepare teachers 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 EED 311

EED 403 Seminar in Elementary Education and Human Relations (3)

A study of philosophical, ethical and legal problems related to Elementary Education. Instructional strategies, general methodology and evaluation procedures will be explored. Consideration is given to interpersonal relations as applied to teaching. To be taken concurrently with EED 408 and EED 409

EED 408 Elementary Student Teaching III (9)

A semester of clinical experience in an off-campus situation under a certified cooperating teacher. To be taken concurrently with EED 403 and EED 409. Prerequisite: EED 203, EED 303, and EED 305 or SED 304

- EED 409 Elementary Problems in Reading (2) An application course involving in depth review and research of the two preceding reading courses in areas where the student indicates need for greater strength, knowledge or expertise. To be taken concurrently with EED
- 403 and EED 408. EED 410 Psychology and Education of the Exceptional Child (2) A course designed to give all teachers background and experience in working with the exceptional child in the regular classroom.

Prerequisite: EED 305 or SED 304.

- EED 413 Speech Correction for the Classroom Teacher (3) Methods and techniques of speech correction applied and utilized by the classroom teacher.
- EED 414 Methods of Teaching the Mentally Retarded (3) Special techniques for teaching the typical child. Prerequisite: EED 303 and

EED 305 or SED 304 or approval of the Department Chairman.

EED 415 Methods of Teaching the Emotionally Disturbed (3) Special techniques for teaching the emotionally disturbed child.

Prerequisite: EED 303 and EED 305 or SED 304 or approval of the Department Chairman.

EED 416 Methods — Learning Disabilities (3) Special techniques for teach-

Special techniques for teaching the child with learning disabilities. Prerequisite: EED 303 and EED 305 or SED 304 or approval of the Department Chairman.

EED 440 Early Childhood Education (1-6)

A component course designed to give the student in-depth understanding of early childhood education. A student may select one or more sections.

a. Creativity and the Preschooler b. Language Development c. Early Childhood Special Education d. Curriculum Development for Early Childhood e. Working with parents of Young Children f. Utilization of Community Resources for the Young Child and his Parents.

EED 450 Independent Study (credit hours open)

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 II in Reading (Diagnosis of Reading Difficulties) (4)

A clinical diagnosis in evaluation of reading and learning problems.

Prerequisite: EED 310, 383, and consent of the Education Chairman. (2 hrs. lecture, 3 hrs. laboratory.) Courses can only be taken on Missouri Western State College campus.

EED 484 Practicum II in Reading (Remediation of Reading Difficulties) (4)

A clinical treatment of identified reading and learning problems.

Prerequisite: EED 483 (2 hrs.

lecture, 3 hrs. laboratory.) Course can only be taken on Missouri Western State College campus.

EED 490 Applied Education Practices (1-9)

Workshops will be developed in selected areas in accordance with interest and felt needs.

Secondary Education

The Department of Education has an overall objective of providing the secondary 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 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.

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 av-

ailable 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 sequences is as follows	3:
Courses Semester Hr	s.
SED 202 Introduction Secondary Education	2
SED 203 Participation in Secondary	
Teaching I	1
SED 303 Experience in Secondary	
Teaching II	3
SED 304 Psychology in Secondary	
Teaching	4
SED 404 Seminar in Secondary Education and	
Human Relations	3
SED 407 Psychology and Education of the Exceptional	
Student	2
SED 409 Secondary Student	
Teaching III	9
Total	24

The Professional Semester

Secondary Student Teaching III (SED 409) is to be taken during your senior year.

Seminar in Secondary Education and Human Relations (SED 404 and Psychology 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 Profes-

sional Education semester is usually limited to SED 404, SED 407, and SED 409.

Petition for any additional course work must be submitted to the Coordinator of Student Teaching in the semester prior to secondary student teaching III. If granted, approval will be endorsed by the cooperating teacher to whom you are to be assigned.

If you are enrolled in Secondary Student Teaching III you will assume the daily teaching schedule of the cooperating teacher.

SED 100 Introduction to Personal Development (2) i

An intensive eight week course designed to increase the participant's understanding of his/her unique role as a learner and to stimulate his/her desire to set and achieve personal learning goals. Specific activities will enhance the participant to become self motivated and to pursue personal learning goals to develop a positive realistic self concept, to develop positive interpersonal skills, and to examine his /her personal values.

_ 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.

SED 203 Participation in Secondary Teaching I (1) i, ii

A laboratory course following SED202 in the same semester.

During this off-campus experience, the participant will serve as a teacher assistant. This exploratory course will provide the participant with concrete exposure to teaching to students, and to the school. **Prerequisite:** SED 202 — Approved admission to the Teacher Education Program.

SED 303 Experience in Secondary Teaching II (3) i, ii

A continuation of the offcampus 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 or EED303.

Prerequisite: PSY 101, SED 202 and 203.

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 407 Psychology and Education of the Exceptional Student (2) i, ii

An introduction to the various areas of exceptionality and the methodology of working with these students. To be taken concurrently with SED 404 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)

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 450 Independent Study (credit hours open) i, ii

A research-oriented involvement intended to extend the competencies of the student in a particular area of education. Prerequisite: Approval of the Education Chairman.

SED 490 Applied Education Practices (1-9)

> Workshops will be developed in selected areas in accordance with demonstrated interest and need.

EED 311 Teaching Reading in the Secondary School (3) i (See Elementary Education)

Driver Education and Safety Theory

Certification in Driver Education (21 hrs.)

Majors in any department who receive a degree in secondary education may also receive certification in Driver Education. The following specific courses are required: SED 154, PED 201, SED 254, SED 354, SED 354 Advanced Traffic Education SED 304, LAW 140, and SED 331. Elective hours are to be taken from the following: PED 385, LAW 100, PSY 320, PSY 325 and PSY 405.

SED 154 Principles and Practices of Safety (3)

> Safety education must meet the challenges of rapid social

changes. Safety education is directed toward all persons with leadership role in working with people, administrative responsibilities, teachers and school administrators responsibility of protecting childuring dren 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 hour lecture.)

SED 254 Developmental Traffic Education

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.

(3)

Advanced course to prepare teachers of Driver Education. Actual experiences in teaching beginning drivers in both the classroom and the car. (2 hrs. lecture, 2 hrs. lab arranged).

Prerequisite: SED 254.

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DEPARTMENT OF ENGINEERING TECHNOLOGY

V. Varma, Chairperson G. Beuchat C. Booth V. Donnelly Dr. R. Holman

The Department of Engineering Technology offers both two and four year programs in Engineering Technology with concentrations in either Civil-Construction or Electronics. Pre-professional engineering and architecture transfer programs are also offered through liaison with various area universities.

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 you to be an engineering technician, and the baccalaureate degree program prepares you to be an engineering technologist.

Both are designed to prepare you to work in meaningful jobs.

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 Missouri-Columbia and the University of Missouri-Rolla. 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 the work required.

The exact program followed will depend on the specialized area (civil, architecture, mechanical, electrical, etc.) and the engineering school to which you plan to transfer. 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 preengineering or pre-architecture student.

Four Year Degree Requirements

All four year graduates are required to take the exam given by the Institute for the Certification of Engineering Technicians, and will not be required to take the Graduate Record Exam.

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; BIO 101; 9 hours free electives; 6 hours approved technical electives; and 28 additional hour 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: 11 hours free electives; 6 hours approved technical electives; and 28 additional hours of general education.

Two Year Degree

Requirements

For the Associate of Science Degree with a Major in:

ENGINEERING, COMMON AND GENERAL TECHNOLOGY

EGT 100 Introduction to Engineering and Technology (1) i,ii 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.

EGT 103 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 or consent of instructor.

EGT 230 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 collumn theory. Three hours lecture. Prerequisite: EGT 258.

EGT 235 Materials Testing Lab II (1) on demand

Includes compression, tension, shear, and flexure tests of steel, wood, plastics, and concrete. Three hours lab. **Prerequisite:** Concurrent with

EGT 230.

EGT 240 ELECTRICAL CIRCUITS (3) ii

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 divider current 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) i 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 204.

EGT 300 Dynamics (3) on demand

Motion of a particle; kenetics of rigid bodies; work and energy; impulse and momentum; impact. Three hours lecture.

Prerequisite: EGT 258.

- 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: PHY 210 or consent of instructor.

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.

EGT 390 Technological Projects (1-3) i, ii, iii

> This course is intended for the advanced student who has a project which would add to his educational experience. Approval by the department chairman is required at least two weeks before the end of the previous term.

EGT 456 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 lecture.

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) ii
 - 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 or consent of instructor.

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 105, 106.

CET 304 Methods and Materials of Construction (3) i

An intruduction 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.
- CET 308 Structural Analysis (3) i Introduction to various methods used in the elastic analysis of statically determinate beams, trusses, frames and arches. Introduction to statically indeterminate structures. Three hours lecture.

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.

CET 358 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 ACI 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 pecular to working drawings. General mechanism, cams, gears and power transmission. Emphasis is placed on developing speed and accuracy in the production of detail and work

ing 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 redesign is expected with the emphasis on fabrication. Two hours lecture, three hours lab. **Prerequisite:** At least ten semester hours of electronics.

EET 220 Instruments & Measurements (3) i

An in-depth study is made of the electronic circuitry and usage of the equipment for circuit evaluation, maintenance, and repairs in most electronics facilities. Equipment studied includes: oscilloscopes, signal sources, meters (digital and analog), bridges, power supplies, digital frequency counters, and 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

The theory of operation of various solid state devices are studied: diodes, transistors, FET'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, con-

current EGT 240 preferred.

- EET 270 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, FET characteristics, push-pull amplifiers, oscillators, amplifiers, and logic gates. Three hours lecture, three hours lab.

Prerequisite: EET 230.

EET 300 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.

EET 340 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 (even numbered years)

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.

EET 360 Network Analysis (3) i Advanced study of steady state network analysis, and transients by classical and La-Place methods with applications to special topics in the fields of power and electronics. Three hours lecture.

Prerequisite: EGT 240, Mat 204.

EET 370 Microwave Systems (3) i (odd numbered years)

VHF and UHF components, circuits and measurement techniques; distributed elements wageguides, microwave links, radar and similar systems. Two hours lecture, three hours lab. **Prerequisite:** EET 340.

EET 420 Control Systems (3) ii (odd numbered years)

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 and EET 300. Three hours lecture, three hours lab.

Prerequisite: EET 270, EET 300

EET 460 Rotating Machinery (4) i (even numbered years)

> 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 require

ments, 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 systems or subsystem 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.

Prerequisite: Thirty hours of electrical courses.

DEPARTMENT OF HEALTH, PHYSICAL EDUCATION, AND RECREATION

Dr. C. Erickson — Chairperson J. Adcox J. Grechus Dr. D. Deaton B. Greene (on leave) G. Filbert G. Hazelrigg

Whether programming intramural competition, offering a planned sequence of exercises and sports activities to help students develop strong active bodies, or working with student 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.

As a student at Missouri Western State College, as a part of the general education requirement, you must take a course in "Concepts of Physical Activity" which will acquaint you with basic knowledge, understanding and values as they affect you psysiologically, psychologically, sociologically and emotionally. Based on self evaluation and guidance by the instructor during the concepts course, you should take activity courses which will assist in areas in which you have 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. J. Long Dr. J. Terry N. Thomas M. Wilson R. Hicklin V. Keegstra Dr. D. Laudie

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 health and physical education. Majors in this department must meet the requirements of general education, teacher education, and health 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 in 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 your interest and upon approval of the advisor. It also offers a minor in leisure management.

Athletic Coaching certification courses are also offered by this department for any education major who desires teaching certification in this area.

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 : BIO 250 and PED courses 191, 192, 201, 243, 244, 245, 246, 301, 302, 303, 304, 310, 374, 380, 382, 384, 385, and 393; three semester hours from PED 311, 312, 313, 314, and 315; four semester hours from PED 320, 321, 322, 323, 324, and 325; one semester hour from PED 153 or 183; one semester hour from PED 184, 185, or 186; and two semester hours from PED 381, 383, 395, or 480.

All Physical Education majors must pass a swimming proficiency test or show evidence of successfully passing a swimming course prior to being admitted to 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.

If you have a physical handicap you may apply to the department chairperson for waiver of this requirement.

The semester prior to student teaching all Physical Education majors must appear before a committee composed of staff members from the Physical Education and Education Departments. You must be approved by this committee before you are allowed to sign up for SED 409 Student Teaching III.

Bachelor of Science Degree — Major in Leisure Management

(62 Hours)

If you are seeking a Bachelor of Science degree with a major in leisure management you are required to take the following: LMA 220, 250, 230, 320, 323, 330, 420, 424, 430; PED 201, 395; and 30 hours within the professional emphasis area of your choice (community, outdoor, private, commercial, special populations, or youth agency).

Leisure Management — Minor (22 Hours)

To be considered a leisure management minor, you must successfully complete the following courses: LMA 220. 225. 230, 243, 320, 322, 323, 326, 424.

Certification in Athletic Coaching (19 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, 310, 374, and 385 (PED 304 and 385 have the prerequisite of BIO 250); three semester hours from 311, 312, 313, 314, 315; four semester hours from 320, 321, 322, 323, 324, and 325.

Facility and Special Fee

A facility fee of \$3 is required for all courses in this Department which entitles you to utilization of the locker and shower rooms. Special fees are charged for some courses which require special equipment and facilities.

Physical Education Theory:

PED 101 Concepts of Physical Activity (3) i, ii, iii To acquaint students with basic knowledge, understandings and values of physical activity as it relates to optimal healthful living. (3 hours lecture)

 PED 191 Foundation of Physical Education (2) i, ii
 Meaning of physical education opportunites in the field, and evaluation of aptitudes and abilities. Recommended for freshmen. (Two hours lecture).

PED 192 Personal and Community Health (2) i, ii
Personal health concerns, family and community health responsibilities. (Two hours lecture).
PED 201 First Aid (2) i, ii, iii

- ²ED 201 First Aid (2) 1, 11, 11 General emergency care, major disaster, civil defense; Red Cross standard, and instructor for standard certification included. (One hour lecture, two hours lab).
- PED 243 Methods and Techniques of Adventure Activities (2) i. ii Introduction to basic knowledge and skills of popular adventure activities (e.g. shooting sports, angling, backpacking, orienteering, rock climbing, canoeing, wilderness living). Emphasis on attitudes, skills, environmental awareness, safety, teaching methodology, and principles of group leadership as they relate to adventure activities. (Field trips may be required.) (Four hour lab.)

Same as LMA 243.

PED 244 Methods and Techniques of Team Sports (2) i

To present teaching methodology and to develop knowledge and skills in the team sports of basketball, flag football, soccer, and volleyball. (Four hours lab.)

PED 245 Methods and Techniques of Individual and Dual Sports (2) i

To present teaching methodology and to develop knowledge and skills in the individual and dual sports of bowling, badminton, tennis, and golf. (Four hours lab.)

PED 246 Methods and Techniques of Rhythms and Gymnastics (2) ii

To present teaching methodology and to develop knowledge and skills in social, folk, and square dance; stunts and tumbling and apparatus gymnastics. (Four hours lab.)

PED 300 Elementary School Health Education

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) i Emphasis on content, methods, and materials in health education at all levels (K throught 12) (Two hours lecture.)

Prerequisite: PED 192.

PED 302 Issues and Materials in Physical Education (2) i, ii Emphasis on major issues and teaching materials as needed for the teaching of Physical Education in the secondary schools. Students are required to assist in the Physical Education activity program as a student instructor. (One hour lecture, two hour lab.)

Prerequisite: PED 101 and two of PED 243, 244, 245 or 246.

PED 303 Kinesiology (3) i

The analysis of movement from a study of the anatomical structure and the mechanical principles of the human body. (Three hours lecture.)

Prerequisite: BIO 250.

PED 304 Physiology of Exercise (3) i 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 and Administration of Coaching (3) ii

A course designed to provide insight into the coaching profession. Areas of concentration include developing a professional approach to coaching ethics, psychology of athletics, staff selection, public relations, administration of duties (i.e., scheduling, eligibility, reports, purchasing, care of facilities). Focus and appreciation for the non-technical aspects of the total job. (Three hour lecture)

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.)

Prerequisition: 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 320 Sports Officiating in Football (1) i

Students are given instruction concerning the rules, strategy of officiating, and basic areas of concern for officials in the

sport of football. Officiating in Intramurals may be required. (One hour lecture, one hour lab.)

PED 321 Sports Officiating in Wrestling (1) ii

Students are given instruction concerning the rules, strategy of officiating, and basic areas of concern for officials in the sport of wrestling. Officiating in Intramurals may be required. (One hour lecture, one hour lab.)

- PED 322 Sports Officiating in Baseball and Softball (1) ii Students are given instruction in the rules, interpretation of rules, and techniques of officiating baseball and softball. Officiating in Intramurals may be required. (One hour lecture, one hour lab.)
- PED 323 Sports Officiating in Basketball (1) ii

Students are given instruction in the rules, interpretation of the rules, and techniques of officiating basketball. Officiating in Intramurals may be required. (One hour lecture, one hour lab.)

PED 324 Sports Officiating in Volleyball (1) i

Students are given instruction in the rules, interpretation of the rules, and techniques of officiating volleyball. Officiating in Intramurals may be required. (One hour lecture, one hour lab.)

PED 325 Sports Officiating in Field Sports (1) i

Students are given instruction in the rules, interpretation of the rules, and techniques of officiating in soccer and flag football. Officiating in Intramurals may be required. (One hour lecture, one hour lab.)

PED 374 Psychology of Sport (2) ii

The psychology and sociology of the sports participant is emphasized from the standpoint of participant's behavior toward other individuals and groups. (Two hour lecture.) **Prerequisite:** Junior classifi-

PED 380 Rhythms and Creative Movement for Elementary

School (2) ii A course designed to teach elementary teachers how to approach the use of rhythms as a means for developing neuro-muscular growth and body space awareness. A variety of musical styles and rhythmic devices will be used to develop a knowledge in movement exploration which includes: body awareness, space utilization, time and energy change. (One hour lecture, two hour lab.)

Prerequisite: Sophomore classification.

PED 381 Outdoor Education (2) On Demand Development of competencies

in teaching in an outdoor learning environment. (Two hours lecture.)

PED 382 Elementary School Physical Education (3) i, iii Fundamental skills sports

Fundamental skills, 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 384 Child Growth and Development (2) i

> The study of man from conception to maturation dealing with the pattern of growth involved in the physical and mental processes. (Two hours lecture.)

PED 385 Athletic Training (2) ii

Prevention and care of common athletic injuries; protective equipment, training methods. (Two hours lecture.) **Prerequisite:** Biology 250.

PED 393 Measurement in Physical Education (3) 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. Assistant 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 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 or approval of the Department Chairman.

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.)
- LMA 230 Recreation; Field Experience I (2) i, ii Practical, exploratory view of three recreation agencies from an on-the-job perspective. (One hour lecture, five hours lab.)

Prerequisite: LMA 220.

LMA 243 Methods and Techniques for Adventure Activities (2) i, ii Introduction to basic knowledge and skills of popular adventure activities (e.g. shooting sports, angling, backpacking, orienteering, rock climbing, canoeing, wilderness living). Emphasis on attitudes, skills, environmental awareness, safety, teaching methodology, and principles of group leadership as they relate to adventure activities. (Field trips may be required.) (Four hour lab.) Same as PED 243.

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) On Demand

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.

- LMA 326 Recreational Arts, Crafts, and Music (2) On Demand A survey of various arts, craft, and music involved in recreation settings. Students must furnish their own supplies. (One hour lecture, two hours lab.)
- LMA 330 Recreation; Field Experience II (3) i, ii, iii Supervised leadership assignment in one leisure agency leading to a deeper conceptual 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 associa-

tions, 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) i, ii, 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) i, ii, iii

An individualized approach to acquire entry-level 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, and 190.) Elective Physical Education activities will be offered during semesters when staff and facilities are available. All sport activities are designed for the development of techniques, knowledges, appreciation, and skills used during your lifetime for recreation and fitness.

PED 110 Adaptive Activities (1)

A program of activities adapted to the needs 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 some ammunition.
- PED 118 Beginning Bowling (1) House fee required.
- PED 119 Beginning Golf (1) Students must furnish four new golf balls.
- PED 120 Beginning Tennis (1) Students must furnish one can of new tennis balls.
- PED 121 Beginning Badminton (1) Students must furnish three new shuttlecocks.
- PED 122 Beginning Orienteering Map and Compass (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. Special fee 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)

- PED 139 Beginning Skiing (1) Intersessions when facility and staff are available. Special fee required.
- PED 140 Beginning Ice Skating (1) Special fee required.
- PED 141 Beginning Karate (1) Students must furnish Gi.
- PED 144 Beginning Recreational Games (1) Shuffleboard, table tennis, and 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.
- PED 156 Beginning Tap Dance (1) Students must furnish tap shoes.
- PED 158 Intercollegiate Sports I (1) Intercollegiate athletic team members who are on the men's football, men's basketball, or women's volleyball teams only. Will not satisfy general educational requirements in Physical Education. Must have permission of coach.
- PED 159 Intercollegiate Sports II (1) Intercollegiate athletic team members who are on the men's baseball, men's golf, men's tennis, women's tennis, women's basketball, and women's softball teams only. Will not satisfy general educational requirements 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) Students must furnish bicycle.
- PED 190 Special Activity (1) Special Activities to be offered when specific instructors and facilities are available.
- PED 215 Intermediate Apparatus Gymnastics (1) Prerequisite: PED 115 or permission of instructor.
- PED 218 Intermediate Bowling (1) Prerequisite: PED 118 or permission of instructor.
- PWS 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 Volleyball (1) Prerequisite: PED 175 or permission of instructor.

DEPARTMENT OF MILITARY SCIENCE

Captain M. Hull Captain R. Lovelace MSG P. Adair

The department of Military Science administers the Reserve Officer's Training Corps (ROTC) program to those of you 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 you enroll in the ROTC program.

The general military science curriculum at Missouri Western State College provides you with the general leadership management and military skills needed to qualify for a commission in any of the branches of the Army. You are 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 Two-Year 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 your desires and on needs of the service at the time of graduation. A contract guaranteeing the threemonth program is available.

FOUR-YEAR ROTC PROGRAM: This course of study consists of MIL 100, 101, 102, 103, 104, 110, 120, 200, 210, 300, 310, 400, 410. In addition, you must attend a six-week advanced camp (MIL 350) at Fort Riley, Kansas, normally between junior and senior years. During this camp, you receive pay of approximately \$500 plus travel expenses. You incur no service obligation for attendance in MIL 100, 101. 102, 103, 104, 110, 120, 200, or 210. The Department Chairperson may award placement credit for successful completion of selected courses in lieu of MIL 100, 101, 102, 103, 104, 110, and 200. Entrance to the advance course is subject to the approval of the Department Chairperson.

TWO-YEAR ROTC PROGRAM: This course of study is for those of you who were unable to enroll in ROTC during your first two academic years. This program substitutes a six-week basic camp for the 100 and 200 level Military Science courses. The remainder of the course is the same as the four-year program. Your pay while attending basic camp is approximately \$450 plus travel expenses.

PLACEMENT FOR VETERANS: Prior service personnel desiring a commission through ROTC may have the 100 to 200 level Military Science course waived and enter directly into the advanced course (last two years of Military Science). The monthly financial aid of \$100 does not affect other financial benefits available to veterans. Interested Veterans should contact the Director of Military Science for permission to enter the advanced course.

MONETARY ALLOWANCES: All ROTC students are furnished texts for your military science courses and uniforms.

If you are enrolled in the last two years of military science you receive \$100 per month, during the school year, not to exceed ten months per year. In addition, those of you attending summer camp 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, tax-free 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 payment of registration fees. Further qualifications for receipt of this award are as follows: must have a minimum of 2.3 high school or college GPA; must not be in receipt of another scholarship from any other source. Application should be made to the scholarship committee.

Fee Waivers: Fee waiver scholarship. See Department Chairperson.

MILITARY SCIENCE MINOR: A minor in Military Science will total 20 credit hours. The following specific courses are required: MIL 100, 110, 200, 210, 300, 310, 400, 410, and two hours of electives as approved by the Department Chairperson.

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 101 Military Mountaineering (1) ii, ii, iii

Techniques for Military Mountaineering: rope bridging, ropes and rope management, types of rappels and their uses. Practical exercises in rappelling will be presented to offer the student the opportunity to test his skills learned.

MIL 102 Water Survival Training (1) i, ii, iii

Techniques for water survival, drown proofing, survival testing, improvised floats and rafts, and introduction to rubber rafts. Practical exercises will be presented to offer the student the opportunity to test his learned skills.

MIL 103 Military Orienteering (1) i, ii, iii

Techniques and procedures used in Military Orienteering: Use of the lensatic and silva compasses, map reading for orienteering purposes, the types of orienteering courses, organizing an orienteering event. Practical orienteering to enable the student to utilize his skills in a field environment.

MIL 104 Small Bore Rifle Marksmanship (1) i, ii, iii

A study of basic marksmanship involving the safety aspects of weaponry, shooting equipment, triangulation, position shooting, and range firing.

- MII 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 120 Precision Military Drill (1) i, ii

Introduction to the conduct of military drill and ceremonies, individual, small unit, drill team and Color Guard drill. The Manual of Arms with infantry weapons, teaching and instructing techniques of military drill.

Lecture/Laboratory four hours per week. May be repeated for credit with the approval of the Professor of Military Science.

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 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 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 a specific military management. Practical application of the military instruction methodology concludes the course.

Prerequisite: Basic course or permission of Department Chairperson.

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 Chairperson.

MIL 350 Practicum in Advanced Leadership Training (3) iii A six week practical experience in 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 Chairperson.

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 decisionmaking and communication operation; training; logistics; intelligence; and personnel. **Prerequisite:** MIL 310 or permission of Department Chairperson.

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 Chairperson.

MIL 450 Independent Study in Military Science (1-5) i, ii, iii Investigation of selected prob-

lems or topics on an individual or conference basis.

Prerequisite: Permission of the Department Chairperson.

DEPARTMENT OF PSYCHOLOGY

Dr. M. Johnson — Chairperson J. Bargar J. Ison P. Wann

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 you a better understanding of yourself and others, and to better prepare you to meet the com-

Bachelor of Arts or Bachelor of Science

MAJOR IN PSYCHOLOGY

A minimum of 36 credit hours of Psychology is required. Required courses totaling 21 credit hours are PSY 101, 200, 300, 301, 330, 401, 490. The additional 15 credit hours to meet the 36 credit hour requirement must consist of electives in Psychology.

Candidates for either degree must also comply with the appropriate baccalaureate degree program and meet all other requirements as outlined elsewhere in this catalog. (See 30 hours upper division requirement and general education requirements.) plexities 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 you are prepared to pursue graduate study in psychology at the Master's or Doctoral level.

The department also serves other disciplines by offering courses which meet their needs.

MINOR OR EMPHASIS IN PSYCHOLOGY

A minimum of 22 credit hours in Psychology is required. Required courses totaling 16 credit hours are PSY 101, 200, 300, 301, 330. The additional 6 credit hours to meet the 22 credit hour requirement must consist of electives in Psychology.

A COGNATE IN PSYCHOLOGY

Students in the Two plus Two program (explained elsewhere in this catalog) who elect psychology as a cognate field will obtain an advisor from the psychology department and may be asked to take up to 16 hours of required courses. A minimum of 24 credit hours in psychology is recommended for a cognate in psychology.

PSY 101 General Psychology (3) i, ii, iii

A general information course about psychology in everyday life, designed to correct misconceptions and to give the student a better understanding of himself and others.

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 or consent of instructor.
- PSY 210 Mental Hygiene (3) i, ii 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) i, (ii 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 or consent of instructor.
- PSY 309 Abnormal Psychology (3) i, ii 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
- PSY 312 Psychology of the Exceptional Child (3) ii Considers problems and needs of children who noticeably deviate from accepted physical, psychological, and social norms.

Prerequisite: PSY 101, 200, or consent of instructor.

PSY 320 Adolescent Psychology (3) ii A descriptive and explanatory consideration of adolescence, with emphasis on motivation and frustration.

Prerequisite: PSY 101, 200, or consent of instructor.

PSY 325 Psychology of Personality (3) i

Dynamics of personality development and human behavior, with emphasis on theories of personality. **Prerequisite:** PSY 101, 200, or

consent of instructor.

PSY 330 Systematic Psychology (3) i 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, or consent of instructor.

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, or consent of instructor.

PSY 350 Physiological Psychology (3) i (even years)

Investigates the physiological correlates of psychological behavior in man.

Prerequisite: PSY 101, 200, or consent of instructor.

PSY 401 Social Psychology (3) i (ii even 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, or consent of instructor.

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, or consent of instructor.

PSY 415 Intermediate Statistics for the Behavioral Sciences (3) i, even years or on demand An application of basic statistical procedures to behavioral research. Some statistical procedures not taught in Math 201, and the use of computers in data analysis are also considered. Two hours lecture and two hours lab.

Prerequisite: PSY 200, MAT 201.

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 422 Behavioral Management (2)

ii Explores the application of behavioristic principles to human problems.

Prerequisite: PSY 101, 200 or consent of instructor.

PSY 450 Independent Study (credit hours open) i, ii

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

Research of selected topics or problems on an individual conference basis. Prerequisite: Consent of chairman.

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.

THE DIVISION OF LIBERAL 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

never-ending 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 of you who wish to make arts or sciences the basis of your 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 its activities, the division must strive, and lead others to strive, for academic excellence.

DEPARTMENT OF ART

J. Estes - Chairperson

Dr. W. Eickhorst

J. Hughes

The department of art is concerned with developing the skills and creative potentials of its majors, and provides you 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

J. Harmon

J. Nelson

professional artist.

In order to broaden your horizons 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. You are encouraged to take advantage of the many cultural events, both on campus and in the St. Joseph/Kansas City area.

Bachelor of Arts Degree

(Requires 16 credit hours in a single 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.

You are responsible for contacting an advisor to schedule a Junior Review during the last semester of the junior year. For this review you bring a representative sampling of your creative work for examination by a committee of the art faculty.

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.

You are responsible for contacting an advisor to schedule a Junior Review during the last semester of the junior year. For this review you bring a representative sampling of your creative work for examination by a committee of the art faculty.

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.

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)

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.)
- ART 320 Beginning Graphic Design (3) ii

Basic layout work: emphasis in typography and symbology; their interrelationship in communicating ideas visually. 6 studio hours. **Prerequisite:** ART 130, 260, 390.

- ART 325 Beginning Jewelry (2) 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) 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: 0 credit hrs. art.

- 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.
- ART 420 Advanced Graphic Design (3) ii

Advanced layout work: camera readywork, mechanicals; emphasis in typography and symbology, their interrelationship in communicating ideas visually. May be repeated for credit. 6 studio hours.

Prerequisite: ART 320.

- ART 425 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) 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) ii Advanced techniques in various media. 6 studio hours. May be repeated for credit. Prerequisite: ART 380.
- ART 485 Senior Exibit (1) i, ii, iii Preparation and presentation of an exhibition of personal art work under the direction and approval of a faculty supervisor.

Prerequisite: Permission of the Junior Review Committee.

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.

DEPARTMENT OF BIOLOGY

Dr. R. Crumley — chairperson Dr. W. Andresen R. Boutwell

Biology students study all forms of life at the molecular, organismal, and population levels of complexity. You work in well equipped 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.

The biology curriculum consists of

Bachelor of Arts Degree (Requires 16 credit hours in a single 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 101 or 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.

Bachelor of Science Degree MAJOR IN BIOLOGY

Courses in Biology must total 40 credit hours. The following specific courses are required: BIO 111, 112, 309, 310, 311, 312, 411, 412, plus 13 additional credit hours selected from Biology courses numbered 300 or

H. Force Dr. L. Galloway

Dr. T. Rachow Dr. D. Robbins

core courses taken by all biology majors, followed by biology electives in specific areas. The department curriculum provides excellent preparation for prospective science teachers, graduate students, research biologists, preprofessional programs in medicine, dentistry, veterinary medicine, and many others.

The Earth Science curriculum is also listed in the Biology Department.

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.

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, 260, 309, 310, 311, 312, 380, 411, 412, plus 3 additional credit hours selected from BIO 350, 405, 406

CHE 111, 120, 310, 311, 370; MAT 105 and 201; PHY 101 or 110.

MINOR IN BIOLOGY

A minor in biology consists of a minimum of 20 credit hours, including BIO 101 or 111, plus at least one course from each of the four areas listed below.

Environmental Biology: BIO 305, 309:

Physiology: BIO 250, 311;Taxonomic Biology: BIO 350, 405, 406, 415, 416;

Biology Electives: BIO 252, 260, 310, 320, 399, 411.

Careful attention must be given to course prerequisites in the planning of the minor program.

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.

BIO 251 Medical and Public Health Microbiology (4) i, ii, iii Introductory concepts of microorganisms; their characteristics, relationships to disease, means of transmission, and methods of control. 3 hours lecture, 3 hours lab. Credit for this course is not applicable toward a major in biology.

BIP 252 Basic Nutrition (3) ii, iii

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 (1) Spring intercession Inter-relationships 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) 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 of 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 interactions 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 201, or consent of instructor.

BIO 320 Histology (3) i (even numbered years)

Identification and description of microscopic structure, organization of tissues and organs, preparation of tissues for observation and study. 2 hours lecture, 3 hours lab. **Prerequisite:** BIO 111 or con-

sent 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 hours 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 399 Microbiology (5) i

Identification, characteristics and importance of common forms of microorganisms; their application to the needs of man, infectious diseases and immunity, microbiology of air, water, foods and their uses in industrial and scientific process. 3 hours lecture, 4 hours lab.

Prerequisite: BIO 111 or 112.

BIO 400 Microbiology of Human Disease (5) ii (odd numbered years) Pathogenic micro-organisms, 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 (even numbered years) 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.

Earth Science

ESC 204 Introduction to Geology (4) i, ii

> Survey of physical and historical geology. 3 hours lecture, 2 hours lab.

DEPARTMENT OF CHEMISTRY

Dr. G. Zweerink — chairperson L. Archer A. Heckel Dr. L. Lambing J. Redmond Dr. R. Schwarz Dr. R. Smith

The department of Chemistry deals with a core of 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

Bachelor of

Art Degree

(Requires 16 credit hours in a single foreign language)

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 TECHNOL-OGY

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 technology, dentistry, and research chemistry.

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

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, 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.

(You 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, oxidation-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.

CHE 120 General Chemistry II (5) i, ii Continuation of CHE 111; thermochemistry, equilibrium, electro-chemistry, radio-chemistry, coordination chemistry and a survey of the main group elements and their compounds. Laboratory includes the topics above along with the separation and identification of some of the 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 and 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 con-

currently.

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 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 electroanalytical 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, acid-base theories. mechanisms of inorganic symmetry chemistry, in molecules, inorganic thermodynamics and atomic and molecular structure. 3 hours lecture. Prerequisite: CHE 120 with a

grade of C or better.

CHE 370 Biochemistry (4) ii

Chemistry of biological compounds, metabolism and biochemical genetics. 3 hours lecture, 3 hours lab.

Prerequisite: CHE 310 and 311 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 interpre-

tations 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.

MEDICAL TECHNOLOGY

MTE 105 Introduction to Health PHS Science (1) i

> A survey of the various health fields; job descriptions, employment opportunities, educational requirements, personal qualifications. 1 hour lecture.

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 Medical Technology Internship (12) ii

Continuation of MTE 451.

MTE 453 Medical Technology Internship (6) iii Continuation of MTE 452. Full internship program, including MTE 451, 452, and 453, is of twelve months duration in a hospital affiliated with Missouri Western State College and approved by the Society of Clinical Pathologists.

PHYSICAL SCIENCE

PHS 100 Introduction to the Metric System (1) i, ii

> The metric system including history of measurements, relationships withing the metric system and conversions beteen the English and metric systems.

5 230 Physical Science for Elementary Teachers (3) i, ii Basic concepts of the physical sciences; emphasis on topics taught in grades K-6.

Prerequisite: BIO 101 and either PHY 101 or CHE 101.

DEPARTMENT OF ENGLISH AND MODERN LANGUAGES

Dr. G. Matthews, Chairperson Dr. J. Castellani W. Chelline M. Drummond Dr. F. Flanagan J. Frick Dr. R. Galloway Dr. J. Gilgun G. Rapinchuk, Director of Learning Skills Center

The Department of English and Modern Languages offers major programs in English leading to the Bachelor of Arts degree and the Bachelor of Science in Education degree. Minor programs are also offered in English, French, German, Spanish, and Journalism. An integral part of the department is the Learning Skills Center where the student receives assistance in developing basic skills related to reading, studying, or writing.

In its various programs and offerings, the Department of English and Modern Languages works toward a four-fold goal: (1) an improvement of communication skills through practice in diverse types of expository and imaginative writing; (2) a developR. Hoffmann Dr. C. McCay M. Magoon R. Miller E. Sawin Dr. R. Shell I. Sparks

ment of critical thinking through exposure to and interpretation of the various world views offered in literary works; (3) an increased appreciation of literature, its backgrounds, history, and values through an analysis and discussion of authors and literary works covering a wide range of attitudes, perspectives, and expressions; (4) a deeper understanding of one's own culture and a tolerance and acceptance of things foreign through a study and appreciation of another language and culture.

In all of its programs, the department encourages you to grow in self-knowledge and the knowledge of others through its emphasis on the human and liberal characteristics of its offerings.

Bachelor of Arts Degree

(Requires 16 credit hours in a single foreign language)

Major in English: Literature Emphasis

The Bachelor of Arts degree, in English with a literature emphasis, is a broad-based program providing you with a wide perspective on literature, language, and world views. The program prepares you to pursue graduate work in English or related disciplines, or to enter areas of the business/professional community seeking people with a broad liberal education.

The requirements for this degree include the satisfactory completion of the following:

Two courses in freshman English composition as required in the general studies program 6

ENG	210	Approaches to Literature	3	
ENG	224	Advanced Composition		
		& Literature	3	
ENG	332	History of the		
		English Language	3	
ENG	310	British Literature		
		to 1798	3	
ENG	312	British Literature		
		since 1798	3	
ENG	360	American Literature		
		to 1865	3	
ENG	362	American Literature		
		since 1865	3	
ENG	368	Shakespeare	3	
ENG	420	American Short Story or		
ENG	422	American Novel	3	
ENG	390	Modern European		
		Literature or		
ENG	426	Modern British &		
		American Poetry or		
ENG	478	Modern Drama	3	
Two		British literature courses		
		numbered above 300	6	
ENG	488	Senior Seminar in English	3	
	Total	required hours	45	
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Major in English: Writing Emphasis

The Bachelor of Arts degree, in English with an emphasis in writing concentrates on the imaginative, expository, and journalistic modes of written discourse. If you are interested in pursuing graduate work emphasizing writing, or in seeking employment with companies or businesses demanding proficiency in written communication skills, you are advised to select this program. If you are interested in journalistic writing you are also encouraged to minor in journalism. You should consult the journalism faculty for advisement.

The requirements for this degree include the satisfactory completion of the following:

Two courses in freshman English composition as required in the general studies program 6

ENG	210	Approaches to Literature	3
ENG	224	Advanced Composition	1
	10.00	& Literature	3
ENG	248	Approaches to Film	
		Literature	3
ENG		Creative Writing	3
ENG	234	Structure of English	3
ENG	310	British Literature to 1798 or	
ENG	312	British Literature since 1798	3
ENG	360	American Literature to 1865 or	
ENG	362	American Literature since 1865	3
JOU	102	Principles of Journalism	
		& Mass Media	3
JOU	202	Basic News Reporting	3
JOU	302	Advanced Reporting:	-
		Opinion Writing	3
JOU	306	Newspaper & Magazine	
	000	Production Management	3
		Additional literature	U
		courses numbered above 300	6
		Total required hours	45
		Total required nours	40

Bachelor of Science in Education Degree Major in English

The Bachelor of Science in Education degree program is more specialized than the Bachelor of Arts degree program in English in that it leads to certification to teach English in the secondary schools. Students who pursue this program should see teaching as their immediate career goal.

The requirements for a Bachelor of Science in Education degree with a major in English include the satisfactory completion of the following:

Two courses in freshman English composition as required in the general studies program6

ENG	210	Approaches to Literature	3	
ENG	224	Advanced Composition		
		& Literature	3	
ENG	234	Structure of English	3	
ENG	310	British Literature		
		to 1798	3	
ENG	312	British Literature		
		since 1798	3	
ENG	360	American Literature		
		to 1865	3	
ENG	362	American Literature		
		since 1865	3	
ENG	368	Shakespeare	3	
ENG	400	Literature for Adolescents	3	
ENG	465	English Teaching:		
		Methods & Materials	2	
ENG	488	Senior Seminar		
		in English	3	
		Additional literature courses		
		numbered above 300	6	
EED	311	Teaching Reading in		
		the Secondary School	3	
		Total required hours	47	

Minor Programs in English, Journalism, and Modern Languages

In addition to the major programs in English and English Education, the Department of English and Modern Languages offers minors in English, Journalism, French, German, and Spanish.

Minor in English: Literature Emphasis

The minor in English provides you with an opportunity to broaden your understanding and appreciation of literature and culture, and to improve your communication skills. As such, the minor is a valuable asset to those of you seeking careers in the professional or business world.

The requirements for a minor in English include the satisfactory completion of the following:

Two courses in freshman English composition as required in the general studies program 6

ENG	210	Approaches to Literature	3	
ENG	224	Advanced Composition		
		& Literature	3	
ENG	310	British Literature		
		to 1798 or		
ENG	312	British Literature		
		since 1798	3	
ENG	360	American Literature		
		to 1865 or		
ENG	362	American Literature		
		since 1865	3	
ENG	368	Shakespeare	3	
ENG	420	American Short Story or		
ENG	422	American Novel	3	
		Two British literature		
		courses numbered		
		above 300	6	
		Total required hours	30	

Minor in English: Education Emphasis

Structured to meet the requirements for teacher certification, the following minor in English is specifically offered to prepare you to teach English in grades seven through twelve.

The requirements for the minor in English include the satisfactory completion of the following:

Two courses in freshman English composition as required in the general studies program 6

ENG	210	Approaches to Literature	3
ENG	224	Advanced Composition	
		& Literature	3 3
ENG	234	Structure of English	3
ENG	310	British Literature	
		to 1798 or	
ENG	312	British Literature	
		since 1798	3
ENG	360	American Literature	
		to 1865 or	
ENG	362	American Literature	
		since 1865	3

ENG	400	Literature for Adolescents Additional literature courses	3	
		numbered above 300	6	
EED	311	Teaching Reading in the Secondary School	3	
			33	

Minor in Journalism

The requirements for the minor in journalism include the satisfactory completion of the following:

JOU	102	Principles of Journalism		
		& Mass Media	3	
JOU	202	Basic News Reporting	3	
JOU	210	Journalism Lab: Newspaper Production or		
JOU	212	Journalism Lab: Specialized Publication		
		Production	2	
JOU	304	Photojournalism	23	
JOU	306	Newspaper & Magazine Production Management	3	
JOU	310	Journalism Lab: Newspaper Production Management or		
JOU	312	Journalism Lab: Special Publication		
		Production Management	2	
JOU	314	Special Topics		
		in Journalism	3	
		Additional journalism		
		electives	5	
		Total required hours	24	

ENG 224 Advanced Composition and ENG 338 Creative Writing are acceptable electives in the journalism minor. Journalism students are encouraged to develop typing proficiency and learn to handle a camera as soon as possible.

Minor in French

The requirements for the minor in French include the satisfactory completion of the following:

FRE	102	Elementary French I	4
FRE	112	Elementary French II	4
FRE	202	Intermediate French	4
FRE	212	French Conversation	
		& Composition	4

FRE	300	Topics in French	4
		(FRE 300 must be repeated	
		to complete 24 hours)	4
		Total required hours	24

Minor in German

The requirements for the minor in German include the satisfactory completion of the following:

GER	102	Elementary German I	4
GER	112	Elementary German II	4
GER	202	Intermediate German	4
GER	212	German Conversation	
		& Composition	4
GER	300	Topics in German	4
		(GER 300 must be	
		repeated to complete	
		24 hours)	4
		Total required hours	24

Minor in Spanish

The requirements for the minor in Spanish include the satisfactory completion of the following:

SPA	102	Elementary Spanish I	4	
SPA	112	Elementary Spanish II	4	
SPA	202	Intermediate Spanish	4	
SPA	212	Spanish Conversation		
		& Composition	4	
SPA	300	Topics in Spanish	4	
		(SPA 300 must be repeated		
		to complete 24 hours)	4	
		Total required hours	24	1
		1		

Teacher Certification in Foreign Language

State certification to teach foreign language in grades K-12 in Missouri requires 30 credit hours in foreign language, including 24 credit hours in the language taught, or 24 credit hours in one language plus two or more high school units in a foreign language.

State certification to teach foreign

language in grades K-9 in Missouri requires 21 credit hours in foreign language, including 18 credit hours in the language taught, or 18 credit hours plus two or more high school units in a foreign language.

English Composition and Language

ENG 100 Basic Written Communications 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 (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, iii 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 23. This course fulfills the English communications requirement for regularly enrolled students.

ENG 200 College Learning Skills Workship (3) i, ii An intensive 12-week skills course in reading, writing, and studying. For freshmen 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. Prereguisite: 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 Structure of English (3) ii (even numbered years)

A traditional analysis of English syntax and an introduction to the basic concepts of generative-transformational grammar.

Prerequisite: ENG 108 or 112, or consent of instructor.

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.

ENG 465 English Teaching: Methods and Materials (2) i

Techniques, materials, and resources used in the English curriculum in the secondary schools.

Prerequisite: Junior standing.

English Literature

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

> A general studies course emphasizing ways of reading poetry, fiction, and drama. Various thematic approaches may be offered.

> Prerequisite: ENG 108 or 112, or consent of instructor.

ENG 248 Approaches to Film Literature (3) ii

Study of themes, ideas, and techniques in film.

ENG 310 British Literature to 1798 (3)

Survey of British literature from Anglo-Saxon times to the Restoration and Eighteenth Century periods.

Prerequisite: ENG 108 or 112, or consent of instructor.

ENG 312 British Literature since 1798 (3) ii

> A continuation of English 310; a survey from the Romantics and the Victorians to contemporary writers.

> Prerequisite: ENG 108 or 112, or consent of instructor.

ENG 360 American Literature to 1865 (3) i

> Survey of American literature from colonial beginnings to the Civil War.

Prerequisite: ENG 108 or 112, or consent of instructor.

- ENG 362 American Literature since 1865 (3) ii A continuation of Eng 360; a survey from the Civil War to the present day. Prerequisite: ENG 108 or 112, or consent of instructor.
- ENG 368 Shakespeare (3) A study of selected works. Prerequisite: ENG 108 or 112, or consent of instructor.
- ENG 370 Medieval Literature (3) The literature and culture of the Middle Ages; special emphasis on Chaucer. Prerequisite: ENG 108 or 112, or consent of instructor.
- ENG 372 Seventeenth Century British Literature (3) The literature and culture of the Jacobean and Restoration periods; special emphasis on Milton.

Prerequisite: ENG 108 or 112, or consent of instructor.

ENG 374 Eighteenth Century British Literature (3) The major literary movements

and writers of the eighteenth century.

Prerequisite: ENG 108 or 112, or consent of instructor.

ENG 380 Romantic Poetry and Prose (3) The major works of the Romantic period. Prerequisite: ENG 108 or 112, or consent of instructor.

ENG 382 Victorian Literature (3)

The major works of the Victorian period. **Prerequisite:** ENG 108 or 112, or consent of instructor.

ENG 390 Modern European Literature (3) Selected works in translation of modern European writers. Prerequisite: ENG 108 or 112, or consent of instructor.

ENG 420 American Short Story (3) ii (even numbered years)

The American short story from Washington Irving to the present.

Prerequisite: ENG 108 or 112, or consent of instructor.

ENG 422 American Novel (3) ii (odd numbered years)

Representative works of the nineteenth and twentieth centuries.

Prerequisite: ENG 108 or 112, or consent of instructor.

ENG 426 Modern American and British Poetry (3) Representative poetry of the twentieth century. Prerequisite: ENG 108 or 112, or consent of instructor.

ENG 450 Independent Study in English (1-5)

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 the major field of study.

ENG 468 British Novel: Eighteenth Century (3) The development of the British novel in the eighteenth century. Prerequisite: ENG 108 or 112, or consent of instructor.

ENG 470 British Novel: Nineteenth and Twentieth Centuries (3) Representative novels of the nineteenth and twentieth centuries.

Prerequisite: ENG 108 or 112, or consent of instructor.

ENG 478 Modern Drama (3) Drama from Ibsen to the present.

Prerequisite: ENG 108 or 112, or consent of instructor.

ENG 488 Senior Seminar in English (3) i

A discussion of the relationships and significance of major texts and periods covered in the degree programs in English.

Prerequisite: Consent of Department Chairperson.

Journalism

JOU 102 Principles of Journalism and Mass Media (3) i

Analysis of the communications process: the role of newspapers, magazines, radio, television; their impact on contemporary society.

JOU 104 Photography Fundamentals (3) i (odd numbered years)

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Basic techniques of picturetaking, film-developing and printing. Students are required to provide their own camera equipment, film and printing paper.

Jou 202 Basic News Reporting (3) i Introduction to journalistic practices; gathering information, taking notes, interviewing, writing; basic journalistic style and story structures; practice in copy editing.

JOU 210 Journalism Laboratory: Newspaper Production (2) i, ii Supervised experience in field reporting and techniques used in producing a newspaper. Students work on the campus newspaper.

Prerequisite: JOU 202 (may be taken concurrently) or permission of the instructor.

JOU 212 Journalism Laboratory: Specialized Publication Production (2) i, ii

Supervised experience in field reporting and techniques used in producing such specialized publications as the campus yearbook and business or industrial house organs.

Prerequisite: JOU 202 (may be taken concurrently) or permission of the instructor.

JOU 302 Advanced Reporting: Opinion Writing (3) ii

Writing editorials and expanded features: interpretive and investigative reporting.

Prerequisite: JOU 202 or permission of the instructor.

JOU 304 Photojournalism (3) ii (even numbered years)

Pictures as reportorial or interpretive statements of human events; photoscripts, outlines, photo essays.

Prerequisite: JOU 102 and

202 or permission of the instructor.

JOU 306 Newspaper & Magazine Production Management (3) ii (odd numbered years) Principles of publication management: determining editorial objectives, identifying publics, defining content and physical format: personnel and production management; packaging the news for accuracy, clarity, and effective communication.

Prerequisite: JOU 202, 210 or 212, or permission of the instructor.

JOU 310 Journalism Laboratory: Newspaper Production Management (2) i, ii Supervised experience in managerial positions on the campus newspaper: application of the principles of professional journalism.

Prerequisites: JOU 210 and 306 (may be taken concurrently) or permission of the instructor.

JOU 312 Journalism Laboratory: Specialized Publications Production Management (2) i, ii.

> Supervised experience in managerial positions on the campus yearbook or on business or industrial house organs: application of principles of professional journalism.

> Prerequisite: JOU 212 and 306 (may be taken concurrently) or permission of the instructor.

JOU 314 Special Topics in Journalism (3) i (even numbered years). An advanced course in journalism. Topics will vary from semester to semester. May be repeated for credit. **Prerequisite:** Consent of instructor.

Modern Languages

If you have an extensive background in a language you are encouraged to attempt credit by examination. 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 provide you with the background for testing out of the second basic course.

French

- FRE 102 Elementary French (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 con-

sent of instructor.

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 consent of instructor.

FRE 300 Topics in French (4) i, ii

An advanced course in French literature, language, or culture. Topics will vary from semester to semester. May be repeated for credit (with permission of instructor). 3 hours lecture and 2 hrs lab, or 4 hrs lecture.

Prerequisite: FRE 212 or consent of instructor.

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 consent of instructor.

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 consent of instructor. GER 300 Topics in German (4) i, ii An advanced course in German literature, language, or culture. Topics will vary from semester to semester. May be repeated for credit (with permission of instructor). 3 hrs. lecture and 2 hrs. lab, or 4 hrs. lecture.

> Prerequisite: GER 212 or consent of instructor.

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 con-

sent of instructor.

SPA 212 Spanish Conversation and Composition (4) ii Conversations and written compositions based on textual materials as well as contem-

porary topics. 3 hours lecture, 2 hours lab.

Prerequisite: SPA 202 or consent of instructor.

SPA 300 Topics in Spanish (4) i, ii

An advanced course in Spanish literature, language, or culture. Topics will vary from semester to semester. May be repeated for credit (with permission of instructor). 3 hrs. lecture and 2 hrs. lab, or 4 hrs lecture.

Prerequisite: SPA 212 or consent of instructor.

DEPARTMENT OF MATHEMATICAL SCIENCES

B. Kelley
Dr. D. John
K. Johnson
E. Johnston

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 of you who desire a more thorough preparation in these areas for jobs in business, government, industry and educational institutions.

Bachelor of Arts Degree

(Requires 16 credit hours in a single foreign language)

MAJOR IN MATHEMATICS

The major in Mathematics requires the completion of the following program for a total of 47 credit hours: MAT

cale <u>107, 108, 209, 305, 312, 316, 420, 430,</u> plus an additional ⁶ credit hours of upper division Mathematics electives; PHY 210, 211, 212.

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Bachelor of Science Degree

MAJOR IN COMPUTER SCIENCE

The major in computer Science ram for a total of 35 credit hours: MAT requires the completion of the follow- c_{alc} 107,108, 209, 305, 312, 315, 316, 420, ing program for a total of 54 credit 430, 465.

Dr. K. Lee Dr. J. Leech L. Schmitz, Jr. Dr. T. Scott J. Wilkerson

hours: CSC 182, 188, 245, 284, 286; MAT 107, 108, 201, 209, 305, 312, 417; plus 12 credit hours of Computer Science electives (excluding CSC 250), 9 credit hours of which must be upper division courses.

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 (excluding CSC 250); MAT 201 or MGT 210; and an approved program of 21 credit hours in a related area. (You must meet with the Computer Science faculty to design and obtain approval for this program.) MAJOR IN MATHEMATICS

The major in Mathematics requires the completion of the following program for a total of 53 credit hours: 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).

Bachelor of Science in Education Degree

MAJOR IN MATHEMATICS

The major in Mathematics requires the completion of the following program for a total of 35 credit hours: MAT <u>107,108, 209</u>, 305, 312, 315, 316, 420, <u>430, 465</u>. *Lin Alg. Geom. Abs. Analy Maly methods*.

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

The minor in Mathematics requires the completion of the following program for a total of 21 credit hours: MAT 107 and 108, plus elective courses in Mathematics numbered 200 or higher. MINOR IN PHYSICS

The minor in Physics requires the completion of the following program for a total of 19 credit hours: PHY 210, 211, 212, 310, 411.

Computer Science

CSC 182 Introduction to Data Processing (3) i, ii, iii

> Overview of data processing and computer concepts as an area of general knowledge for the informed individual. Includes programming microcomputers in the BASIC language.

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 250 Computer Operations Practicum (3) ii

Participation in computer operations in a local data processing installation. This course will not be accepted as a computer science elective for degree programs. Application for placement must be made at least 9 weeks before registration for this course.

Prerequisite: Sophomore standing and completion of at least one language programming course.

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 Lan-

guage I (3) i, ii Assembly language level programming: Symbolic machine instructions, dumps, assembly language instructions, subprogram linkage, and vendor supplied subprograms.

Prerequisite: CSC 188.

CSC 286 Computer and Programming Systems (3) ii

An introduction to machine organization, programming and operating systems. **Prerequisite:** CSC 284. CSC 345 Advanced COBOL Programming (3) i, ii Continuation of CSC 245; table handling, error-routine handling, tape processing, sequential and indexedsequential disk processing, SORT AND REPORT WRI-TER features.

Prerequisite: CSC 245, with grade of C or better.

CSC 370 Data Structures (3) i (even numbered years)

Organization of data files, hierarchies of storage, sorting, searching, cross referencing, retrieval of information from files.

Prerequisite: CSC 188 with grade of C or better.

CSC 384 Symbolic Assembler Language II (3) ii System Macro instructions, special-purpose instructions, macro definitions, conditional assembly, and interrupt structure.

Prerequisite: CSC 284.

CSC 388 Operations Research I (3) ii (even numbered years)

Introduction to operations research techniques: linear programming, transportation and network theory, scheduling problems, inventory control, simulation.

Prerequisite: CSC 188 and MAT 201 or MGT 210.

CSC 418 Operations Research II (3) i (even numbered years)

Queueing theory, game theory, regression analysis, dynamic programming. Prerequisite: CSC 388, MAT

107, 201.

CSC 428 Computer Graphics (3) i (odd numbered years)

Techniques for picture transformation, curve and surface approximation; study and implementation of graphical languages and data structure; organization of graphical systems. Use of micro-computer and the Cal-comp plotter as tools for displaying graphical data.

Prerequisite: CSC 188 and MAT 107

CSC 450 Application Projects (3) i, ii, iii

The student will complete an independent project under the supervision of one of the members of the Computer Science faculty.

Prerequisite: Senior college standing and project approval prior to course registration.

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.

Mathematics

MAT 090 Basic Mathematics (3) i, ii, iii

> A review of basic topics in arithmetic, algebra and geometry. Arithmetic topics include operations on the natural numbers, integers, fractions and decimals: algebra topics include addition, subtraction, multiplication and division of elementary expressions of one variable and the solutions of simple linear equations; geometry topics include area, volume and surface area of simple geometric figures.

MAT 095 Basic Algebra (3) i, ii, iii A review of elementary algebra including the algebra of polynomials, linear equations, quadratic equations, systems of three equations, linear inequalities, integer and rational exponents, factoring, graphs of lines and conic sections.

Prerequisite: One year of high school algebra or a grade of C or better in MAT 090 or the equivalent.

MAT 101 Fundamental Concepts of Mathematics (3) i, ii, iii

Selected topics including symbolic logic, probability and statistics, metric measurement, graphic interpretation and computer science.

Prerequisite: One year of high school algebra with a Math ACT score of 14 or above; or a grade of C or better in MAT 090; or the equivalent. (Not open to the student who has credit in MAT 107)

MAT 105 College Algebra (3) i, ii, iii Linear, quadratic and miscellaneous equations and inequalities; relations and functions including polynomial, exponential and logarithmic functions; graphing; systems of equations and inequalities; matrices and determinants; sequences and series.

> Prerequisite: Two years of high school algebra or a grade of C or better in MAT 095 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 095 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.

MAT 201 Elementary Statistics (3) i, ii, iii

A basic course for students in natural sciences, the behavioral sciences, and social sciences; tabulation of data, graphic representation, measures of central tendency and dispersion, probability, types of distributions, sampling, hypothesis testing, elementary aspects of correlation.

Prerequisite: MAT 095 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 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 statics; probability, distribution theory and point estimation.

Prerequisite: MAT 209 or the

equivalent.

- MAT 350 Mathematics for Elementary Teachers (5) i, ii, iii Structure, meanings, relationships and logical reasoning in elementary mathematics; emphasis on the structure of mathematics taught in grades K-6. Prerequisite: MAT 101 or the equivalent. (Not applicable to the major or minor in mathematics).
 - MAT 351 Mathematics Methodis in in the Elementary School (2) i, ii, iii

Methodologies, strategies, materials, and curriculum development in elementary school mathematics. Must be taken concurrently with MAT 350.

Prerequisite: MAT 101 or the equivalent. (Not applicable to the 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 or ordinary differential equations.

Prerequisite: MAT 312 and CSC 188 or the equivalent.

- MAT 420 Analysis I (3) i
 - Sets and functions, sequences and series of real numbers, limits, metric spaces, limits in metric spaces, continuous functions on metric spaces. Prerequisite: MAT 209 or the

equivalent. MAT 430 Analysis II (3) ii

Connectedness, completness, 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) 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 resourses 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) 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 nonmathematical 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, heat, electricity, magnetism and optics. 4 hours lecture, 3 hours laboratory. Proceedings of the physical sector of the physical proceeding of the physical sector of the physical sector proceeding of the physical sector of the physical sector physical sector of the physical sector of t

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. 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 thermodynamics, electricity, magnetism, waves 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.

PHY 310 Modern Physics (3) i (odd numbered years) Selected topics dealing with the transition from classical physics to modern quantum physics. 3 hours lecture per week.

> Prerequisite: PHY 212 and MAT 312 or consent of instructor.

PHY 411 Quantum Mechanics (5) ii (even numbered years) Introduction to formal quantum mechanics; Schroedinger equation and introductory Heisenberg formulation. Laboratory in modern physics techniques. 3 hours lecture, 6 hours laboratory. **Prerequisite:** PHY 310.

DEPARTMENT OF MUSIC

Dr. M. Gilmour — chairperson

J.	Anderson	
C.	Crittenden	

S.	Groh
W.	Mack

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

BACHELOR OF SCIENCE IN EDUCATION DEGREE

The following programs lead to K-12 teaching certification in Missouri.

MAJOR IN MUSIC — VOCAL EM-PHASIS (SECONDARY)

Courses in music must total 69 — 71 credit hours. The following courses are required: MUS 100 (seven semesters) 146, 147, 160, 161, 162, 163, 169, 240, 241, 247, 260, 261, 262, 263, 330, 350, 449b (2 hrs), 462, 465, plus 10-12 credit hours in restricted electives.

Restricted electives for students concentrating in applied voice: MUS 370, 8 credit hours (seven semesters), MUS 349e, 2 credit hours.

Restricted electives for students concentrating in applied piano: MUS 371, 8 credit hours (seven semesters), Mus 370, 2 credit hours (two semesters), MUS 349b, 2 credit hours.

MAJOR IN MUSIC-VOCAL EM-PHASIS (ELEMENTARY)

Courses in music must total 72 hours. The following courses are required: MUS 100 (seven semesters), MUS 146, 147, 160, 161, 162, 163, 169, 240, 241, 247, 260, 261, 262, 263, 300, 330, 331, 332, 349e (1 hr), 351, 449b (1 M. Mathews T. Price F. Thomas

appreciation and understanding of music. You are encouraged to broaden your 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.

hr), 462, 465, plus 4 credit hours (4 semesters) in applied voice and 2 credit hours (2 semesters) in applies piano or voice by advisement.

MAJOR IN MUSIC - INSTRUMEN-TAL EMPHASIS

(SECONDARY)

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 (seven semesters) on the applied major instrument.

Degree candidates in music must: (a) pass a piano proficiency examination at the conclusion of MUS 247 and prior to SED 409, (b) participate in one major ensemble each semester (with the exception of the student-teaching semester), and (c) present a lecture/recital by advisement.

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.

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 composi-

tions. For non-music majors. MUS 160 Elementary Theory I (3) i

- Simple chord progression, accessory tones, harmonizing melodies and figured bass. 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.

- MUS 241 Choral Conducting (2) ii A laboratory course in problems of choral conducting. Supervised conducting experience is provided. Prerequisite: MUS 240.
- MUS 242 Instrumental Conducting (2) ii

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, and harmonic elaboration. 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.

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 Music in Early Childhood (3) i, ii

An overview of methods and materials for teaching music focusing on perceptual motor development in the primary grades. For students majoring in Elementary Education or Music Education.

Prerequisite: EED 305.

MUS 330 Music in Elementary Schools (3) i An overview of methods and materials for teaching music in grades K-6. For students majoring in Elementary Edu-

cation or Music Education.

Prerequisite: Ability to read music.

MUS 331 Comparative Elementary Music Methods. (2) ii (odd numbered years)

Analysis of the major elementary music methods: Dalcroze, Kodaly, Orff, Richards, etc.; incorporating these methods into the curriculum.

Prerequisite: MUS 300 or 330. MUS 332 General Music Activities (2)

> ii (even numbered years) Developing musical concepts and skills in grades K-12 through activities involving composing, sight singing, listening, classroom instruments.

Prerequisite: MUS 300 or 330.

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) 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.

MUS 350 History of Music: Primitive to Baroque (3) i MMusical styles and techni-

ques; from primitive music to baroque.

Prerequisite: MUS 169 and 262.

MUS 351 History of Music: Classical to Modern (3) ii Musical styles and techniques; from classical to mod-

> ern. Prerequisite: MUS 169 and 262

MUS 449 Advanced Music Literature (1-3)

> Study in music literature and performance practices: a. chamber, b. choral, c. piano, d. organ, e. percussion, f. solo instrument, g. solo vocal. May be repeated for credit.

Prerequisite: Approval of instructor.

MUS 450 Independent Study in Music (1-5)

> 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.

MUS 462 Form and Analysis (3) i

The elements, harmonic con-

tent, and formal structures of music; historical development.

Prerequisite: MUS 169 and 262.

MUS 463 Arranging (2)

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. MAJOR Ensembles

MUS 110 Chorus (1) i, ii

- Group singing of various styles of music literature. 2 hours.
- MUS 135 Marching Band (1) 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 323 String ensemble (1) 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 334 Symphonic Winds (1) ii Select ensemble emphasizing musicianship, playing skills: representative literature and public performance.

Prerequisite: Approval of the director.

MUS 335 Concert-Laboratory Band (1) ii Basic concert band literature with public performance: laboratory for conducting and arranging students; experience on secondary instruments. 3 hours.

Prerequisite: Approval of the director.

- Chamber Ensembles
- MUS 313 Swing Choir (1) i, ii Performance of popular music with choreography. 3 hours. Prerequisite: Approval of director.
- MUS 320 Percussion Ensemble (1) Chamber music performance. 2 hours.

Prerequisite: Approval of the director.

MUS 321 Brass Ensemble (1)

Chamber music performance. 2 hours.

Prerequisite: Approval of the director.

MUS 322 Woodwind Ensemble (1)

Chamber music performance. 2 hours.

Prerequisite: Approval of the director.

MUS 333 Jazz Ensemble (1) i, ii Select ensemble for public performance.

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. 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)

Tone production, breath control, articulation, and interpretation. International phonetic alphabet and Italian pronunciation for singing.

MUS 147 Foundations in Singing II (2) ii

Continuation of MUS 146. German and French pronunciation for singing.

Prerequisite: MUS 146.

- MUS 148 Class Percussion (2) i 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 (1-2) i, ii May be repeated for a total of 8 credit hours toward a degree, ½ hour for each credit hour. Prerequisite: Approval of instructor.
- MUS 371 Applied Piano (1-2) i, ii May be repeated for a total of 8 credit hours toward a degree. ½ hour for each credit hour. **Prerequisite:** Approval of instructor.
- MUS 372 Applied Strings (1-2) i, ii May be repeated for a total of 8 credit hours toward a degree. ½ hour for each credit hour. Prerequisite: Approval of instructor.
- MUS 373 Applied Brass (1-2) i, ii May be repeated for a total of 8 credit hours toward a degree. ½ hour for each credit hour. Prerequisite: Approval of instructor.

- MUS 374 Applied Percussion (1-2) i, ii May be repeated for a total of 8 credit hours toward a degree. ½ hour for each credit hour. Prerequisite: Approval of instructor.
- MUS 375 Applied Woodwinds (1-2) i, ii May be repeated for a total of 8 credit hours toward a degree. ½ hour for each credit hour. Prerequisite: Approval of instructor.
- MUS 376 Applied Organ (1-2) i, ii

May be repeated for a total of 8 credit hours toward a degree. ½ hour for each credit hour. **Prerequisite:** Approval of instructor.

MUS 377 Composition (1-2) i, ii

Private Lessons in composition, ½ hour lessons for each credit hour. May be repeated for credit.

Prerequisite: Approval of instructor.

DEPARTMENT OF SOCIAL SCIENCES

J. Jordan — chairperson

J. Allen	
Dr. R. Askins	
R. Donaldson	

Dr.	M.	Hoover
Dr.	F.	Kessler
Dr.	P.	McLear

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

Bachelor of Arts Degree

(Requires 16 credit hours in a single foreign language)

MAJOR IN HISTORY

Courses in History must total 30 credit hours, with an additional 24 credit hours required in supporting areas. The following specific courses are required: HIS 100, 110, 140, 150, 200, 330, or 340, plus 12 additional credit hours in History, including 9 credit hours numbered 300 or higher; PSC 101, 110, plus 3 additional credit hours in Political Science; SOC 110 plus 3 additional credit hours in Sociology; GEO 100; ECO 260; Social Science (other than history) 3 credit hours.

MAJOR IN POLITICAL SCIENCE

Courses in Political Science must total 30 credit hours, with an additional 24 credit hours required in supporting areas. The following specific courses are required: PSC 101, 110, 200, 210, 310, 320, plus 12 additional credit hours in Political Science courses numbered 300 or

E. Phelan	
H. Pilgram	
Dr. T. Ragland	

Dr. J. Ripple Dr. A. Rogers Dr. D. Steiniche

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.

higher; HIS 100, 110, 140, 150; SOC 110 plus 3 additional credit hours in Sociology, Geo 100, ECO 260. MAJOR IN SOCIOLOGY

Courses in Sociology must total 30 credit hours, with an additional 27 credit hours required in supporting areas. The following specific courses are required: SOC 110, 120, 230, 310, 440, 460, plus 12 additional credit hours in Sociology, including 9 credit hours numbered 300 or higher; HIS 100 or 110, 140 and 150; PSC 101, 110, 320, or 330; GEO 100, ECO 260, MAT 201.

Bachelor of Science in Education Degree

MAJOR IN HISTORY

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 your 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 your 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 your major advisor.

Bachelor of Science in 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; HIS 465.

Bachelor of Social Work Degree

Entry to the baccalaureate program in social work is through interview and acceptance by the social work faculty. Prior to the interview you must have completed at least 45 credit hours of college coursework with a minimum cumulative G.P.A. of 2.3.

Courses in Social Work must total 35 credit hours with an additional 42 credit hours in related areas. The following specific courses are required: SWK 250, 310, 320, 330, 350, 410, 420, 460 (two semesters), 470; SOC 110, 230, 330, 440, 460; PSC 101, 320; PSY 101, 304, 320, 401; ECO 260; MAT 201; BIO 101 or higher.

Minors

MINOR IN GEOGRAPHY

Courses in Geography must total 19 credit hours. The following specific courses are required: GEO 100, 210, 220, 320, 330; ESC 304.

MINOR IN HISTORY

Courses in History must total 18 credit hours.

United States History option: HIS 140, 150, 300, 330, plus an additional 6 credit hours of history courses numbered 300 or higher.

European History option: HIS 100, 110, 200, 320 or 340, plus an additional 6 credit hours of history courses numbered 300 or higher.

MINOR IN POLITICAL SCIENCE

Courses in Political Science must total 18 credit hours.

American Government option: PSC 320, 330, 410, 430, plus an additional 6 credit hours of political science courses numbered 300 or higher.

International Affairs option: PSC 200, 210, 340, 440, plus an additional 6 credit hours or political science courses numbered 300 or higher.

MINOR IN SOCIAL WORK

Courses in Social Work must total 16 credit hours. Courses in related areas must total 12 credit hours. The following specific courses are required: SWK 250, 310, 320, 330, 350; SOC 230, 330; PSY 101; ECO 260. MINOR IN SOCIOLOGY

Courses in Sociology must total 18 credit hours. The following specific courses are required: SOC 230, 310, 340, 440, plus an additional 6 credit hours of sociology courses numbered above 300.

Geography

- GEO 100 World Geography (3) i, ii, iii An introductory course which emphasizes the interrelationships between man and the natural environment.
- 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 with 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 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 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 1815-1914 (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.

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) 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)

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.

HIS 400 Civil War and Reconstruction (3) i (odd numbered years)

> Sectionalism in anti-bellum America; developing sectional crisis and coming of the Civil War; effects of the war and reconstruction on the nation. **Prerequisite:** Six hours

American History.

HIS 420 History of Africa (3)

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 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) j (even numbered years)

English mercantilism, laissez-faire and its effect on American, 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 465 Methods of Teaching the

Social Studies (2) i

Principles and methods of teaching the Social Studies in the secondary school. An indepth study of current objectives, problems, materials, and methods as applied to each discipline within the social studies curriculum.

Prerequisite: Consent of advisor.

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 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) 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.
- PSC 210 Comparative Political Systems (3) ii

A structural-functional analysis of major European political systems; comparison and contrast among such systems and with others of contemporary significance. Prerequisite: PSC 101.

PSC 300 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 decision-making 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 ser-

vices 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 350 Governments of Britain and the Commonwealth (3) i

The British constitutional system and parliamentary government, variations of the Westminster model which have evolved in the Commonwealth; governmental efforts to cope with Britain's current social and economic problems. **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 fo 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) ii (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.

PSC 440 International Law and Organization (3) i (even numbered years)

Legal and political foundations of the international system; settlement of disputes between states, prevention of war, maintenance of security, the United Nations, regional arrangements for collective defense, 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 prob-

lems 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 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 problesm; 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. Prerequistie: SWK 250.
- SWK 330 Human Behavior & Social Environment (3) ii 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 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.

SWK410 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 420 Philosophy & Policy in Social Service II (3) i Continuation of SWK 320. Analysis of the philosophy and policies of presently active social agencies; policy reforms and evaluation of their possible effectiveness. Prerequisite: SWK 320, 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.

Sociology

SOC 110 General Sociology (3) i, ii, iii Sociological concepts: social organization, human interaction with individuals and groups, population, and social change. SOC 120 General Anthropology (3) i, ii

The bio-cultural evolution of the human species, with emphasis on culture as adaptation for survival; comparison of human non-literate societies, stressing cultural variability, cultural relativity, and similarities between cultures.

- 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 conflect.

Prerequisite: SOC 110 and 230.

- SOC 320 Urban Sociology (3) i Population dynamics and urban growth: processes of urbanization, social differentiation, bureaucratization, and inequality insofar as they affect social organization and life style; the modern city and metropolitan area as distinctive units of analysis. **Prerequisite:** Six hours of
- sociology. SOC 330 The Family (3) ii 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 Mind, Self, and Society (3) i The individual as a social actor: sociological conceptualizations of mind, self, uand society; interrelationships between the individual and the

structure and process of his society.

Prerequisite: SOC 110, 230.

SOC 400 Minority Groups (3) ii The characteristics of minority groups, theoretical interpretations of minoritymajority relations; group conflict and social differentiation in complex societies.

Prerequisite: Six hours of sociology.

SOC 420 Collective Behavior (3) ii Analysis of collective phenomena, propaganda, crowds, public opinion polls, pressure groups, and social movements.

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.

SOC 450 Independent Study in Sociology (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.

SOC 460 Research Methods in Sociology (3) ii

Ethical, epistemological and theoretical foundations of the research process; basic assumptions, derivation of hypotheses, 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.

DEPARTMENT OF SPEECH, THEATRE, HUMANITIES

Dr. J. Mehl — chairperson
Dr. L. Dobbins
B. Garren

Dr. P. Mullins Dr. I. Parmenter Dr. A. Ruffino

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 beings - the 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

Bachelor of Arts Degree

(Requires 16 credit hours in a single foreign language)

MAJOR IN SPEECH COMMUNICATION

Courses must total 36 credit hours. The following specific courses are required: SPH 305, 312, 314, 324, 334, 335, 475, and 12 additional credit hours in Speech; THR 124. Major in Theatre

Courses in Theatre and related

Dr. J. Tapia B. Wise Dr. R. Wagner M. Wise

introduced 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."

areas must total 39 credit hours. The following specific courses are required: THR 124, 217, 239, 249, 259, 318, 338, 457, 467, plus an additional 12 credit hours selected from theatre coursework, 9 hours of which must be numbered 300 or higher (6 credit hours may be selected from nontheatre course-work, 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 spcific courses are required: THR 140, 218, 249 or 259, 338, 457 or 467, plus elective credits in theatre or departmntally approved coursework to total 6 credit hours, 3 credit hours of which must be numbered 300 or higher.

Minor in Humanities

Courses in humanities and approved electives must total 21 credit hours. The following specific courses are required: HUM 203, 205, 210, 230, or 420, plus an additional 9 credit hours chosen from HUM 219, 230, 250, 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

Minor in Speech and Theatre

Courses in Speech and Theatre must total 42 credit hours. The following specific courses are required: SPH 204, 305 or 324, 312, 314, 334, 465; THR 124, 218, 218, 239, 249, 318, 338, 457 or 467.

MINOR IN SPEECH AND THEATRE

Courses in Speech and Theatre must total 21 credit hours. The following specific courses are required: SPH 305 or 324, 312 or 334, 465; THR 124, 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.

SPH 105 Business and Professional Speech (3) i, ii Principles of speech directly

applicable to the professions and business; formal presentations of speeches of various types, the conference, and interview techniques. Not available for credit to students with previous or concurrent credit in either SPH 104 or 106.

- SPH 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 204 Mass Communication (3) ii Basic concepts of mass communication. Interpretation of mass communication as a persuasive, artistic, and social force.
- SPH 218 Oral Interpretation (3) i (even numbered years) Same as THR 218. Oral reading and analysis of prose, poetry, and drama.
- 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 inter-personal 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, mini-lecture, and formal lecture.

SPH 324 Small Group Communication (3) ii

Group roles, leadership styles, group structure, thought processes, and consensus methods. 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 ar-

gumentation to the persuasive process; experience in preparation and presentation through debate and discussion formats.

Prerequisite: SPH 104 or 105 or 106.

SPH 335 Theories of Rhetoric and Communication (i) (even numbered years)

Survey of the formation and transformation of rhetorical precepts from the classical period to modern; and the study of recent theories of communication.

Prerequisite: 9 credit 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 para-language (vocal cues accompaning words).

Prerequisite: SPH 104 or 105 or 106.

SPH 410 Organizational Communication (3) ii (even numbered years)

Theories and problems of human communication within a variety of organizational settings; the relationship of communication to motivation, organizational structure, non-verbal behavior, surroundings, leadership style, and information accuracy.

Prerequisite: SPH 305 or 324 or permission of instructor.

SPH 450 Independent Study in Speech (1-5) i, ii, iii

Investigation of selected prob-

lems 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 Rhetorical Criticism (3) ii (odd numbered years)

> Application of various theories of rhetoric and communication to the analysis and criticism of discourse. **Prerequisite:** SPH 335.

Theatre

THR 113 Introduction to Theatre (3) i, ii

The contributions made by directors, actors, designers, technicians, and play-wrights 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 124 Voice and Diction (3) ii Theories and techniques of improving voice and articulation. Includes mastery of a working knowledge of phonetics.

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. Course grades assigned on a pass-fail basis.

- THR 217 Play Analysis (3) i (odd numbered years) Study of the written script from the stand-point 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(even numbered years) Same as SPH 218. Oral reading and analysis of prose, poetry, and drama.
- THR 229 Stage Makeup (2) ii (even numbered years) Techniques and materials involved in make up and hair styling as required by the various styles and periods of dramatic productions. 1 hr. lecture, 2 hrs lab. (Student must furnish assorted makeup accessories).
- THR 239 Costume History and Construction (2) i (even numbered years) An historical study of stage

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 (odd numbered years)

> Stages, staging techniques and construction in relation to theatrical production requirements. 3 hours lecturedemonstation, 4 hours lab.

THR 259 Stage Lighting (3) ii (even numbered years)

A continuation of THR 249; emphasizes the element of state 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 (odd numbered years) 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. 2 hrs. lecture, 2 hrs. lab. Prerequisite: THR 239
- 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 Theater 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 in-

- structor. THR 418 Independent Project 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. Prerequisite: THR 217, 318 and /or consent of instructor.
 - THR 438 Independent Projects in Directing (1-3), i, ii, iii 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.

Prerequisite: THR 217, 239, 249,259, 338 and /or consent of instructor.

THR 449 Independent Projects in Technical Theatre (1-3) i, ii, iii

Project course involving the design and execution of scenery, lights, sound, properties, costumes, or make-up for a full-length departmental production.

Prerequisite: THR 229, 239, 249, 259 or 339 and 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 insturctor.

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, iii The social and intellectual history of man as reflected by the literature, art, music, drama and discourse of man from Renaisance to present. HUM 210 Introduction o 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
- HUM 230 Ethics (3) ii

arguments.

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 250 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 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.

THE DIVISION OF CONTINUING EDUCATION

Through the Division of Continuing Education, Missouri Western State College provides a variety of programs including:

- 1. One day seminars and workshops.
- 2. Evening classes which may be scheduled for one session to sessions for a full semester.
- 3. Courses which produce academic credit for specialized populations in the community.

The resources of the campus and community are utilized through the college's efforts to meet the educational needs of the community. A special unique feature of Continuing Education classes is that they are scheduled to meet the special needs and requests of the community and do not follow the normal academic semester schedule.

Specifically, the activities of the Division of Continuing Education are guided by the following statement of purposes:

I. 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/her cultural knowledge.

enhance the pursuit of avocational interests.

provide, within specified limits, full academic credit for individuals enrolling in specialized courses established by the Division of Continuing Education.

II. Provide services to the community by organizing, sponsoring or cosponsoring specialized short courses, workshops, and seminars designed to be of value to identifiable groups or organizations and to the public at large.

Admissions 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, you may enroll during the second session. Enrollment consists of the completion of a short form needed for report and roster purposes.

Fees

You pay fees for the courses during enrollment. Because of the diverse nature of programs offered through the Division of Continuing Education, registration fees vary from one offering to another. Fees are set by the Division 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 Division: phone 271-4218.

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 you 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 programs.

The Office assists you in enrollment plans and serves as a communication center for both students and faculty in the Evening and Saturday Program.

If you find it necessary to withdraw from college while a semester is in session you are 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. You will be given a "failing" grade in each subject if the formal notification of withdrawal has not been made.

SUMMER SESSION

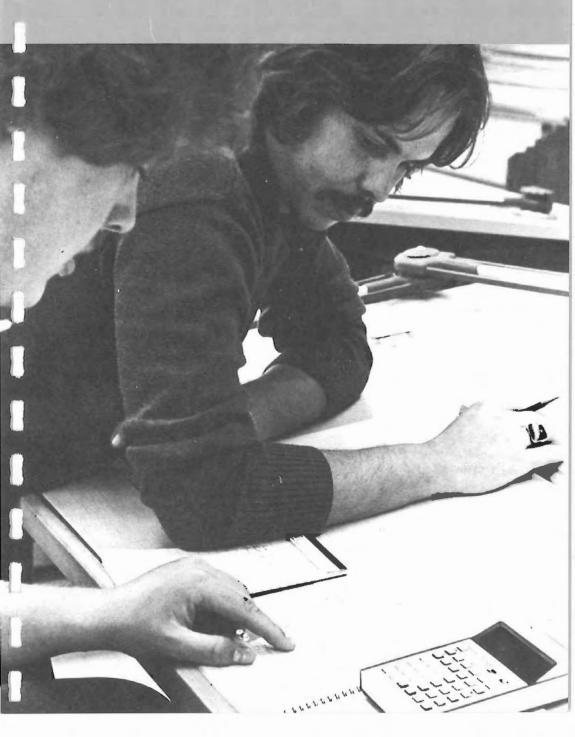
Missouri Western State College summer sessions are designed for: Students who wish to accelerate their progress.

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.

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