



Missouri Western State College
Catalog 1980-81

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Missouri Western State College Catalog 1980-81

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CONTENTS

The College	1
The College	3
Goals of the College	4
Campus Map	5
Academic Calendar	6
General Information	9
Admission	11
Registration	16
Financial Aid	18
Student Affairs	27
Academic Policies and Regulations	32
Requirements for Graduation	38
Degree Programs	41
Academic Programs	45
The Division of Career Programs	47
Department of Agriculture	48
Department of Business and Economics	53
Department of Criminal Justice	61
Department of Engineering Technology	64
Department of Military Science	69
Department of Nursing	72
Program in Automotive Technology	74
Program in Lawyers' Assistant	76
Program in Pilot Training	78
Program in Secretarial Science	79
General Electives	81
The Division of Education and Psychology	82
Teacher Education	83
Elementary and Special Education	85
Secondary Education	88
Department of Health, Physical Education, and Recreation	90
Department of Psychology	98
The Division of Liberal Arts and Sciences	101
Department of Art	102
Department of Biology	105
Department of Chemistry	108
Department of English and Modern Languages	112
Department of Mathematical Sciences	121
Department of Music	126
Department of Social Sciences	130
Department of Speech, Theatre, and Humanities	136
The Division of Continuing Education	140
Evening and Saturday Program	141
Summer Session	141
Appendices	143
Appendix A: Course Abbreviations	145
Appendix B: The Board of Regents	146
Appendix C: Administrative Staff	147
Appendix D: Faculty 1980-81	150
Index	157

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. 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 by the National Council for Accreditation of Teacher Education, Missouri Western State has entered its second decade with an enrollment approaching 4,000 students, with over 150 faculty, and with a modern campus offering laboratories, classrooms, lecture halls, learning resources center, and many other facilities for instruction and recreation.

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 the college enters the 1980's, Missouri Western State continues 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 their talents.

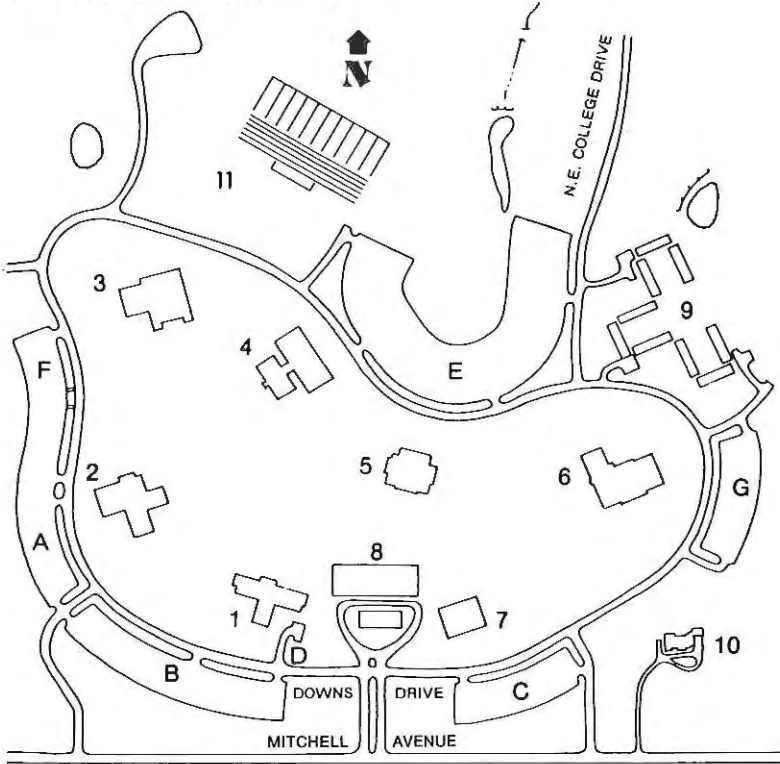
This mix in the student body—of adults with experience in the world of work and young men and women entering directly from high school—provides an exciting and dynamic learning environment. It affords all Missouri Western State students the opportunity to learn from one another. It brings life to the classroom and challenge to our faculty. Above all, it provides the student with a special experience intended to expand horizons and provide rich career opportunities.

GOALS OF THE COLLEGE

Aware of its obligations to the state, to the student as a person and a seeker of knowledge, and to itself as an academic community committed to the increase of knowledge, Missouri Western State College, through its Board of Regents, has the following goals:

1. To provide educational opportunities suited to varying needs by developing:
 - Bachelor-degree programs in selected fields of the arts and sciences, education, technology, and business administration;
 - One-year certificate and two-year associate degree programs in selected vocational and technical fields;
 - Preprofessional 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.
2. To provide an appropriate learning environment through the development of proper facilities and a strong faculty, and by supplying necessary auxiliary services and recreational and cultural opportunities.
3. To 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 cultural and recreational opportunities and appropriate services.

CAMPUS MAP



Key

1. Frank Popplewell Classroom and Administration Building
 2. Dr. Thompson E. Potter Fine Arts Center
 3. Health, Physical Education, and Recreation Building
 4. Engineering Technology Building
 5. Evan R. Agenstein Science and Mathematics Building
 6. Nelle Blum College Center
 7. Warren E. Hearnnes Learning Resources Center
 8. Student Services/Classroom Building
 9. Residence Hall Complex
 10. President's Home
 11. Spratt Memorial Stadium
- A-G Parking Lots

Access to the Campus

North (from Mound City, Savannah, and Maryville): Go south on I-29. Take Highway 36 East exit. Travel east on 36 to Riverside Road exit; turn left onto Riverside Road. At Mitchell Avenue, turn left, and travel west to college entrance (on right).

West (from Kansas): Go east on Highway 36, past I-29 interchange, to Riverside Road exit; turn left onto Riverside Road. At Mitchell Avenue, turn left, and travel west to college entrance (on right).

East (from Chillicothe and Cameron): Go west on Highway 36 to Riverside Road exit; turn right onto Riverside Road. At Mitchell Avenue, turn left, and travel west to college entrance (on right).

South (from Kansas City): Go north on I-29 to Highway 36 East (Cameron) exit. Travel east on 36 to Riverside Road exit; turn left onto Riverside Road. At Mitchell Avenue, turn left, and travel west to college entrance (on right).

ACADEMIC CALENDAR

Summer Session 1980

The summer schedule is based on a Monday-Thursday week.

June 2, Mon.	Registration
June 3, Tues., 7:00 a.m.	Classes begin
June 30, Mon., 10:00 p.m.	End of first half of classes
July 3, Thurs.	Holiday
July 29, Tues., 10:00 p.m.	Classes end
July 31, Thurs., 4:30 p.m.	Final grades due

Fall Semester 1980

Aug. 14-15, Thurs.-Fri.	Faculty planning days
Aug. 18-19, Mon.-Tues.	Registration
Aug. 20, Wed., 7:00 a.m.	Classes begin
Sept. 1, Mon.	Holiday
Oct. 17, Fri.	Student Activity Day
Nov. 26, Wed., 7:00 a.m.	Thanksgiving vacation begins
Dec. 1, Mon., 7:00 a.m.	Classes resume
Dec. 8, Mon., 10:00 p.m.	Classwork ends
Dec. 9, Tues., 4:30 p.m.	Final exams begin
Dec. 16, Tues., 4:30 p.m.	Fall semester ends

Spring Semester 1981

Jan. 12-13, Mon.-Tues.	Registration
Jan. 14, Wed., 7:00 a.m.	Classes begin
Mar. 16-20, Mon.-Fri.	Spring recess
Mar. 23, Mon., 7:00 a.m.	Classes resume
Apr. 17, Fri.	Holiday (Good Friday)
May 5, Tues., 10:00 p.m.	Classwork ends
May 6, Wed., 4:30 p.m.	Final exams begin
May 13, Wed., 4:30 p.m.	Spring semester ends
May 14, Thurs.	Commencement

Summer Session 1981

The 1981 summer schedule may be based on a Monday-Thursday schedule.

June 1, Mon.	Registration
June 2, Tues., 7:00 a.m.	Classes begin
July 3, Fri.	Holiday
July 28, Tues., 4:30 p.m.	Classes end

Fall Semester 1981 (tentative)

Aug. 18-19, Tues.-Wed.	Faculty planning days
Aug. 20-21, Thurs.-Fri.	Registration
Aug. 24, Mon., 7:00 a.m.	Classes begin
Sept. 7, Mon.	Holiday
Oct. 9, Fri.	Student Activity Day
Nov. 24, Tues., 4:30 p.m.	Thanksgiving vacation begins
Nov. 30, Mon., 7:00 a.m.	Classes resume
Dec. 12, Sat., 4:30 p.m.	Classwork ends
Dec. 14, Mon., 7:00 a.m.	Final exams begin
Dec. 19, Sat., 4:30 p.m.	Fall semester ends

Spring Semester 1982 (tentative)

Jan. 14-15, Thurs.-Fri.

Jan. 18, Mon., 7:00 a.m.

Feb. 22, Mon.

Mar. 15-29, Mon.-Fri.

Mar. 22, Mon., 7:00 a.m.

May 10, Mon., 10:00 p.m.

May 11, Tues., 7:00 a.m.

May 17, Mon., 10:00 p.m.

May 18, Tues.

Registration

Classes begin

Washington's Birthday holiday

Spring recess

Classes resume

Classwork ends

Final exams begin

Spring semester ends

Commencement

Summer Session 1982 (tentative)

June 1, Tues.

June 2, Wed., 7:00 a.m.

July 5, Mon.

July 28, Wed., 10:00 p.m.

Registration

Classes begin

Holiday

Classes end

General Information

ADMISSION

Students who wish to take credit courses at Missouri Western State College are admitted to the college in one of the following three categories.

Students who plan to work toward a college degree and have not attended any college before should read "First Time in College."

Students who are transferring from another institution should read the "College Transfer" section. Students who are not seeking a degree and wish to take credit courses are "Special Students."

Transfer students who hold an Associate of Arts degree from an accredited Missouri public institution are considered to have satisfactorily completed MWSC's general studies requirements (see page 43), and will be admitted at the junior-year level.

Graduates of accredited high schools from both Missouri and other states will be admitted to Missouri Western State College under the same policies.

First Time in College

Students who have not previously attended a college or university must provide:

- an application for admission,
- a \$5 application 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).

Foreign students must provide an application for admission, application supplements, 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, and proof of completion of high school or its equivalent.

Foreign students transferring to MWSC from other U.S. institutions must contact the Office of Admissions and Records for information regarding additional admission requirements.

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.

Freshman orientation dates are July 14-15, August 2, and August 12, 1980.

College Transfer

Students who have previously attended a college or university must provide:

- an application for admission,
- a \$5 application fee, and
- an official transcript from each college and university attended.

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.

Transfer students seeking a bachelor's degree must complete at least 30 of the last 45 credits at Missouri Western State College (exclusive of credit by examination). A minimum of 9 credit hours of the residence requirement must be in the major field. Education majors must also include student teaching in the residence requirement.

Transfer students seeking the associate degree must complete the last 15 hours at MWSC (exclusive of credit by examination). A minimum of 6 credits of the residence requirements must be in the major field.

Special Student

The special student category is for individuals who are not seeking a degree at Missouri Western State College but desire to enroll in credit courses. Students under suspension from Missouri Western State are *not* eligible to be admitted under this category.

To be admitted, the applicant must provide an application for admission and a \$5 admission fee.

High school students who have completed the junior year are eligible to attend Missouri Western State College as a special student upon the high school principal's certification that the applicant is academically capable of pursuing college-level work. The applicant must provide:

- an application for admission,
- a \$5 matriculation fee, and
- certification from the high school principal.

Those who enroll as special students and later decide to seek a degree must reapply for admission under the appropriate admissions category. (Consult the Admissions and Records Office for more information.)

Nonresident credit and credit by examination will not be entered on the permanent record of a special student until he or she reapplies as a degree-seeking student and has met all admission requirements under the appropriate category of admission.

Nonresident Credit

Missouri Western State College may accept a total of 30 hours work (maximum applicable to a degree) obtained through nonresident credit or credit by examination.

Credit earned through the United States Armed Forces Institute (USAFI) 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, and correspondence work from regionally accredited institutions of higher education are generally recognized if documented by written records from the U.S. government and other institutions of higher education.

Credit by Examination

If travel, employment, extensive reading, or other unique education experience appears to have given proficiency in courses required in the curriculum equivalent to that ordinarily attained by the traditional classroom manner, the applicant may be granted permission to attempt college credit through examination. College credit by examination is available for all courses required in general education and in 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 Examination 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 the applicant should take subject exams which are not normally employed for

the test-out program, the result will be reviewed by the appropriate department, and credit may or may not be awarded.

Applicants are eligible to receive credit by examination only if they:

- have applied for admission to MWSC and paid the application fee,
- are enrolled before credit obtained through examination is awarded,
- are not enrolled in a course for which an examination is requested,
- are granted written permission by all appropriate college authorities before taking the exam unless it is the CLEP General for a first-time college student.

If the student is a transfer, he or she must have complete transcripts of previous college credit in the Records Office before written permission for the test-out will be granted. Students are ineligible to take a test for credit by examination if the credit they would earn on that test makes them eligible for graduation at the end of that semester.

Students are not eligible to receive credit by examination if they 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, students request credit by examination early in their college career to avoid ineligibility at a later date. Transfer students 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 this on-campus 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 (for a list of dates, write to the Counseling and Testing Office, MWSC, SS/C 112). The test fees are \$20 for each test.

A minimum of a 500 scaled score must be attained on the CLEP General Examination for the student to receive credit, except in English which requires a 600 scaled score. High school seniors should take the CLEP General Examination before the end of April. The table on page 14 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 also may be received in specific subjects. A list of courses for which subject tests are available may be obtained from the Counseling and Testing Office. Successful performance on a subject test is determined by the academic department which administers the course.

Applications for subject examinations may be acquired from the Counseling and Testing Office. The test dates are:

- November 8, 1980 (application deadline October 10, 1980)
- April 18, 1981 (application deadline March 20, 1981)
- June 13, 1981 (application deadline May 15, 1981)

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. Students should contact the Counseling and Testing Office prior to taking a CLEP Subject Examination to determine whether or not that particular examination is acceptable for obtaining credit.

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 directed to the Counseling and Testing Office. The following procedure will be observed:

- Students must present a written request in which the reasons for asking for the special date are stated.

- The department chairperson will decide whether or not the petition is justified and may ask for verification.
 - If the circumstances warrant it, the department may set up a special test time.
- The two types of subject examinations are:
- Single-level subject matter test. The student is required to take a separate test for each course for which he or she desires to obtain credit. The test fee is \$20 for each CLEP exam and \$15 for each departmental test.
 - Multilevel subject test. 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 the student desires credit by examination in two or more courses in a sequence covered by such a test, a test fee of \$25 is applicable. The student will be given credit for each course in the sequence for which he or she demonstrates the minimum standards of proficiency as designated by the academic department.

CLEP General Tests and Credit Hours

	<i>Credits</i>		<i>Credits</i>
ENGLISH		MATHEMATICS	
<i>General Studies requirement met</i>		<i>General Studies requirement met</i>	
ENG 100 and	3	MAT 101 and	3
ENG 104	3	MAT 105	3
HUMANITIES		NATURAL SCIENCE	
<i>Subscores</i>		<i>Subscores</i>	
High in Fine Arts		Higher in Biological	
<i>General Studies requirement met</i>		Lower in Physical	
Groups 1 and 3 in Humanities	6	<i>General Studies requirement met</i>	
		BIO 101	6
<i>Subscores</i>		<i>Subscores</i>	
Relatively equal subscores		Lower in Biological	
<i>General Studies requirement met</i>		Higher in Physical	
Groups 2 and 3 in Humanities	6	<i>General Studies requirement met</i>	
		One of the following:	
<i>Subscores</i>		CHE 101 or	6
High in Literature		PHY 101	6
Low in Fine Arts			
<i>General Studies requirement met</i>		SOCIAL SCIENCE AND HISTORY	
Groups 1 and 2 in Humanities	6	<i>General Studies requirement met</i>	
		Groups 1 and 2 of Social Science and	
		History	
			6

If the student should decide not to take a test after the petition for test-out has been processed, a refund request may be initiated in the Counseling and Testing Office. However, \$5 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 ENG 112, Honors Composition and Rhetoric, and upon its successful completion are also awarded 3 hours credit in ENG 104, Composition and Rhetoric. This process fulfills the college's written composition requirements in general studies. The English major who successfully completes this program enters ENG 224, Advanced Composition and Literature, a course required of all English majors.

ACT Test Schedule

<i>Test dates</i>	<i>Registration deadlines</i>
October 18, 1980	September 19, 1980
December 13, 1980	November 14, 1980
February 14, 1981	January 16, 1981
March 28, 1981	February 27, 1981
June 13, 1981	May 15, 1981

FINANCIAL AID

The college's financial aid program is designed to assist those students who would not otherwise be able to attend Missouri Western State College. Scholarships, fee waivers, or other forms of 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 (ACT) 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. A copy of the IRS 1040/1040A is required to verify the financial data on each application. In case an IRS 1040/1040A is not filed, copies of the appropriate W-2 forms will be required.

Students are expected to assist by using previous savings, earnings from summer employment, and, if it should be necessary, a part-time job in conjunction with other financial aid at Missouri Western State. Parents are expected to contribute funds from their income and assets. The amount expected from parents is the difference between the student's total expenses and the amount of 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, and 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 1980-81 school year are as follows:

STATE RESIDENTS

	<i>On campus</i>	<i>Off campus</i>
Tuition and fees	\$ 520	\$ 520
Room and board	1,200	1,250
Books and supplies	150	150
Travel	400	600
Personal	300	300
Miscellaneous	430	430
Total	\$3,000	\$3,250

NONRESIDENTS

	<i>On campus</i>	<i>Off campus</i>
Tuition and fees	\$ 968	\$ 968
Room and board	1,200	1,250
Books and supplies	150	150
Travel	400	600
Personal	300	300
Miscellaneous	430	430
Total	\$3,448	\$3,698

In packaging financial aid, the Financial Aid Office considers (1) grants, (2) work-study, and (3) loans (in that order). The office tries to meet each student's needs without the use of loans whenever possible. Since the amount of aid awarded is a reflection of the financial position of the student's family, it is regarded as confidential. The amount awarded is determined on the basis of need, and any additional prizes or awards received from outside agencies must be reported to the Financial Aid Office.

Application Procedure

To be considered for financial aid opportunities, the applicant 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, along with the appropriate federal income tax return (1040/1040A), must also be submitted. The Family Financial Statement may be secured from high school guidance offices or from the Financial Aid Office at MWSC. The Family Financial Statement should be

completed and mailed to ACT, as instructed on the form, in the early spring before the school year for which financial aid is requested. Four weeks should be allowed for processing.

This procedure is required each year for returning students who desire financial assistance.

Awarding of Financial Aid

May 1 of each year is the deadline date when the completed application must be in the Financial Aid Office at Missouri Western State College. At that time applications are considered, awards made, and the student notified. Applications will be accepted after May 1, but chances of receiving financial assistance will be much less since most institutionally awarded aid will already have been disbursed.

Student Aid Programs

Basic Educational Opportunity Grant: The federal BEOG program entitles every student wishing to attend college up to \$1,800 minus parental contribution, 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 nonreligious 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 for 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 Program: 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 Student Loans: The college participates in the Federally Insured Student Loan program. Through the program, students are loaned necessary funds from their local banks. Applicants should contact their local bank or the Financial Aid Office for more information.

Law Enforcement Education Program (LEEP): The Law Enforcement Education Program 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. 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 long-term low-interest loans to help meet costs of education.

Dr. William L. and Mildred T. Landfather Loan: Landfather funds provide interest-free loans for five students each semester. The loans are awarded by the Financial Aid Office to students majoring in science or mathematics. The loan may be renewed each semester, provided the recipient makes satisfactory academic progress. Repayment of the loan after graduation is arranged for the convenience of the student.

Institutional Loans: The college has various student loan funds available to enrolled 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 minimal. Liberal repayment schedules are available; however, the loan is a short-term emergency loan and must be paid back the same semester. Students should contact the Financial Aid Office for further information.

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 office of part-time job location and development.

Fee Waiver Scholarships

- The college reserves the right to limit the number of fee waiver scholarships awarded each year by scholarship categories.
- Applications for new or renewable fee waiver scholarships must be made annually to the college by May 1 and written acceptance of the scholarship by July 1.
- Students who apply for a fee waiver scholarship will be notified of the status of the scholarship by June 15.
- Fee waiver scholarships are awarded only to students carrying 12 or more semester hours each semester.
- Students must have made application for admission to MWSC to receive a scholarship.
- Fee waiver scholarships are valid for eight semesters provided all requirements are met each semester. The eight semesters must be completed within six years of the date of matriculation.
- When qualified applicants exceed the number of fee waiver scholarships to be awarded, the application date will be the determining factor.

Academic Fee Waivers

Regents Honor Scholarship: Awarded by MWSC annually to all Missouri students who rank in the top 20 percent of their Missouri high school graduating class, the Regents Honor Scholarship is restricted to full-time students entering college for the first time. This award must be used in the student's first eight regular semesters (excluding summer session) of full-time attendance (semesters need not be consecutive). The student must maintain a 3.0 grade-point average (GPA) or better each semester to remain eligible. The scholarship is for \$130 per semester.

Academic Scholarship: Awarded by MWSC annually to all Missouri students who rank in the top 33 percent of their Missouri high school graduating class, the academic scholarship is restricted to full-time students entering college for the first time. This award must be used in the student's first two regular semesters (excluding summer session) of full-time attendance (semesters need not be consecutive). The student must maintain a 3.0 GPA or better each semester to remain eligible. The scholarship is for \$100 per semester.

Special Award: This award is given by MWSC annually to Missouri students selected by each Missouri high school. One scholarship is awarded for each seventy-five graduating seniors. The Special Award is restricted to full-time students entering college for the first time. This award must be used in the student's first two regular semesters (excluding summer sessions) of full-time attendance (semesters need not be consecutive). The student must maintain a 3.0 GPA or better each semester to remain eligible. The award is for \$100 per semester.

G.E.D. Award: Awarded by MWSC annually to all Missouri residents who score 265 points or higher on the General Education Development Test, the G.E.D. Award is restricted to full-time students entering college for the first time. This award must be used in the student's first eight regular semesters (excluding summer sessions) of full-time attendance (semesters need not be consecutive). The student must maintain a 3.0 GPA or better each semester to remain eligible. The award is for \$130 per semester.

Community College Scholarship: Awarded by MWSC annually to Missouri students who have completed 57 hours at a junior or community college with a cumulative grade-point average of 3.0 or above, the award is restricted to full-time students entering MWSC for the first time, and must be used in the student's first four regular semesters (excluding summer sessions) of full-time attendance (semesters need not be consecutive). The student must maintain a 3.0 GPA or better each semester to remain eligible. The scholarship is for \$130 per semester.

Departmental Fee Waivers

Art and Music Scholarships: The Departments of Art and Music offer a number of scholarships each year to help cover incidental fees to those students who show particular ability in the fields. Interested students should contact the respective department.

Banking and Finance Scholarships: Missouri Western State College offers fee waiver scholarships to eligible nonresident students from Kansas and Nebraska 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. 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 of the following courses: BAN 250, 251, 252, 253. 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. The scholarship must be renewed each semester with a letter of nomination.

National Guard Scholarship Program: This program is offered by MWSC to members of the Missouri National Guard, and includes twenty-five \$130 fee waivers. Fee waivers are renewable each semester for a total of 124 semester hours. To qualify for the free educational benefits, the student must: meet MWSC's admission requirements, have a composite score of 18 or better on the ACT examination, 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 fulltime enrollment of 12 semester hours, carry a 2.3 GPA, and accept no other scholarship and/or fee waiver to MWSC. (With the advice of the director of financial aid, students can select the scholarship and/or fee waiver that will be of greatest benefit.) Students provide the college a certification letter of enlistment status with the guard at the beginning of each semester. Information about the scholarships may be obtained from high school counselors, the local National Guard recruiter, or the nearest guard commander.

ROTC Fee Waiver: For information about this fee waiver scholarship, contact the Department of Military Science.

Speech and Theatre Scholarships: The Department of Speech, Theatre, and Humanities offers a number of scholarships each year to help cover incidental fees to students 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 GPA thereafter. Interested students should contact the department.

Departmental Scholarships

Agriculture Scholarships: Applications for these scholarships are obtained through the Department of Agriculture.

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. 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. 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. This scholarship will be awarded to a student upon completion of the junior year who has demonstrated leadership abilities, academic excellence, and financial need.

American National Bank Scholarship: The American National Bank in St. Joseph has given \$400 to make one or two scholarships available for students majoring in agriculture. The recipients shall demonstrate leadership ability, academic excellence, and financial need.

Buchanan County Soil and Water Conservation Scholarship: 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 and interested in pursuing a career in the general area of soil and water conservation. The recipient must be a full-time resident of Buchanan County.

St. Joseph Stockyards Award: This award is made to a student selected by the Agriculture Scholarship Committee. The student must be an agriculture student majoring in animal science; other criteria are 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 who has shown financial need and academic excellence.

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. The student must have a minimum 2.3 high school or college GPA and must not be the recipient of another scholarship. Application should be made to the department.

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 fees incurred.

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 GPA 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 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 Department of English.

Society for the Preservation and Encouragement of Barbershop Quartet Singing in America, Inc.: Annual scholarships will be offered to students majoring in vocal music. The Missouri Western State College Scholarship Committee asks the vocal music faculty for assistance in naming the recipients.

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 Department of Social Science.

V. Fran Quammen Scholarship: 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. Applicants will be screened by a panel of judges selected from the speech faculty.

Competitive Scholarships

Scholarships are available to Missouri Western State College students who qualify. Applications for scholarships may be picked up in the Financial Aid Office, and should be returned to that office on or before April 1. 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 GPA 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

Buchanan County Medical Society Nursing Scholarship: 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.

Culver-Gettys Memorial Scholarship: This scholarship is given in memory of Lt.

Col. Charles M. Culver and Capt. 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 GPA of 2.5 or better and show evidence of financial need. The scholarship shall be in the amount of \$100 for the first semester, and, if the student continues to achieve a cumulative GPA of 2.5, may be continued for the second semester. Preferably, the student should be planning a career in 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 awarded for one semester at a time; the recipient is 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 should be made to the Scholarship Committee.

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 GPA. Selection will be made by the Missouri Western State College Scholarship Committee.

F. Gregg Thompson Memorial 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 premedical field. If a premedical 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 applicants have equal academic standing, financial need will be the deciding factor.

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 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 Scholarships: These scholarships were established in 1961 by the First National Bank of St. Joseph as an expression of its interest in the importance of higher education and in appreciation of the contribution Missouri Western State College is making to the betterment of St. Joseph and surrounding area. The scholarships cover fees. 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, the recipient must reapply. Application is made to the Scholarship Committee. The committee selects the two students who are best qualified from the standpoint of scholarship and financial need.

Frank R. Smith Memorial Scholarship Fund: Frank R. Smith served as director of public relations and of publications from 1967 to 1979. In his memory, a scholarship fund has been established through the MWSC Foundation, Inc. The fund will provide assistance to students based on satisfactory scholastic standing and their demonstrated need. Recipients will be selected by the MWSC Scholarship Committee, and interested students should contact the committee. Preference will be given to students with an interest in communications and journalism.

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 as a scholarship. 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 in preengineering, 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 funds is awarded each year by the Scholarship Committee to a student whose major area of study is engineering or technology.

Scholarships Having No Specific Requirements

Alma Pletcher Endowment Trust Scholarship: A \$100 scholarship a year for upper-classmen is awarded to a full-time student (12 hours) in good standing.

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, George H. Andrews, Cora Ann Johnson Whitaker, and James W. Whitaker. Interest from the \$10,000 scholarship fund is awarded annually to Missouri Western State College students who have demonstrated academic excellence and 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 former 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.

First Trust Bank Scholarship: This scholarship was established in 1969 by the First Trust Bank of St. Joseph to express recognition for the contribution the college is making to northwest Missouri. The scholarship is awarded by the Scholarship Committee to the best qualified applicant who has financial need.

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

Missouri Western State College Foundation Scholarship: Designated monies of the foundation will be used to award scholarships 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 Service Management: One \$250 scholarship for every 100 boarding students is awarded 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 pur-

poses. 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.

Scholarships Awarded by Donors

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 woman. Application for this scholarship is made through the Financial Aid Office or a member of the organization.

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.

B'nai B'rith Women's Division Award: Selection is made from a list of eligible students by a committee from the organization. Applications can be obtained from the Financial Aid Office or from a member of the organization.

Carolyn B. Ullman Teacher Education Scholarship: The Missouri Congress of Parents and Teachers offers a scholarship to students wishing to prepare to teach in public elementary schools in the state of Missouri. The awards are based on character, scholastic record, aptitude for teaching, and sound health. Application forms may be secured from the Financial Aid Office.

East Hills Merchants Association Scholarships: These scholarships are awarded annually to athletes in any major sports field. Application should be made to the athletic director no later than May 1 of each year.

National Association of Power Engineers, Missouri Chapter no. 1, St. Joseph Scholarship: This organization has made a scholarship available to a preengineering student who is in the freshman year and who expects to complete the 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.

National Association of Women in Construction (NAWC) Scholarship: A \$100-per-year scholarship has been established by the St. Joseph Chapter No. 162 of the National Association of Women in Construction, to be awarded to a student majoring in a construction-related field, preferably a woman. This scholarship is available to any student who demonstrates financial need. The student must maintain standard academic progress. Applications will be accepted at the Financial Aid Office; selection will be made by the local chapter.

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.

Additional financial aid and scholarship information may be obtained upon request from the Financial Aid Office, SS/C 101.

STUDENT AFFAIRS

Academic Advisement

Academic advisement is an important function, since proper advisement can prevent many errors in the choice of major or courses.

Before the student formally declares a major, he or she should maintain close contact with the Counseling Center and those academic departments of particular interest.

The student officially declares a major by contacting the academic department offering the major and filing a Major-Minor Application form. In order to prevent misunderstandings, this formal declaration should be done early in the college career. The college catalog in effect at the time of completion of the Major-Minor Application will be used to determine graduation requirements. The Major-Minor application remains effective for no more than six years following its approval date.

Students are responsible for the requirements of their educational programs and should work closely with their advisors.

Counseling

Counselors are available to assist the student in becoming oriented to the college, selecting courses, making a career choice, and understanding and attempting to resolve any personal difficulties.

The Career Information Center has information to broaden the student's understanding of different careers which match individual student profiles evidenced by the interpretation of career planning instruments such as the Career Planning Profile, the Strong-Campbell Interest Inventory, and the American College Testing result.

Trained counselors are available to assist in resolving personal and social problems that may interfere with a college education.

New students may attend a one- or two-day orientation session designed to familiarize the student with the college and provide assistance with academic advisement and schedule planning. Subsequent interviews with a counselor may be arranged at any time thereafter. Counselors attempt to help the student reach a state of self-reliance through a clearer understanding of individual potential.

Testing

The college serves as a testing center for the American College Test. Other tests are available on an individual basis. Students 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.

Students may test out of as much as 30 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 (see page 12).

Student Conduct

As a condition to remaining at MWSC, the college expects all students to conduct themselves 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 halls are contemporary in design. Each suite includes a large living room with two adjoining bedrooms on either side and two bathrooms. Each suite also has its own outside entrance, 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 students to come to St. Joseph prior to the beginning of the academic year to locate suitable housing.

College Center

The College Center houses the bookstore, cafeteria, snack bar, Health Services, the Dean of Students Office, Student Government Association, College Center Board, and the security and football offices. Recreational games and equipment are also available in 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 and personal items. A 5 percent discount is given on all student purchases.

Health Service

The Health Service is under the direction of on-call medical doctors and a full-time registered nurse. Registered nurses are on duty during class hours. They provide first aid, administer authorized medication, counsel in health-related problems, and make referrals to doctors, dentists, or public health officers. The on-call physicians prescribe treatment for students seeking medical attention.

Prior to treatment, students must supply a complete medical history form. All health records, including a permanent daily record of visits to the Health Service Center and of the treatment prescribed, are filed in the Health Service office.

A health insurance plan is made available to students each year; it is strictly voluntary. After a plan is submitted to several insurance companies, the lowest bid is accepted. From that point on, in accordance with a recent ruling by the Missouri attorney general, the college ceases responsibility for the insurance program. The Health Service strongly recommends that students obtain the coverage if they are not covered by a family health insurance plan. It is extremely important for those students living away from home.

Library

The library is located in the Hearnes Learning Resources Center, which houses over 100,000 volumes, periodicals for research and recreation, microformat mate-

rials, films, records, filmstrips, tapes, and a variety of other print and nonprint material, making information available in the most suitable medium.

Using a computerized system for interlibrary loan, the LRC also makes available two million items in libraries across the United States. 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. Seminar rooms are available for group study.

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 the public. 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 college relations.

The office schedules school assemblies and staff visits off campus, arranges luncheons and meetings for area educators, supervises information centers, and consults with officials in business and industry in the college district regarding educational programs.

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

It makes available information concerning job openings, compiles registrants' credentials, and arranges interviews with prospective employers. The placement service assists employers by notifying them of qualified applicants, furnishing credentials, and arranging for interviews.

Students are encouraged to use the services by registering with the Placement Service in the first semester of the 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 able to continue using the library and certain other college facilities. Third, it is an organization that helps the college to achieve its long-range goal of educational service to the community.

Association members receive the *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 twenty-four-member Board of Directors, with an executive director providing on-campus 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. All new MWSC graduates are provided one year's free membership in the association.

Foundation

Established in 1969 as a separate corporate entity, the MWSC Foundation, Inc., acts as the college's nongovernment fund-raising arm. Coordinated by a twenty-five-member Board of Directors, the foundation works closely with the college administration to identify needs, approach possible fund sources, and disburse grants to appropriate college areas.

Among the foundation's contributions to the college in recent years have been approximately \$10,000 per year of 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, help in the 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 an important part of the educational philosophy at Missouri Western State College. While the information gained in the academic classroom is important in shaping the future of the student, the experience of participating as a citizen in an academic community is equally important.

Student Government

Composed of elected representatives from the student body, the Student Government Assembly (SGA) is the primary student governing body on the campus. All student committees, activities, 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 in football, basketball, baseball, golf, tennis, track, and volleyball. Competition will begin in other sports as they can be staffed and facilities 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 athletic program. Only through student interest will the athletic program grow and continue to provide exciting activities enjoyed on campuses today.

Intramurals

A full intramural sports program is offered to college personnel. The program of activities includes individual, dual, and team sports for men and women.

The intramural program encourages the development of mental, physical, emotional, and social health. 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 are sponsored each year by the Department of Speech, Theatre, and Humanities. Reader's theater, oral interpretation, and debate activities are also available to students.

Music

Musical groups include the marching band, stage band, various instrumental ensembles, the concert choir, and vocal ensembles, all sponsored by the Department of Music. Any student may audition for membership in these groups.

Social Life

The social life changes from year to year to meet the current needs and interests of 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, prominent speakers, and movies. Additional social events are developed and sponsored by the various organizations and interest groups on the campus.

Organizations

A list of organizations currently active on the campus appears below. 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
Engineering Technology Society
Forensics Society
Griffon Guard
Griffon Theater Guild
Journalism Club
Kappa Delta Pi
Le Circle Francais
Missouri State Teacher's Association
Music Educator National Conference
National Society of Pershing Rifles
Phi Beta Lambda
Pre-Law Club
Sigma Tau Delta
Social Work Club
Students Accounting Society
Students Nursing Association

Social Clubs

Delta Zeta
Lambda Chi Alpha
Panhellenic
Phi Mu
Phi Sigma Epsilon
Phi Sigma Epsilon Little Sisters
Sigma Kappa
Sigma Phi Epsilon
Sisters of the Golden Heart
Tau Kappa Epsilon
Tau Kappa Epsilon Little Sisters

Religious Clubs

Baptist Student Union
Campus Christian House
Fellowship Christian Athletes
Newman Club

Miscellaneous

Association of Black Collegiates
International Students Organization
Judo Club
MWSC Dance Company
MWSC Outing Society
MWSC Student Reading Council
Western Athletic Association

ACADEMIC POLICIES AND REGULATIONS

Change of Schedule

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

Regular Semester: Add—during first week only.

Drop—first through the tenth week.

Courses dropped through the fourth week will not appear on the transcript as attempted classes. Courses dropped from the fifth week through the tenth week will be assigned a grade of W. After the tenth week of classes and before the beginning of final examinations, a course may be dropped only by official, complete withdrawal from the college, in which case a W is recorded for each course in which the student was enrolled.

Summer Session (eight 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, a course may be dropped only by official, complete withdrawal from the college, in which case a W is recorded for each course in which the student was enrolled.

Class Attendance

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

Class Auditors

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

Students enrolling in a class for credit 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 a student 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 faculty advisor and the approval of the division dean, a student who has a 3.0 term GPA may take additional credit the following semester. A student cannot enroll as an auditor in excess of a normal load.

Students who find it necessary to work in order to attend college should adjust their course load to their work load. The following is a guideline which students may use to determine their course load:

<i>Hours worked per week</i>	<i>Course load</i>
15-20 hours	12 credits
20-30 hours	9 credits
30-35 hours	6 credits
35-40 hours	3 credits

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 100-298 are considered lower-division courses, and those numbered 300-498 are considered upper-division courses.

Special Topics Courses

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

Grading System

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

<i>Letter grade and level of performance</i>	<i>Grade points earned</i>
A superior	4 per credit
B good; above average	3 per credit
C average	2 per credit
D minimum passing; below average	1 per credit
F failing	0 per credit
Inc incomplete	
W withdraw, no grade assessment	
Aud audit	
Cr credit	

Courses evaluated by pass-fail criteria receive the number of credits for that course, with a grade of Cr. A failure will result in a grade of F and no credit. Credits earned by pass-fail will not be used in computing grade-point averages for honors.

Grade-point averages are used to determine class standing and eligibility for graduation, the Dean's and President's Honor Lists, and membership in honor societies.

Honors

A President's Honor List is published at the end of each semester. To be included on the President's List, a student must be carrying 12 or more credits with a grade-point average of 4.0 exclusive of pass/fail credit or audits. A Dean's Honor List is published at the end of each semester. To be included on a Dean's List, a student must be carrying 12 or more credits with a grade point average of 3.5 or higher exclusive of pass-fail credit or audits.

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 time may be made to the department chairperson and appropriate division dean.

Pass-Fail

The major objective of the pass-fail option is to encourage students to explore academically. Students may choose 100- and 200-level courses they may otherwise avoid because of the regular grading system and lack of background.

Students may enroll for courses on a pass-fail basis within the following guidelines:

- Students may accumulate no more than 6 credits of pass-fail credit towards their degree, and the pass-fail option is only allowed for 100- and 200-level courses.
- Students who pass the course (instructor indicating a letter grade of A, B, C, or D) receive credit without a grade, while students who fail the course receive a grade of F. The attempted hours are included in the GPA.
- Students may take all 6 credits on a pass-fail basis in one semester if they so desire.
- Although course prerequisites are not as important in the pass-fail option, the chairperson of the department in which the course is offered should be consulted if the pass-fail option is being considered.
- Students must designate the pass-fail option at the Admissions and Records Office during the fourth week after the first day of classes.
- Instructors will not be informed that students are enrolled under the pass-fail option. Regular procedures will be followed by sending the midterm grades and final grades from the instructor to the registrar. Grades will be converted to pass-fail in the Admissions and Records Office.
- A course completed under the letter grade system 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 GPAs for honors.

Readmission

Students placed on scholastic suspension the first time 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 the student is eligible to return. The petition should be directed to the director of admissions and records.

Students placed on scholastic suspension the second time after being readmitted may again be readmitted after the lapse of one academic year, provided a written petition for return is filed at least eight weeks prior to beginning of the session when the student is eligible to return. The 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.

Records of Academic Work and Transcripts

Unofficial transcripts will be stamped "Unofficial, for Missouri Western State College 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 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.

Repeating Courses

Students 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 GPA.

Scholastic Probation

Students are placed on scholastic probation if either their cumulative grade-point average (CGPA) or resident grade-point average (RGPA) drops below the probation grade-point average in the Table of Academic Standards (below) which corresponds to the cumulative credits attempted.

Scholastic Suspension

Students are placed on scholastic suspension if either their CGPA or RGPA drops below the suspension grade-point average in the Table of Academic Standards (below) which corresponds to the cumulative credits attempted, subject to the provisions which follow. To be placed on scholastic suspension, a student:

- must have attempted 20 or more credits and have been on scholastic probation during the previous semester, and
- must have a term grade-point average lower than 2.0 (C).

Students suspended from the college may petition the Academic Regulations and Standards Committee if they feel their case warrants special consideration. Appeals must be made immediately following notification of suspended status. Circumstances beyond the student's control must be presented before reinstatement will be considered. If reinstatement is granted, the student will be on scholastic probation (refer to Table of Academic Standards, below).

Withdrawal from College

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

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 3 credits meets for three periods weekly for one semester. The number of credits is shown in parentheses after the course title.

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 which 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 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.

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.

Table of Academic Standards

<i>Cumulative hours attempted</i>	<i>Probation if GPA is less than</i>	<i>Suspension if GPA is less than</i>	<i>Cumulative hours attempted</i>	<i>Probation if GPA is less than</i>	<i>Suspension if GPA is less than</i>
1	N/A	N/A	27	1.815	1.333
2	N/A	N/A	28	1.821	1.357
3	0.333	N/A	29	1.828	1.379
4	0.750	N/A	30	1.833	1.400
5	1.000	N/A	31	1.839	1.419
6	1.167	N/A	32	1.844	1.433
7	1.286	N/A	33	1.848	1.455
8	1.375	N/A	34	1.853	1.471
9	1.444	N/A	35	1.857	1.486
10	1.500	N/A	36	1.861	1.500
11	1.545	N/A	37	1.865	1.514
12	1.583	N/A	38	1.868	1.526
13	1.615	N/A	39	1.872	1.538
14	1.643	N/A	40	1.875	1.550
15	1.667	N/A	41	1.878	1.561
16	1.688	N/A	42	1.881	1.571
17	1.706	N/A	43	1.884	1.581
18	1.722	N/A	44	1.886	1.591
19	1.737	N/A	45	1.889	1.600
20	1.750	1.100	46	1.891	1.600
21	1.762	1.143	47	1.894	1.617
22	1.773	1.182	48	1.896	1.626
23	1.783	1.217	49	1.898	1.633
24	1.792	1.250	50	1.900	1.640
25	1.800	1.280	51	1.902	1.647
26	1.808	1.308	52	1.904	1.654

<i>Cumulative hours attempted</i>	<i>Probation if GPA is less than</i>	<i>Suspension if GPA is less than</i>	<i>Cumulative hours attempted</i>	<i>Probation if GPA is less than</i>	<i>Suspension if GPA is less than</i>
53	1.906	1.660	87	2.000	1.793
54	1.907	1.667	88	2.000	1.795
55	1.909	1.673	89	2.000	1.798
56	1.911	1.679	90	2.000	1.800
57	1.912	1.684	91	2.000	1.802
58	1.914	1.690	92	2.000	1.804
59	1.915	1.695	93	2.000	1.806
60	2.000	1.700	94	2.000	1.809
61	2.000	1.705	95	2.000	1.811
62	2.000	1.710	96	2.000	1.813
63	2.000	1.714	97	2.000	1.814
64	2.000	1.719	98	2.000	1.816
65	2.000	1.723	99	2.000	1.818
66	2.000	1.727	100	2.000	1.820
67	2.000	1.731	101	2.000	1.822
68	2.000	1.735	102	2.000	1.824
69	2.000	1.739	103	2.000	1.825
70	2.000	1.743	104	2.000	1.827
71	2.000	1.746	105	2.000	1.829
72	2.000	1.750	106	2.000	1.830
73	2.000	1.753	107	2.000	1.832
74	2.000	1.757	108	2.000	1.833
75	2.000	1.760	109	2.000	1.835
76	2.000	1.763	110	2.000	1.836
77	2.000	1.766	111	2.000	1.838
78	2.000	1.769	112	2.000	1.839
79	2.000	1.772	113	2.000	1.841
80	2.000	1.775	114	2.000	1.842
81	2.000	1.778	115	2.000	1.843
82	2.000	1.780	116	2.000	1.845
83	2.000	1.783	117	2.000	1.846
84	2.000	1.786	118	2.000	1.847
85	2.000	1.788	119	2.000	1.849
86	2.000	1.791	120 and over	2.000	1.850

REQUIREMENTS FOR GRADUATION

Application for Graduation

To be considered a candidate for graduation, the student must file an Application of Graduation in the Admissions and Records Office 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 the actual graduation of the student. Late applications will, however, possibly curtail the ability of the college to provide all services to the candidate.

Commencement

Commencement is held at the end of the spring semester, and is a voluntary activity on the part of the student. 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. However, the degree will not be awarded until the close of the summer session.

General Degree Requirements for Associate Programs

A student must:

- complete the general studies requirements,
- have a minimum of 62 credits,
- have resident and cumulative grade-point averages of at least 2.0,
- earn the last 15 credits at MWSC in resident course work, and
- have resident and cumulative grade-point averages of at least 2.0 in courses comprising the major.

General Degree Requirements for Baccalaureate Programs

A student must:

- complete the general studies requirements,
- have a minimum of 124 credits (including 60 from a senior college),
- have resident and cumulative GPAs of at least 2.0,
- have resident and cumulative GPAs of at least 2.0 in courses comprising the major,
- have a minimum of 30 credits in the upper-division courses (numbers in the 300's and 400's with adjustments in the Two-Plus-Two Programs),
- earn 30 of the last 45 credits at MWSC in resident course work, and
- 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 exam may be secured from the office of the director of counseling and testing.

Grade-Point Averages

The "resident grade-point average" (RGPA) 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 student who receives 16 credits of B has earned 48 grade points. The RGPA is $48 \div 16 = 3.0$
- A student who receives 16 credits of which 8 credits are B and 8 credits are C has earned 40 grade points. The RGPA is $40 \div 16 = 2.5$

Credit earned in courses in which a grade point of Cr is given are not included in the computation of the RGPA. 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. 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 credits attempted are included in the computation of the RGPA.

Note: For those students enrolled at MWSC prior to August 1, 1978, the college credits earned at other accredited institutions will be treated as if earned at Missouri Western State College. Thus, the RGPA and the CGPA average are the same.

The cumulative grade-point average (CGPA) is calculated in the same fashion as the RGPA and includes all undergraduate credit earned at institutions accredited by the North Central Association or a similar regional agency.

Graduate Honors

Students 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 graduate 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).

Major-Minor Application

Every degree candidate must have on file in the Admissions and Records Office an approved Major-Minor Application form. This application is normally completed early in the student's college career. For additional information, consult the "Student Affairs" section (page 27).

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, and Bachelor of Social Work. The college will confer two baccalaureate degrees provided:

- the student meets graduation requirements for each degree,
- has earned a minimum of 144 credits, and
- pays an additional \$5 fee for the additional diploma.

State Legislation Requirement

Section 10370, 10374, 10374a, 10374b, 10374c (SCS for SB4) of the laws of Missouri, 1947 (sixth General Assembly), prescribe that all candidates for a degree issued by the colleges and universities of Missouri must have completed courses of instruction in and "satisfactorily passed an examination on the provisions and principles

of the Constitution of the United States and of the State of Missouri, and in American History, including the study of American Institutions." Students may comply with the law by successfully completing *one* of the following courses at MWSC: HIS 140, American History to 1865, HIS 150, American History since 1965, or PSC 101, American National Government; or by completion of an equivalent course (as evaluated at MWSC) from another institution.

DEGREE PROGRAMS

The degree requirements in this catalog are effective beginning the fall semester of 1980. A candidate for a degree may use, as a basis for requirements, the catalog in effect at the time of completion of the major-minor application. This application remains effective for no more than six years following its approval.

One-Year Certificate Programs

Missouri Western State College offers certificate programs with majors in various fields. In order to earn the certificate, students must complete a minimum of 30 credits with a minimum cumulative GPA of 2.0 (C average). Certificates are offered in clerical, lawyers' assistant, and secretarial programs. Specific course requirements are listed under the department administering the program.

Associate Degree Programs

Missouri Western State College offers the Associate of Science degree with majors in various fields. For associate degree requirements, refer to the "Requirements for Graduation" section (page 38).

The Associate of Science degree is designed for the student who desires a concentrated program (usually technical in nature) in preparation for employment in business, health care, industry, or public service. The degree is available with majors in agri-business, agricultural supply technology, automotive technology, construction engineering technology, corrections, criminal justice, electronic engineering technology, executive secretary, lawyers' assistant, mid-management, nursing, pilot training, and teacher's aide.

Two-Year General Studies Program

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 skills to:

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

Category One—Basic Skills

Credits
6

1. ENG 104 (3 credits)
2. Select one of the following courses (3 credits):
SPH 104 or SPH 105 or SPH 106

Category Two—Social Sciences

3

Select one of the following courses:
HIS 140 or HIS 150 or PSC 101

Category Three—Humanities

3

Select one of the following courses:
ART 100, HIS 100, HIS 110,
HUM 203, HUM 205, HUM 210,
MUS 101, THR 113

Category Four—Physical Health

3

PED 101

Total

15

41

Baccalaureate Degree Programs

Missouri Western State College offers six baccalaureate degrees with majors in various fields. For general baccalaureate degree requirements, refer to the "Requirements for Graduation" section (page 38). 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 by students who 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. Specific requirements include 16 credit hours in a foreign language and completion of a major in one of the following areas: art, biology, chemistry, English, history, mathematics, music, natural science (biology), political science, psychology, sociology, speech communication, and theatre.

The **Bachelor of Science** degree is based on concentrated study in one or more sciences. It is usually pursued by students who plan to apply this knowledge in the scientific areas of health, industry, and research. Specific degree requirements include completion of a major in one of the following areas: agriculture, biology, chemistry, computer science, criminal justice, data processing, history, leisure management, mathematics, medical technology, natural science (chemistry), political science, psychology, and sociology.

The **Bachelor of Science in Business Administration** degree is designed for the student who desires a broad foundation in several areas related to business principles as applied in business, industry, or government. This degree is available with majors in accounting, economics, management, and marketing.

The **Bachelor of Science in Education** degree is designed to prepare individuals for careers in teaching or education. Upon completion of the degree requirements and with a minimum cumulative GPA 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 employment or for graduate study in education or related fields. Specific degree requirements include completion of the professional education program and a major in one of the following areas: elementary education, physical education, and secondary education in the areas of art, basic business, biology, business skills, chemistry, English, mathematics, music, social science, and speech and theatre.

The **Bachelor of Science in Technology** degree is designed for the student interested in a career as a technologist requiring skills and knowledge necessary to plan, produce, inspect, maintain, install, and distribute technological products or services. Specific degree requirements include completion of a major in construction engineering technology or electronics engineering technology.

The **Bachelor of Science in Technology "Two plus Two"** degree is designed for the student who has completed a career-oriented associate degree program and desires the bachelor's degree with an additional emphasis in an approved cognate field. A student must complete 24 to 30 credits in a cognate field as well as the general degree requirements for baccalaureate programs. An earned associate degree with a career-oriented major is a prerequisite for admission into the degree program.

The **Bachelor of Social Work** degree is designed for the student whose goal is preparation for professional social work practice. A structural program of instruc-

tion 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.

Four-Year General Studies Program

General studies at Missouri Western State College constitute a common core of curriculum offerings necessary to produce an individual who demonstrates the skills, knowledge, and characteristics of an educated person. The required general studies curriculum consists assures that all baccalaureate-degree-seeking students will be provided the opportunity to acquire knowledge and/or skills to:

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

The courses meeting the first two objectives 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.

A student may attempt credit by examination in most of the general studies courses.

Category One—Basic Skills

Credits
12

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

Category Two—Natural Sciences

8-10

Select a minimum of 8 credits from two of the following disciplines:

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

Category Three—Social Sciences

6

Select one course from each of the following groups:

1. PHY 101, SOC 110, SOC 120, GEO 100, or ECT 101
2. HIS 140 or HIS 150 or PSC 101

Category Four—Humanities

9-10

Select one course each from three of the following:

1. HIS 100, HIS 110, HUM 203, HUM 205
2. ENG 210, HUM 210, HUM 230, HUM 250
3. ART 100, MUS 101, THR 113
4. FRE 102, GER 102, SPA 102

Category Five—Physical Health

4

1. PED 101 (3 credits)
2. One Physical Education Activity or
MIL 101, MIL 102, MIL 103, or MIL 104 (1 credit)

Total

39-42

Transfer Programs

Preprofessional programs in specialized fields are offered for students who plan to transfer to a university for the completion of their studies. Students choosing these programs should select a transfer insitution early and should work closely with their academic advisor and counselor.

The following areas are those which serve most students interested in transfer programs: architecture, chiropractic, dentistry, engineering, law, journalism, medicine, mortuary science, optometry, pharmacy, physical therapy, veterinary medicine.*

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

Academic Programs

THE DIVISION OF CAREER PROGRAMS

The Division of Career Programs includes the Departments of Agriculture, Business and Economics, Criminal Justice, Engineering Technology, Military Science, and Nursing as well as programs in automotive technology, lawyers' assistant, secretarial science, and pilot training. The division provides career-oriented education leading to one-year certificates, the Associate of Science, Bachelor of Science, Bachelor of Science in Business Administration, Bachelor of Science in Education, and Bachelor of Science in Technology degrees. Programs of study are offered which prepare individuals to enter into or advance in careers in 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 knowledge and the development of practical skills based upon individual needs.

The division strives to provide curricula based upon documented requirements for employment opportunities. Objectives are:

- To build the framework of basic knowledge underlying the chosen career program;
- To provide situations of study in which skills for a career can be developed and utilized;
- To promote an environment conducive to students' learning not only the skills and knowledge, but also the proper attitudes necessary to achieve and become productive in their chosen career areas;
- To advise students in selecting educational experiences which will facilitate educational development in the chosen career field and in general education;
- To assist the program graduates in securing responsible positions in chosen careers.

DEPARTMENT OF AGRICULTURE

Dr. G. Johnson, *chairperson*, Dr. H. Green, Dr. R. Rundell, K. Krieg, Dr. A. Kahn

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 provide goods and services in the processing and distribution of farm products. Undergraduate curricular offerings in the Department of Agriculture are designed to provide the student with a broad general education, while still allowing students sufficient opportunity to select specific general and professional electives to satisfy their special needs and desires.

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

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

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

The agronomy curriculum is organized to prepare the student for professional positions with agencies of the state and federal government, as well as in private industry. Job titles include soil scientist, soil conservationist, farm manager, feed, seed, and fertilizer distributor, soil laboratory technician, and others.

The animal science curriculum is designed to prepare students 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 the student may select courses from several areas of study, thereby enabling him or her to hold positions in the general field of agriculture.

The Associate of Science degrees are designed so that the student 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 credits in a selected discipline. Students minoring in agricultural economics must take AEC 150, 200, 308; students minoring in agronomy must take AGN 120, 222, 320; students minoring in animal science must take ASI 130, 236.

Bachelor of Science Degree Requirements

Students must complete a total of 62 credits in agriculture courses.

Agriculture Core

AEC 150 Agricultural Economics	4	AGR 111 Orientation to Agriculture	1
AGN 120 Plant Science	4	AGR 430 Seminar	1
CHE 104	4	ASI 130 Animal Science	4
AGN 222 Soil Science	4	Total core credits	22

Major in Agriculture, Agricultural Economics Emphasis

	Credits
<i>Requirements:</i>	
AEC 200 Agri Marketing	3
AEC 304 Farm Finance and Accounting	4
AEC 305 Farm Management	3
AEC 308 Commodity Marketing	3
AEC 400 Farm Price Analysis	3
ECO 260 Principles of Economics	3
BIO 101	5
MAT 105	3
<i>Total credits</i>	<u>27</u>
<i>Suggested Electives:</i>	
AEC 204 Agri Supply Management	3
AEC 310 Agri Policy	3
AEC 402 Agri Law	3
AEC 490 Special Problems	1-8

Major in Agriculture, Agronomy Emphasis

<i>Requirements:</i>	
AGN 224 Grain Grading and Handling	4
AGN 320 Soil Fertility	4
AGN 324 Diseases of Field Crops	2
AGN 326 Agri Chemicals	3
CHEM 204 Agri Organic Chemistry	4
CHEM 304 Biochemistry and Natural Products	3
BIO 101	5
	<u>25</u>
<i>Suggested Electives:</i>	
AGN 322 Forage Crop Management	3
AGN 420 Soil Conservation and Management	3
AGN 429 Corn and Soybean Production	3
AGN 490 Special Problems	1-8
AGN 426 Soil Genesis and Classification	3
AGN 436 Soil Microbiology	3

Associate of Science Degree Requirements

Agriculture Core

	Credits
AEC 150 Agricultural Economics	4
AEC 200 Agriculture Marketing	3
AGN 120 Plant Science	4
AGN 222 Soil Science	4
AGR 111 Orientation to Agriculture	1
AGR 290 Occupational Experience	8
ASI 130 Animal Science	4
<i>Total core requirements</i>	<u>28</u>

Major in Agricultural Supply Technology

<i>Requirements:</i>	
AGN 224 Grain Handling and Grading	4
AGN 320 Soil Fertility	4
AGN 324 Diseases of Field Crops	2
AGN 326 Agricultural Chemicals	3

(continued in following column)

Major in Agriculture, Animal Science Emphasis

	Credits
<i>Requirements:</i>	
ASI 236 Fundamentals of Animal Nutrition	3
ASI 265 Meat Science	3
ASI 330 Applied Animal Nutrition	4
ASI 338 Animal Breeding	3
ASI 339 Livestock Evaluation	3
ASI 475 Diseases of Livestock	2
CHE 204 Agri Organic Chemistry	4
CHE 304 Biochemistry and Natural Products	3
	<u>25</u>

<i>Suggested Electives:</i>	
Three of the following courses:	6-9
ASI 332 Beef Production	3
ASI 333 Dairy Science	2
ASI 334 Horse Production	2
ASI 335 Poultry Science	2
ASI 336 Sheep Production	3
ASI 337 Swine Production	3
ASI 439 Intercollegiate Judging	3
ASI 490 Special Problems	1-8

Major in Agriculture, General Agriculture Emphasis

	Credits
<i>Requirements:</i>	
AEC 304 Farm Finance and Accounting	4
AEC 305 Farm Management	3
AGN 224 Grain Grading and Handling	4
AGN 320 Soil Fertility	4
AGN 326 Agri Chemicals	3
ASI 330 Applied Animal Nutrition	4
ASI 339 Livestock Evaluation	3
	<u>25</u>

<i>Suggested Electives:</i>	
AEC 490 Special Problems	1-8
AGN 490 Special Problems	1-8
ASI 490 Special Problems	1-8

	Credits
ASI 236 Fundamentals of Animal Nutrition	3
ASI 330 Applied Animal Nutrition	4
<i>Total major requirements</i>	<u>20</u>

Major in Agri-Business Technology

<i>Requirements:</i>	
ACT 230 Principles of Financial Accounting	3
AEC 204 Agriculture Supply Marketing	3
AEC 402 Agricultural Law	3
AGN 326 Agricultural Chemicals	3
MGT 110 Business Organization	3
MGT 312 Principles of Management	3
MGT 274 Professional Selling	3
<i>Total major requirements</i>	<u>21</u>

Agricultural Economics Courses

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.

AEC 200 Agricultural Marketing (3) ii. Principles underlying the marketing of farm products with the emphasis on describing the marketing process. Prerequisite: AEC 150 or equivalent course.

AEC 204 Agri-Supply Management (3) ii (odd-numbered years). Comprehensive course in the management of a retail farm supply store. Includes product knowledge, personnel policies and relationships, purchasing and sales techniques, inventory methods, stock control, and merchandising.

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. Prerequisites: AEC 150, MAT 105, or equivalent courses.

AEC 305 Farm Management (3) i. Principles of farm management and farm organization. Includes selection of farm enterprises, farm credit, leases, and types of farming adapted to a given farm. 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. Prerequisite: AEC 200.

AEC 310 Agricultural Policy (3) i (even-numbered years). The study of programs, both past and present, that affect the situation of agriculturalists and what the alternatives are for the future. Prerequisite: AEC 150.

AEC 400 Farm Price Analysis (3) i (odd-numbered years). Economic and econometric principles applied to price movements and price discovery in agriculture. Prerequisite: AEC 200.

AEC 402 Agricultural Law (3) ii (even-numbered years). The legal framework impinging upon decision making by farm firms, families, and individuals; liabilities, real and personal property, contracts, farm commercial code, organization of farm firms, intergeneration, property transfer, water and fence laws, federal and state regulatory powers, and insurance. Three hours lecture per week. Prerequisite: Junior standing or consent of instructor.

AEC 490 Special Problems (1-8) i, ii, iii. Designed for student research projects on the farm. Prerequisite: Consent of department chairperson should be obtained the semester preceding enrollment.

Agronomy Courses

AGN 120 Plant Science (4) ii. Principles of production and management. Discusses importance and ecology of each crop, new practices, and varieties. Laboratory includes 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, emphasizing soils of Missouri. Laboratory and field trips. Three hours lecture and two hours lab per week. Prerequisite: CHE 104 recommended.

AGN 224 Grain Handling and Grading (4) ii (odd-numbered 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. Use and management of lime and fertilizer on soils. Emphasizes 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.

AGN 324 Diseases of Field Crops (2) i (even-numbered years). Study of disease of field crops and forages that cause economic loss to the producer.

AGN 326 Agricultural Chemicals (3) i (odd-numbered years). Introduction to the field of agricultural chemicals including herbicides, insecticides, fungicides, types of materials, calibra-

tion of sprayer, methods of use, and safety measures. Two hours lecture and two hours lab per week. Prerequisite: CHE 104 recommended.

AGN 420 Soil Conservation and Management (3) ii (even-numbered 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.

AGN 426 Soil Genesis and Classification (3) (on demand). 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. Study of the latest research and production practices concerning varieties, cultural practices, fertilization, rotations, insects, disease, and weed control problems, and including harvesting and marketing.

AGN 436 Soil Microbiology (3) (on demand). 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. Prerequisite: AGN 222.

AGN 190 Special Problems (1-8) i, ii, iii. Designed for student research projects on the farm. Prerequisite: Consent of department chairperson should be obtained the semester preceding enrollment.

Animal Science Courses

ASI 130 Animal Science (4) i. 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. 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.

ASI 330 Applied Animal Nutrition (4) ii. Measure of the nutritive value of feeds, nutrient requirements of the various species of livestock, sources and composition of nutrients, ration formulation, preparation of feed, feed additives, and food and drug regulations. Three hours lecture and two hours lab per week. Prerequisite: ASI 236.

ASI 332 Beef Production (3) ii (odd-numbered 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-numbered years). Development of dairy cattle breeds, principle and practices of dairy cattle feeding, management, and selection of breeding animals for dairy herds. Prerequisite: ASI 236.

ASI 334 Horse Production (3) i (even-numbered years). Basic principles of horse breeding, color, inheritance, health, management, nutrition, and marketing. Prerequisite: ASI 130 and junior standing.

ASI 335 Poultry Science (2) i (odd-numbered years). Study of breeds, breeding, common diseases, housing, efficient management, nutrition, and marketing of eggs and poultry. Prerequisite: ASI 236.

ASI 336 Sheep Production (3) i (even-numbered years). Production, management, marketing, and nutrition of breeding flock and feedlot lambs. Prerequisite: ASI 130 and junior standing.

ASI 337 Swine Production (3) ii (even-numbered 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 Animal 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, judging, and presentation of oral reasons. Six hours lab per week. Prerequisite: ASI 130.

ASI 439 Intercollegiate Judging Training and Competiton (3) on demand. Specialized training in evaluating and grading live animals. Field trips to farms and livestock expositions. Six hours lab per week (plus trips to contests). Prerequisite: ASI 339 and consent 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. Prerequisite: ASI 130. One or more of the following is recommended: ASI 332, 334, 336, or 337.

ASI 490 Special Problems (1-8) i, ii, iii. Designed for student research projects on the farm. Prerequisite: Consent of department chairperson should be obtained the semester preceding enrollment.

Agriculture Courses

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.

AGR 210 Farm Mechanization (3) i (even-numbered years). Study of the basic principles of the power unit, equipment, their major components, their management, and the operator's 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 of department chairperson during the 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 credits 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. Prerequisite: Junior or senior standing.

AGR 450 Independent Study (1-4) i, ii, iii. Research topics assigned on an individual basis; conference times will be arranged. Prerequisite: Consent of department chairperson.

DEPARTMENT OF BUSINESS AND ECONOMICS

Dr. E. Shrouf, *chairperson*, B. Blankenship, B. Greenwald, L. Hawley, J. McCarthy, P. McMurry, J. Mitchell, C. Pettijohn, J. Pettijohn, G. Pyle, G. Segebarth, M. Septon, Dr. M. Strader, I. Williams, J. Wise

The Department of Business and Economics offers diversified programs leading to associate degrees in mid-management and baccalaureate degrees with majors in accounting, business education, economics, management, and marketing. Students receive a general background in the fundamentals of business and economics as well as an opportunity to specialize within a particular discipline. The programs have been designed to prepare students for a career in the challenging and everchanging field of business as well as the pursuit of advanced degrees. The department is actively involved in student placement and assists students in meeting potential employers through annual seminars.

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 requirements for these majors follow.

Bachelor of Science in Business Administration Degree Requirements

Freshman-Sophomore Core

	<i>Credits</i>
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
MGT 211 Business Law	3
MKT 270 Principles of Marketing	3
MAT 105 College Algebra (use to fulfill general studies requirements—may not be taken pass/fail)	(3)
<i>Total core credits</i>	<u>21</u>

Professional Core

MGT 312 Principles of Management	3
MGT 315 Financial Management	3
MGT 319 Business Communications	3
<i>Total core credits</i>	<u>9</u>
<i>Total credits, both cores</i>	<u>30</u>

Major in Accounting

	<i>Credits</i>
<i>All of the following:</i>	
ACC 330 Intermediate Accounting I	3
ACC 331 Intermediate Accounting II	3
ACC 333 Cost Accounting	3
ACC 336 Tax Accounting	3
*ACC 430 Advanced Accounting Problems or	
*ACC 431 Seminar in Accounting Theory	3
ACC 433 Auditing	<u>3</u>
	18

One of the following:

ACC 332 Accounting Systems and Control	3
ACC 334 Budgets and Budgeting Control	3

(continued on next page)

*Cannot be taken as an elective if used to fulfill the required accounting courses.

	Credits
ACC 335 Government and Institutional Accounting	3
ACC 430 Advanced Accounting Problems	3
ACC 431 Seminar in Accounting Theory	3
ACC 432 Advanced Cost Accounting	3
ACC 439 Advanced Tax Accounting	3
	<u>3</u>
<i>One of the following:</i>	
ECO 360 Intermediate Macroeconomics	3
ECO 361 Intermediate Microeconomics	3
ECO 362 Public Finance	3
ECO 363 Money and Banking	3
ECO 365 Government Regulation	3
	<u>3</u>
<i>One of the following:</i>	
MGT 411 Investment Analysis	3
MGT 412 Personnel Management	3
MGT 415 Administrative Supervision	3
MGT 419 Business Policy	3
	<u>3</u>
<i>One of the following:</i>	
CSC 245 Introduction to COBOL	3
MGT 311 Business Law II	3
MGT 313 Business Statistics II	3
	<u>3</u>
	<u>3</u>
<i>Total core and major credits</i>	60

Major in Economics

<i>All of the following:</i>	
ECO 360 Intermediate Macroeconomics	3
ECO 361 Intermediate Microeconomics	3
ECO 363 Money and Banking	3
Upper-level ACC, MGT, MKT	3
	<u>12</u>
<i>Four of the following:</i>	
ECO 362 Public Finance	3
ECO 364 Labor Economics	3
ECO 365 Government Regulation	3
ECO 367 Urban and Regional Economics	3
ECO 460 Business Cycles and Forecasting	3
ECO 461 International Economics	3
ECO 462 History of Economic Thought	3

(continued in following column)

	Credits
ECO 463 Comparative Economic Systems	3
ECO 466 Current Economic Problems	3
	<u>3</u>
	<u>12</u>
<i>Total core and major credits</i>	54

Major in Management

<i>All of the following:</i>	
MGT 412 Personnel Management	3
MGT 419 Business Policy	3
Upper-level ACC, ECO, or MKT	3
Upper-level Economics	3
	<u>3</u>
	12
<i>Three of the following:</i>	
MGT 311 Business Law II	3
MGT 313 Business Statistics II	3
MGT 316 Principles of Insurance	3
MGT 410 Small Business Management	3
MGT 411 Investment Analysis	3
MGT 413 Real Estate	3
MGT 415 Administrative Supervision	3
MGT 416 Production Management	3
MGT 417 Credit Management	3
MGT 420 Small Business Management Counseling Practicum	3
MGT 421 Small Business Management Counseling Practicum	3
	<u>3</u>
	<u>9</u>
<i>Total core and major credits</i>	51

Major in Marketing

<i>All of the following:</i>	
MKT 470 Marketing Management	3
MKT 472 Sales Management	3
MKT 473 Business Research	3
MGT 419 Business Policy or	
MKT 474 Marketing Seminar	3
	<u>3</u>
	12
<i>Three of the following:</i>	
MKT 371 Retailing	3
MKT 372 Physical Distribution	3
MKT 375 Industrial Marketing	3
MKT 376 Advertising	3
MKT 377 International Marketing	3
MKT 378 Product Strategy	3
MKT 471 Consumer Relations and Behavior	3
ECO 361 Intermediate Microeconomics or	
ECO 460 Economic Cycles and Forecasting	3
	<u>3</u>
	<u>9</u>
<i>Total core and major credits</i>	51

Bachelor of Science in Education, Major in Business Education

Business Education Core

	Credits		
SEC 140 Beginning Typing	3	SEC 240 Office Typing Problems	3
SEC 141 Intermediate Typing	3	SEC 351 Model Office I	3
ACC 230 Principles of Accounting I	3	ECO 260 Principles of Economics I or ECO 261 Principles of Economics II	3
ACC 231 Principles of Accounting II	3	MGT 110 Business Organization	3
ACC 330 Intermediate Accounting I	3	MGT 311 Business Law II	3
ECO 160 Consumer Economics or ECO 260 Principles of Economics I	3	MGT 312 Principles of Management	3
MGT 116 Business Math or MGT 210 Business Statistics	3	MKT 274 Professional Selling	3
MGT 211 Business Law I	3		15
MGT 319 Business Communications	3	<i>Professional education:</i>	
CSC 182 Introduction to Data Processing	3	SED 202 Introduction to Secondary Education	2
BUS 455 Methods of Teaching Business Subjects		SED 203 Participation in Secondary Teaching I	1
MAT 105 College Algebra (use for general studies—not pass/fail)	(3)	SED 303 Experience in Secondary Teaching II	3
<i>Total core courses</i>	33	SED 304 Psychology in Secondary Teaching	4
		SED 404 Seminar in Secondary Education	3
		SED 407 Psychology and Education of the Exceptional Student	2
		SED 409 Student Teaching III	9
			24
		<i>Total core and major credits</i>	72

Major in Business Education

Five of the following:

SEC 144 Elementary Shorthand	3
SEC 145 Intermediate Shorthand	3
SEC 340 Advanced Shorthand	3
SEC 230 Office Machines	3

(continued in following column)

In addition to the above requirements for the baccalaureate degrees, students must have at least a 2.0 GPA in credits comprising the major as well as a minimum of 21 credits 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-credit 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 and 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 requirements for this major follow.

Mid-Management Core

	Credits		
MGT 110 Business Organization	3	ACC 231 Principles of Accounting II	3
MGT 116 Business Mathematics or MGT 210 Business Statistics I	3	ECO 260 Principles of Economics I	3
ACC 230 Principles of Accounting I	3	ECO 261 Principles of Economics II	3
		MGT 312 Principles of Management	3
		<i>Total core credits</i>	12

Accounting Emphasis

	Credits
ACC 330 Intermediate Accounting I	3
ACC 331 Intermediate Accounting II	3
ACC 333 Cost Accounting	3
Upper-level ECO, MGT, or MKT	3
	<u>12</u>
<i>Total core and emphasis credits</i>	33

Banking and Finance Emphasis

	Credits
BAN 253 Bank Management	3
ECO 363 Money and Banking	3
MGT 211 Business Law I	3
MGT 315 Financial Management	3
<i>Two of the following:</i>	
AEC 304 Farm Finance and Accounting	4
BAN 250 Principles of Bank Operations	3
BAN 251 Savings and Time Deposit Banking	3
BAN 252 Trust Functions and Services	3
	<u>6-7</u>
	<u>18-19</u>
<i>Total core and emphasis credits</i>	39-40

Data Processing Emphasis

	Credits
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
	<u>15</u>
<i>Total core and emphasis credits</i>	36

Retailing Emphasis

	Credits
MKT 270 Principles of Marketing	3
MKT 374 Professional Selling	3
MKT 371 Principles of Retailing	3
MKT 376 Advertising	3
	<u>12</u>
<i>Total core and emphasis credits</i>	33

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

Accounting Courses

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. 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-numbered 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). Emphasizes billing, sales, purchases, and payroll procedures. Prerequisite: ACC 231.

ACC 333 Cost Accounting (3) i, ii. 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-numbered 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 nonprofit institutions, and to cities, counties, and other governmental units. Prerequisite: ACC 231.

ACC 336 Tax Accounting (3) i. Introduction to taxation, including both federal and state taxes to which many small businessmen and individuals are subject. Includes payroll, sales, and income taxes. Includes an exposure to individual partnership and corporate income taxation. Prerequisite: ACC 231.

ACC 430 Advanced Accounting Problems (3) i. Accounting problems course with emphasis on problems facing partnership and corporate business organizations. Emphasizes forms, maintenance, and 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. Familiarizes students with the current accounting issues and literature. Includes development of accounting theory, accounting concepts, and objectives of accounting. Requires students to research basic accounting issues. Prerequisite: ACC 331.

ACC 432 Advanced Cost Accounting (3) ii (even-numbered 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. Includes sales and disposition of property, pension plans, liquidation, and reorganization of business organizations. Also includes tax planning and introduction to federal estate and gift taxation. Prerequisite: ACC 336.

Banking Courses

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-numbered 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. Examines different types of financial savings to describe the system of financial flows of income to capital investment.

BAN 252 Trust Functions and Services (3) i (odd-numbered 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 Courses

BUS 455 Methods of Teaching Business Subjects (3) i. Study of the methods and activities for teaching business education in the secondary school. To be taken before SED 409. Prerequisite: Consent of advisor or SED 202 and 203.

Economics

ECO 101 Current Issues in the Economy (3) i, ii. Introductory course dealing with economic events and the problems facing our economy today. Discusses specific topics of current interest using economic thinking in analyzing problems and possible solutions.

ECO 160 Personal Economics (3) i, ii. 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), ii, ii, iii. Introduction to basic principles of economics with emphasis on the analysis of unemployment, GNP, inflation, and public debt. Discusses fiscal and monetary theories and public policies.

ECO 261 Principles of Economics II (3), i, ii. Continuation of economic fundamentals but with emphasis on supply and demand analysis, factor markets, different market structures, international economics, and various current economic problems. Prerequisite: ECO 260.

ECO 360 Macroeconomic Theory (3) ii. Intermediate-level theory course that examines the determinants of GNP, employment, and inflation. Emphasizes 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. Theoretical approach to the behavior of the individual buyer and seller in the marketplace. Includes 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. 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. Includes 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 for the various economic components of the American economy. Prerequisite: ECO 261.

ECO 367 Urban and Regional Economics (3) ii. Examines 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 Cycle and Forecasting (3) i (odd-numbered years). Studies 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-numbered years). Introduction to the study of the theory of international economics with emphasis on international trade, flows of funds, foreign exchange, balance of payments, and world economic interdependence. Prerequisite: ECO 261.

ECO 462 History of Economic Thought (3) ii (even-numbered years). Development of various schools of economic thought. Includes Classical, Neo-Classical, Institutional, Keynesian, and Neo-Keynesian theories. Prerequisite: ECO 261.

ECO 463 Comparative Economic Systems (3) i (even-numbered years). Analytical study of the major alternative economic systems—capitalism, socialism, planned economies, and mixed capitalism—with emphasis on 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 Courses

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. Introduction to the daily mathematical problems that arise in business. Includes 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. Study of descriptive and inductive statistical methods as they apply to decision making in business and economics. Prerequisite: MAT 105.

MGT 211 Business Law I (3) i, ii. Introduction to the legal environment of business. Examines the constitutional and historical foundations of the American legal system. Emphasizes contracts, personal property, bailments, and sales.

MGT 215 New York Viewpoint (2). Designed to make use of the unparalleled learning resources of New York City. The tour includes visits to both major stock exchanges, the Federal Reserve Bank, commercial banks and other Wall Street financial institutions, and corporate headquarters of companies listed among *Fortune's* 500 largest.

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 211.

MGT 312 Principles of Management (3) i, ii. 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 these data aid in controlling operations and making sound business decisions. Prerequisite: MGT 210.

MGT 315 Financial Management (3) i, ii. Introductory survey of the issues which face the financial manager of a firm. Discusses liquidity vs. profitability decisions, capital budgeting, planning needs, and controlling uses of funds as well as the methods of procuring funds. 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. Prerequisite: MGT 210 or LAT 100.

MGT 319 Business Communications (3) i, ii. Designed to meet the needs of business for better communications, written and 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. Prerequisite: Completed freshman-sophomore core and a processed major-minor application.

MGT 410 Small Business Management (3) i. Deals with all major aspects of starting and managing a small business. Includes 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 270.

MGT 411 Investment Analysis (3) ii. A critical approach to security analysis. Presents 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. Considers problems relating to the purchase, transfer, lease, financing, and management of land and buildings. Prerequisite: MGT 211.

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

MGT 416 Production Management (3) i. Development of scientific management principles and methods of organization and management in manufacturing. Includes plant location, scheduling, 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). Deals 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. Continuation of MGT 420, permitting the student an opportunity for an additional three 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 Courses

MKT 270 Principles of Marketing (3) i, ii. Basic course defining the role of the marketer and marketing within our society and economy. Examines all interacting forces within the firm, dealing with price, promotion, distribution, personal selling, and product and economy aspects.

MKT 274 Professional Selling (3) i. Study of the practical methods, principles, procedures, and policies of a professional salesperson.

MKT 371 Principles of Retailing (3) ii. Practical study of the underlying principles of retail store management with emphasis on basic retailing activities of buying, merchandising, and promotion. Prerequisite: MKT 270.

MKT 372 Physical Distribution (3) ii. Analyzes the physical distribution functions in marketing with emphasis on transportation methods, material handling, and facility location as elements of an integrated system. Prerequisite: MKT 270.

MKT 375 Industrial Marketing (3) ii (even-numbered years). Analyzes the structure of marketing for industrial and wholesaling activities. Studies industrial selling, warehousing, and wholesaling problems. Prerequisite: MKT 270.

MKT 376 Advertising (3) i. Survey of the fundamentals of market promotion, including advertising media. Discusses creative advertising, advertising agencies, and the advertising campaign. Prerequisite: MKT 270.

MKT 377 International Marketing (3) i (odd-numbered years). Overall view of the structure and approaches to international marketing. Emphasizes methods of evaluating and implementing international marketing opportunities. In addition, considers cultural, political, legal, and financial factors in relation to the total international marketing mix. Prerequisite: MKT 270.

MKT 378 Product Strategy (3) i. Covers product management, product development, placement, maintenance, and withdrawal. Emphasizes application of marketing techniques to new products. Prerequisite: MKT 270.

MKT 470 Marketing Management (3) i. Presents 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 270.

MKT 471 Consumer Relations and Behavior (3) i. Considers the influences on consumer motivation and behavior. Discusses how the behavioral sciences relate to marketing. Prerequisite: MKT 270.

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 270.

MKT 473 Business Research (3) ii. Analyzes markets and marketing problems by various research methods. Emphasizes project management. Prerequisite: MGT 210, MKT 270, and senior standing.

MKT 474 Marketing Seminar (3) ii. Seminar of case situations dealing with various strategy alternatives involved in marketing problem solving. Emphasizes the marketing mix and the use of marketing research and decision making. Prerequisites: senior standing and 12 credits in marketing.

DEPARTMENT OF CRIMINAL JUSTICE

L. Maxwell, *chairperson*, J. Carmichael, C. Bucher, J. Miller

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

Associate of Science: offered with either a major in criminal justice or a major in corrections.

Bachelor of Science: offered with a major in criminal justice.

The criminal justice program seeks to prepare the student for entry into or advancement within the criminal justice system in any of the many areas existing within this career field. Such areas 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.

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 credits of restricted electives from the following courses: SOC 230, 310, 320, 400, 420, 430; PSC 110, 320, 330, 420; PSY 201, 309; LAW 110, 150, 205, 210, 230; SEC 140, 141; ENG 108.

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 110, 230; PSC 101; and PSY 101, plus 6 credits of restricted electives from the following: SOC 310, 400, 430; LAW 150.

Bachelor of Science Degree Requirements

Students enter the baccalaureate program in criminal justice after completion of an accredited associate degree program, preferably in a criminal justice area. The two-year program may be completed at MWSC or at another accredited college. The major in criminal justice consists of 43 credits in criminal justice course work plus 30 credits of course work in related areas. The following specific courses are required: LAW 100, 110, 150, 160, 180, 200, 215, 220, 260, 290, 470 (two semesters); PSC 101, 110; PSY 101, 210, 309; SOC 110, 230, 310, 400, 430. Also required are 9 credits of elective criminal justice course work from the following: LAW 120, 140, 205, 210, 230, 250, 270, 280, 450, 490.

Criminal Justice Courses

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, and an assessment of 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, iii. Survey of the responsibilities and duties of the uniformed patrol. Special emphasis on patrol procedures, mechanics of arrest, search, and seizure, interpretation and evaluation of information received on patrol, and accurate report writing.

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

LAW 150 Criminal Justice Report Writing (3) ii. Interdisciplinary approach toward precise report writing in criminal justice. Emphasizes the criminal justice terminology. 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-numbered years). Introduction to modern investigative methodology. Emphasizes 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-numbered years). Survey of the public service agency and its role in the community. Emphasizes the importance of the individual and his or her relationship to the public served. Outlines a general program of community relations to be undertaken by public service agencies. Prerequisite: LAW 100.

LAW 200 Penology and Corrections (3) ii. The origins and theories of punishment and the prison system. Introduces the principles and programs of institutional correction and special problems in administration. Reviews modern recommendations for improvement of the system. Prerequisite: 6 credits in criminal justice.

LAW 205 Institutional Procedures, Jails, and Detention (3) ii. The function of the custodial staff, with special emphasis on the correctional officer. Reviews institutional procedures, including reception, classification, program assignment, and release procedures, and implementation of possible jail programs. Examines juvenile detention facilities and practices.

LAW 210 Legal Rights of the Confined (3) i. Overview of the legal rights of inmates, both pre- and post-conviction. Analyzes administrative restrictions relating to inmates' rights and reviews legal and practical remedies to insure these rights. Discusses the relationship between the granting of inmates' legal rights and probable rehabilitation. Prerequisite: LAW 100.

LAW 215 Essentials of Interviewing (3) i, ii. Examination of fundamental concepts of verbal communication applied to interview situations within the criminal justice system. Emphasizes 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-numbered years). Introductory survey of current police administrative methodology. Reviews the organization of the police service, police functions, principles of police management, operational services within police agencies, and the role of the police administrator in personnel assignment and evaluation. Prerequisite: 6 credits in criminal justice.

LAW 230 Contemporary Practices in Corrections (3) i. Modern trends in corrections, including community-based programs in work release, halfway houses, contract program planning, and the therapeutic community and treatment team concept. Prerequisite: LAW 100.

LAW 250 Prison Organization and Operation (3) ii. Studies the organization of various institutions; examines treatment, custody, and support activities as entities and in relation to each other. Students construct an organization chart for a model prison and functional charts for its departments. Prerequisite: LAW 200.

LAW 260 Criminal Law (3) i, (iii even-numbered years). Explores the origin, development, and classification of substantive criminal law. Reviews the rules of evidence of particular importance at the operational level of law enforcement and criminal procedures in arrest, force, search and seizure. Prerequisite: 9 credits in criminal justice.

LAW 270 Probation and Parole (3) ii. Examines probation and parole alternatives to confinement, and their effectiveness in curbing future criminal behavior. Prerequisite: LAW 200.

LAW 280 Criminalistics (3) ii. Introductory survey of modern methodology for police laboratories. Reviews the need for professional investigations and introduces the means of achieving high degrees of proficiency in the field of scientific criminal inquiries. Prerequisite: 15 credits in criminal justice.

LAW 290 Practicum in Criminal Justice (3) i, ii, iii. 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 to the department chairperson 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, and guest speakers on selected topics. Must be taken both semesters during the senior year for a total of 4 credits. Prerequisite: Senior status in criminal justice and completed 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 nine weeks before registration for this course. Prerequisite: Senior status in criminal justice and completed major application.

DEPARTMENT OF ENGINEERING TECHNOLOGY

V. Varma, *chairperson*, V. Donnelly, R. Kackley, Jr.

The Department of Engineering Technology offers two- and four-year programs in engineering technology with concentrations in either construction or electronics. Preprofessional engineering and architecture transfer programs are also offered in cooperation 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 the student to be an engineering technician, and the baccalaureate degree program prepares the student to be an engineering technologist. Both are designed to prepare students to work in meaningful jobs.

Engineering Transfer Program

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 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.

The exact program followed will depend on the specialized area (civil, architecture, mechanical, electrical, etc.) and the engineering school to which the student plans to transfer. Also, many students are not prepared for calculus their first semester and special programs must be arranged. Therefore, an advisor in the Department of Engineering Technology will set up a suitable program for each preengineering or prearchitecture student.

Architecture Transfer Program

The architecture transfer program is closely coordinated with the College of Architecture and Design, Kansas State University, Manhattan, Kansas.

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 Examination.

Specific requirements are as follows for the Bachelor of Science in Technology degree with the major listed.

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 or ESC 204; plus 6 credits of approved technical electives from the following: ACC 230; ECO 260; CSC 255; MAT 201; MGT 110, 210, 211, 312; EGT 300, 390, 490.

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; plus 6 credits of approved technical electives from the following: ACC 230; ECO 260; CSC 255; MAT 201; MGT 110, 210, 211, 312; EGT 390, 490.

Two-Year Degree Requirements

Specific requirements are as follows for the Associate of Science degree with the major listed.

Construction Engineering Technology

EGT 100, 104, 154, 202, 204, 250, 258; CET 150, 206, 256, 304, 354; MAT 105, 106, 204; PHY 110.

Electronic Engineering Technology

EGT 100, 103, 104, 240; EET 210, 220, 230, 270, 300, 340; MAT 105, 106, 204; PHY 110.

Engineering Technology Courses

EGT 100 Introduction to Engineering and Technology (1) i, ii. Studies the occupational spectrum of the technical world of work; emphasizes the role of the engineering technician, the engineering technologist, and the professional engineer. Although the course emphasizes the work done by these practitioners, attention is given also 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. Discusses electrical and electronic terminology including component names, electrical units, instrumentation, and devices. Studies characteristics, electrical measurements, electrical circuits, and the application of electricity to other areas. Emphasizes power generation and distribution and the electrical code. Two hours lecture, three hours lab. Prerequisite: MAT 095 or consent of instructor.

EGT 104 Engineering Graphics I (3) i, ii. Introduction to the fundamentals of drawing, drafting room practices, and technical communications through graphics. Develops techniques through 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. Continuation of EGT 104, but with an extension of graphical problem solution in three-dimensional space. Develops problem-solving techniques through the solution of practical problems in the engineering and technology areas. Two hours lecture, four hours lab. Prerequisite: EGT 104.

EGT 202 Surveying I (3) i. Introduction to the basic principles of plane surveying with applications to engineering and construction problems. Uses laboratory periods 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 structures. Topics include lettering, shades, shadows, free-hand sketching, and planning and working drawings. Emphasizes technique and methodology. Two hours lecture, four hours lab. Prerequisite: EGT 14 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 column 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 registration in EGT 230.

EGT 240 Electrical Circuits (3) ii. Circuit analysis provides a mathematical approach for solving the current flows and voltages in both AC and DC circuits. Includes mesh analysis, nodal analysis, superposition, voltage, current divider rules, and Thevenin's theorem, Norton's theorem, and Millman's theorem. Analyzes R-C and R-L circuits for transient conditions. Uses practical applications whenever possible for illustrations, and the computer as a labor-saving device. Two hours lecture, three hours lab. Prerequisite: EGT 103, MAT 105, 106.

EGT 250 Technical Report Writing (2) ii. Studies various forms of reports. Includes practical projects in preparing reports of various lengths and degrees of complexity and 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. Includes 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 theory. Three hours lecture, three hours lab. Prerequisite: MAT 240.

EGT 300 Dynamics (3) on demand. Motion of a particle; kinetics of rigid bodies; work and energy; impulse and momentum; impact. Three hours lecture. Prerequisite: EGT 258.

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. Introduction to fluid mechanics including fluid statics and elementary fluid dynamics. Includes 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. Familiarizes the student with industrial hydraulic and pneumatic components and circuits. Emphasizes identification, functions, and interchangeability of components; 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. Studies heat loads, assigning of equipment for specific applications, electrical circuits and motors, and 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. Intended for the advanced student whose project would enrich the educational experience. Approval by the department chairperson is required at least two weeks before the end of the previous term.

EGT 456 Electrical Systems of Buildings (3) ii. Further study of electrical and lighting systems of buildings. Includes design, code requirements, and personnel safety. Three hours lecture. Prerequisite: EGT 103.

EGT 490 Technological Practices (1-3) i, ii, iii. Intended for the advanced student with a job which reinforces and extends knowledge and skills. Approval by the department chairperson is required at least two weeks before the end of the previous term.

Construction Engineering Technology Courses

CET 150 Blueprint Reading (1) ii. Provides intense coverage of various aspects of blueprint reading from the general and heavy construction field. Includes heavy timber, structural steel, and reinforced concrete. One hour lecture. Prerequisite: EGT 104 or consent of instructor.

CET 206 Structural Drawing (2) ii. Introduction to the drawing and detailing of various

structural elements used in construction. Includes 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. Includes mapping, hydrography, and photogrammetry. Uses laboratory periods for in-the-field application of techniques. Two hours lecture, three hours lab. Prerequisite: EGT 202.

CET 256 Bituminous, Concrete, and Soils (3) ii. Studies 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. Introduction to methods and materials used in various areas of the construction industry. Uses laboratory periods for plant 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 or her 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, and to statically indeterminate structures. Three hours lecture. Prerequisite: EGT 258.

CET 354 Construction Estimating (3) ii. Introduction to construction estimating. Emphasizes accurate and systematic analysis of working drawings and specifications as they pertain to quantity takeoffs. Three hours lecture. Prerequisite: CET 340.

CET 358 Structural Steel Design (4) ii. Introduction to elementary structural steel design. Stresses design of individual members and their connections as dictated by various specifications (AISC, AASHTO, etc.). Laboratory includes 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. Introduction to the mechanical systems of buildings. Includes principles of water supply, sanitation systems, plumbing, heating, and air conditioning. Three hours lecture. Prerequisite: EGT 356.

CET 408 Reinforced Concrete Design (4) i. Introduction to the design of reinforced concrete elements and structures. Includes 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 peculiar to working drawings; general mechanism, cams, gears, and power transmission. Emphasizes speed and accuracy in the production of detail and working drawings for practical application. Two hours lecture, six hours lab. Prerequisite: EGT 104.

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

Electronic Engineering Technology Courses

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 10 credits in electronics.

EET 220 Instruments and Measurements (3) i. In-depth study of electronic circuitry and equipment usage 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. Discusses calibration requirements and techniques. The student demonstrates some electronic test instruments. Two hours lecture, three hours lab. Prerequisite: EET 230, EGT 240, completion of or concurrent registration in EET 270 preferred.

EET 230 Introduction to Electronics (3) ii. The theory of operation of various solid state devices: diodes, transistors, FETs, SCRs, and monolithic integrated circuits. Laboratory train-

ing sessions include evaluation of many solid state devices. Two hours lecture and three hours lab. Prerequisite: EGT 103, concurrent registration in EGT 240 preferred.

EET 270 Electronics (4) i. Studies complete electronic circuits, including rectifiers, regulators, SCR controls, amplifiers using transistors and FETs, oscillators, waveshaping circuits, clippers, limiters, and basic logic. Laboratory analyzes 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 330 Digital Electronics (4) ii. Number systems, computer codes, fundamentals of combinational logic circuits, and special topics. Three hours lecture, three hours lab. Prerequisite: EET 270 or consent of instructor.

EET 340 Communication Systems (4) ii. Analyzes various types of circuits used in equipment such as AM and FM receivers and transmitters, television receivers and transmitters, and microwave equipment. Studies antennas and transmission lines. Three hours lecture, three hours lab. Prerequisite: EET 270.

EET 350 Advanced Communications Systems (3) ii (even-numbered years). Studies communications theory emphasizing the relationship of information transmission with band width and noise. Studies further 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 Laplace 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 waveguides, 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. Includes control of manufacturing processes, measurement and counting of components, and servo control. Two hours lecture, three hours lab.

EET 430 Advanced Electronics (4) i. Advanced treatment of discrete and integrated circuit electronics. Explores small-signal, large-signal, and digital circuit topics 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). Instruction in the construction, theory of operation, and application of various types of A.C. and D.C. motors and generators, synchros, servo systems, and motor controllers. Studies mathematical computations dealing with motor efficiency, power requirements, horsepower, torque, and power factor correction. Laboratory explores various types of A.C. and D.C. motors and generators. Three hours lecture, three hours lab. Prerequisite: EGT 103, EGT 240, credit in EGT 456 preferred.

EET 480 Design and Fabrication (3) ii. With instructor's approval, the senior student selects an electronic systems or subsystem to design, drawing on basic electronic background, and builds a functional prototype to demonstrate the design concept. Requires a written paper which supports the project demonstrating research techniques and the ability to document sources. Two hours lecture, three hours lab. Prerequisite: 30 credits in electrical courses.

DEPARTMENT OF MILITARY SCIENCE

Lt. Col. J. G. Coombs, *chairperson*, Capt. R. L. Lovelace, Capt. M. Hull, SGM P. W. Adair, SFC D. G. Landrum

The Department of Military Science administers the Army Reserve Officer Training Corps (ROTC) program. The purpose of Army ROTC is to develop qualities of leadership and skills in college-trained men and women, to provide both the Army and the civilian community with well-rounded leaders. Thus, ROTC is designed to develop broad leadership capabilities rather than to teach military specialties. All courses are open to any student. The general military science curriculum at Missouri Western State College provides the cadet with the general leadership management and military skills needed to qualify for a commission in most of the branches of the Army. The student is afforded the opportunity to apply this training during field training, conducted off campus. This curriculum alone does not lead to a degree, but is to be taken 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 MWSC. Currently, a college graduate who is commissioned through ROTC is placed on active duty for either three months or three years, depending on his or her desires and on the needs of the service at the time of graduation. A contract guaranteeing the three-month program is available.

Four-Year ROTC Program: This program consists of 18 credit hours; 6 credit hours from the 100- and 200-level courses and 12 credit hours from MIL 300, 310, 400 and 410. Other courses offered include MIL 100, 101, 102, 103, 104, 110, 120, 200, 210, 302, 312, 412, and 450. The student also must complete successfully a six-week advanced camp at Fort Riley, Kansas, normally between the junior and senior years. For this camp, the student receives pay of approximately \$500, plus travel expenses. A student incurs no service obligation for attendance in MIL 100, 101, 102, 103, 104, 110, 120, 200, or 210. Entrance in the advanced course is subject to the approval of the department chairperson.

Two-Year ROTC Program: This course of study is for students who were unable to enroll in ROTC during their first two academic years. This program substitutes a six-week basic camp for the 100- and 200-level courses. The remainder of the course is the same as the four-year program. Pay for students while attending basic camp is approximately \$500, plus travel expenses.

Military Science Minor: A minor totals 24 credits. The following are required (18 credits): MIL 120, 210, 300, 302, 310, 312, 400, 410, 412. Six credits may be chosen from the following: MIL 100, 101, 102, 103, 104, 110, 200, and 450. Additionally, the six-week advanced camp must be successfully completed to be eligible for the minor.

Placement for Veterans: Prior service personnel desiring a commission through ROTC may have the 100- and 200-level military science courses 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 professor of military science for permission to enter the advanced course.

Monetary Allowances: All ROTC students are furnished uniforms and textbooks for their military science courses. Students enrolled in the last two years of military science receive \$100 per month during the school year, not to exceed ten months per year.

Financial Assistance

U. S. 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 payment of \$100 for the duration of the scholarship, not to exceed ten months for each year of the scholarship.

Department of Military Science Scholarship: This scholarship, established by the college, 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 toward 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 department.

Fee Waivers: A fee waiver scholarship is available. See the department chairperson.

Military Science Courses

MIL 100 Development of the Defense Establishment (1) i, ii, iii. Examines the evolution of the United States military defense system and the citizen-soldier concept. Includes the evolution of warfare and development of weapons.

MIL 101 Military Mountaineering (1) i, ii, iii. Techniques for military mountaineering: rope bridging, ropes and rope management, types of rappels and their uses. Presents practical exercises in rappelling to test skills learned.

MIL 102 Water Survival Training (1) i, ii, iii. Technique for water survival, drown proofing, survival testing, improvised floats and rafts, and introduction to rubber rafts. Presents practical exercises to test learned skills.

MIL 103 Military Orienteering (1) i, ii, iii. Techniques of 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. Includes practical orienteering to test skills in a field environment.

MIL 104 Small-Bore Rifle Marksmanship (1) i, ii, iii. Study of basic marksmanship involving the safety aspects of weaponry, shooting equipment, triangulation, position shooting, and range firing.

MIL 110 The Defense Establishment in National Security (1) i, ii, iii. Study of the organization and functions of the defense establishment of the United States. Includes the interrelations between services under the Department of Defense and with 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. Includes the Manual of Arms with infantry weapons and instructing techniques of military drill. Lecture/laboratory two 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. 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. Study of map reading and analysis, offensive and defensive principles, and small-unit organization and tactics.

MIL 300 Leadership and Management I (3) i. Investigation of organizational leadership, organizational and individual psychology in the military environment, and application of academic theory to specific military management. Includes practical application of the military instruction methodology. Prerequisite: Basic course or consent of department chairperson.

MIL 302 Leadership Practicum (1) i. Examination of squad and platoon offensive and defensive operations, the patrol leader in patrolling operations, and a tactical application exercise. Prerequisite: Advanced-course status. To be taken concurrently with MIL 300.

MIL 310 Fundamentals and Dynamics of the Military Team I (3) ii. Study of the principles and fundamentals of military operations, the decision-making process, planning, communications, and tactics of military units. Prerequisites: MIL 300 or consent of department chairperson.

MIL 312 Leadership Practicum (1) ii. Familiarization with military firearms; includes assembly and disassembly; tactical communications and the field artillery request. Prerequisite: Advanced-course status. To be taken concurrently with MIL 310.

MIL 400 Fundamentals and Dynamics of the Military Team II (3) i. Discussion and application of the principles of military organization and management. Includes the comprehensive study of executive decision making and communication operation, training, logistics, intelligence, and personnel. Prerequisite: MIL 310 or consent of the department chairperson.

MIL 410 Leadership and Management II (3) ii. Advanced study of leadership and management. Examines administration at the company level and military justice. Also an interdisciplinary seminar on the military implications of world change. Concludes with an overview of the obligations and responsibilities of an officer. Prerequisite: MIL 400 or consent of department chairperson.

MIL 412 Leadership Practicum (1) ii. Practical applications in problem analysis, decision making, planning and organization, delegation and control, and development of interpersonal skills required for effective management. Prerequisite: advanced-course status. To be taken concurrently with MIL 410.

MIL 450 Independent Study in Military Science (1-5). Investigation of selected problems or topics on an individual or conference basis. Prerequisite: Consent of the department chairperson.

DEPARTMENT OF NURSING

C. Esry, *chairperson*, H. Buckles, A. Cordonier, J. Hoagland, S. McGinley, K. Noland, A. Walton

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

The following objectives are essential learning needs for students 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.

Students in the associate degree program must maintain a minimum lecture average of 70 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 eligible to apply 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, prospective students must contact the department chairperson for an application, which must be returned by Feb. 1. Other requirements for admission will be explained by the chairperson.

The laboratory experience in the nursing program requires special uniforms. The cost for these are approximately \$50.

Degree Requirements

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

Nursing Courses

NUR 150 Nursing I: Fundamentals of Nursing (6) i. Coordinated study of concepts, skills, and attitudes basic to patient care, safety, and comfort. Emphasizes orientation of the student to the individual, his or her health, and to the community health agencies. Guided

laboratory experience in an extended care unit and a general hospital. Students observe health care and community services in a variety of settings. Four hours lecture, six hours lab. Prerequisite: Approval of department chairperson.

NUR 151 Nursing II: Physical and Mental Illness, I (10) ii. Uses a conceptual and developmental approach in meeting nursing care and body maintenance needs. Focuses on the physical and psychological effects of illness. Guided laboratory experience in general hospitals, a psychiatric setting, and selected health agencies. Five hours lecture, fifteen hours lab. Prerequisite: NUR 150.

NUR 250 Nursing III: Physical and Mental Illness, II (10) i. Provides opportunities to give total patient care to individuals and groups of adults and children. Guided laboratory experience in a general hospital, and selected observation experiences. Five hours lecture, fifteen hours lab. Prerequisite: NUR 151.

NUR 251 Nursing IV: Maternal and Child Health (8) ii. A family-centered approach to maternal and child health, building on 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. Four hours lecture, twelve hours lab. Prerequisite: NUR 250.

PROGRAM IN AUTOMOTIVE TECHNOLOGY

L. Harris

The Program in Automotive Technology is designed to prepare individuals to become automotive technicians and automobile service managers. Career opportunities include positions with automobile and truck dealers, service stations, automotive service centers, and automotive service departments in various 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.

Automotive Technology Courses

AUT 111 Automotive Engine Theory and Analysis (5) i. Beginning course in theory and practical mechanics of the internal combustion engine. Emphasizes operation principles of four-cycle engines. Students work in the laboratory with engines to learn mechanical relationships and use of tools and gauging instruments. Three hours lecture and four hours lab.

AUT 120 Automotive Suspension and Chassis (4) i. Designed to acquaint the student with various automotive chassis and suspension systems and the related components which initiate braking, steering, and spring controls. Includes front-end geometry, front-end alignment, manual and power-assist steering units, manual and power-assist braking design and service, and front and rear suspension design and service. Two hours lecture and four hours lab.

AUT 150 Automotive Electrical and Fuel Systems (5) ii. Beginning course in automotive electricity, basic automotive ignition systems, fuels and lubricants, production, and testing. Emphasizes electrical fundamentals as related to spark ignition and carburetion principles. Includes 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. Covers components of the modern automotive power train mechanisms. Familiarizes the student with the total automotive drive train covering components located between the engine and the drive wheels. Includes clutches, fluid couplings and torque converters, standard transmissions, 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. Provides the student with the opportunity to apply formal training to actual work situations. The student will work in a job related to his or her 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. Emphasizes 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. Acquaints students with the operation of various types of automotive service businesses; includes guest speakers from the automotive industry, including service advisors, service foremen or managers, factory service representa-

tives, parts store managers, Small Business Administration personnel, bankers, insurance representatives, speciality 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. Familiarizes the student with automotive air conditioning units and power accessories. Emphasizes service and diagnosing of these units on and off the vehicle. Two hours lecture and four hours lab. Prerequisite: AUT 150.

Small Engine Repair Courses

SER 100 Basic Small Engines (3) i. Basic operating principles of two- and four-cycle small gas engines with an introduction to the mechanics of diesel and rotary engines. Discusses and demonstrates disassembly, inspection, measurements, adjustments, and assembly procedures. Two hours lecture, three hours lab.

SER 110 Electrical and Charging Systems (3) i. Covers basics of electrical theory and principles of operation of such units as magnetos, starters, generators, alternators, and charging system regulators. Includes testing and servicing procedures. Two hours lecture, three 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. Covers the calibrating and maintaining of speed and governor control assemblies. Two hours lecture, three hours lab.

SER 130 Small Engine Power Transmission (3) ii. Discusses transmission and control units for recreational and lawn and garden equipment such as lawn mowers, motorcycles, and tillers. Demonstrates disassembly, assembly, and adjustments of gear drive transmissions, belt drivers, hydraulic transmissions, trans-axle drives, power take-off units, power lifts, and torque converters. Two hours lecture, three hours lab.

SER 190 Small Engine Repair Practicum (5) iii. Provides the student with the opportunity to apply formal training to actual work situations. The student will work in a job related to his or her 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 individuals to enter 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 requires 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 211 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 3 credits of restricted electives from the following courses: LAW 215, MGT 211, LAT 190 or 210, plus 6 credits of restricted electives from the following courses: LAT 240, 260, 270; MGT 211 or 311.

Lawyers' Assistant Courses

LAT 100 Introduction to Legal Services (3) i, ii. 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, and the ethical and professional practice standards applicable to lawyers and assistants.

LAT 110 Legal Bibliography and Brief Writing (3) i. Introduces the law library and the processes of legal research. Emphasizes 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. Studies the law of real property. Emphasizes the common types of real estate transactions and conveyances, research of and practice in the drafting of contracts, deeds, leases, deeds of trust, forms of ownership, rights of creditors, and consequences of ownership.

LAT 160 Evidence (3) ii. Order of proof, form of question, opinions, cross examination, impeachment, objections, competency, privileges, relevancy, demonstrative evidence, best evidence rule, parole evidence rule, hearsay, burdens of proof and persuasion, judicial notice. Prerequisite: LAT 100.

LAT 190 Estates and Trust Administration (3) i. Studies the laws applicable to decedents' estates and common forms of wills and trusts. Examines the role and jurisdiction of the Missouri Probate Court as it relates to the administration of estates. Emphasizes will drafting, incompetents' estates, and probate proceedings and procedures.

LAT 210 Tort and Insurance Law (3) i. Studies the principles of the law of torts and insurance. Emphasizes the practical aspects of tort and insurance claim investigation, research, and preparation of pleadings.

LAT 240 Business Organization and Regulation (3) ii. Studies the laws related to the formation and regulation of business entities. Emphasizes practical research and projects related to legal services provided to developing and ongoing business organizations.

LAT 260 Taxation (3) ii. Studies taxation at the federal, state, and local levels. Emphasizes income, estate, gift, and fiduciary taxation, the preparation of tax returns, and other tax-related documents. Prerequisite: LAT 190.

LAT 270 Domestic Relations (3) ii. Studies the legal aspects of family relationships. Emphasizes the laws concerning marriage, divorce, separation, child support, adoption, and guardianship. Prerequisite: LAT 100.

LAT 290 Lawyers' Assistant Practicum (3-5) ii, iii. Provides the student with the opportunity to apply formal education in actual work situations. The student will work in a position related to his or her area of interest and will be evaluated by the participating professional for course credit. Prerequisite: A completed major application for a lawyers' assistant program and consent of instructor.

PROGRAM IN PILOT TRAINING

The Program in Pilot Training is designed to prepare individuals to become professional pilots. Employment opportunities for pilots include air taxi, business or corporate flying, supply company pilot, pilot instruction, police patrol flying, and a host of others.

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. Interested individuals should contact the dean of the Division of Career Programs for further information.

Pilot Training Courses

PTR 120 Private Flight (3) i, ii. Flight maneuvers leading to private pilot, single engine, land certificate. Two hours lecture, four hours lab.

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

PTR 126 Commercial Flight I (3) i, ii. Continuation of flight training leading to qualification for commercial license. Two hours lecture, four hours lab. Prerequisite: PTR 120.

PTR 129 Commercial Ground (3) i, ii. Advanced weights and balances, meteorology, flight computers, navigation, and radio, Federal Aviation regulations, and flight maneuvers. To be taken concurrently with PTR 126. Prerequisite: PTR 123.

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. Two hours lecture and four hours lab.

PTR 243 Instrument Flight (3) i, ii. Flight maneuvers and planning by sole reference to flight instruments. Two hours lecture, four hours lab. Prerequisite: PTR 126.

PTR 246 Instrument Ground (3) i, ii. Aircraft instruments and systems; instrument flight rules, 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. Two hours lecture, four 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, R. Hanks

The Program in Secretarial Science, with individualized typewriting and shorthand classes, is designed to prepare individuals 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.

A Secretarial Certificate requires the completion of the following specific courses: MGT 110 and 116; ENG 104; SEC 141, 230, 240, 351 and two of the following: SEC 144, 145, 340, plus one of the following: SEC 220; PSY 101; SPH 104 or 105; CSC 182; ACC 230.

A Clerical Certificate requires the completion of the following specific courses: MGT 110 and 116; ENG 104; ACC 230; SEC 141, 230, 240, and 351, plus two of the following: SEC 220; PSY 101; SPH 104 or 105; CSC 182; ACC 231; ECO 260.

Secretarial Science Courses

SEC 140 Elementary Typewriting (3) i, ii, iii. Beginning typewriting, emphasizing techniques of typewriter operations, skill development, and typing of letters and manuscripts. Three hours lecture, two hours lab.

SEC 141 Intermediate Typewriting (3) i, ii, iii. Emphasizes developing speed and accuracy, typing business letters, manuscripts, and business forms. Minimum net speed of twenty-five words per minute is needed to take this course. Three hours lecture and two hours lab. Prerequisite: SEC 140 or equivalent.

SEC 144 Elementary Shorthand (3) i, ii. Beginning course in which principles of Gregg Shorthand, Series 90, are taught. Three hours lecture, two hours lab. Prerequisite: SEC 140 or equivalent and ENG 100 or equivalent.

SEC 145 Intermediate Shorthand (3) i, ii, iii. A continuation of SEC 144 designed to review the principles of Gregg Shorthand, Series 90, with emphasis on development of dictation and transcription skills. Minimum dictation speed of sixty words per minute on new material is needed to take this course. SEC 141 should precede or parallel this course. Three hours lecture, two 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. Provides on-the-job office experience to students working in an approved local business for a minimum of ten hours a week. Student may take it for credit only one semester. Prerequisite: SEC 141, completed major application in secretarial science, and written consent of the instructor.

SEC 230 Office Machines (3) i, ii. Introduction to electronic calculators, transcribers, duplicating equipment, and special typewriters. Six hours lecture, three 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

*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).

production of mailable copy. Minimum net speed of forty words per minute is needed to take this course. Three hours lecture and two hours lab. Prerequisite: SEC 141 with C grade or better.

SEC 340 Advanced Shorthand (3) i, ii, iii. Continuation of SEC 145 with further development of dictation and transcription skills. Minimum dictation speed of eighty words per minute is needed to take this course. Three hours lecture and two hours lab. Prerequisite: Credit or concurrent enrollment in SEC 240; SEC 145 with C grade or better.

SEC 341 Secretarial Dictation and Transcription (3) i, ii, iii. Continuation of SEC 340 with emphasis on producing mailable transcripts. Minimum dictation speed of 100 words per minute is needed to take this course. Three hours lecture and two hours lab. Prerequisite: SEC 340 with C grade or better.

SEC 350 Office Communications (3) i, ii. Designed to teach effective oral and written communications. Includes business letters and reports. Six hours lecture, three 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 knowledge and skills in modern office practice. Six hours lecture, three hours lab. Meets second half of semester. Prerequisite: Credit or concurrent enrollment in SEC 240; SEC 230.

SEC 352 Model Office II (3) i, ii. Continuation of SEC 351 with students being promoted to managerial positions. Six hours lecture, three hours lab. Meets second half of semester. Prerequisite: Credit or concurrent enrollment in SEC 350; SEC 351.

GENERAL ELECTIVES

ALH 100 Emergency Medical Technology (9). Basic course designed to prepare persons for service with emergency medical units. Emphasizes 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). Advanced course for emergency medical service personnel. Emphasizes 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.

THE DIVISION OF EDUCATION AND PSYCHOLOGY

The Division of Education and Psychology includes the Departments of Education; Health, Physical Education, and Recreation; and Psychology.

In addition, the division contributes to all facets of education within the college. Required and elective courses assist students in fulfillment of general educational needs; comprehensive offerings lead to the completion of degree requirements; and the varied electives lead to program enrichment.

Students have 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 ever-changing 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 students gain maximum benefits and enjoyment from their college program. The objectives of the division are to provide opportunities for:

- professional development, in which students are prepared to enter the field of their choice with the knowledge and skills necessary for personal success and satisfaction either in the marketplace or in pursuit of additional education;
- personal development, in which a variety of courses are available through which students may broaden and enrich their understanding of themselves, mankind, and society;
- career exploration, which through a blend of on-campus theory courses and off-campus experiences students can explore the field of their choice early in their academic program.

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

TEACHER EDUCATION

Dr. S. Haynes, *chairperson*, Dr. J. Aschermann, Dr. N. Edwards, M. J. Fields, Dr. T. Hansen, Dr. F. Kump, Dr. D. Mahaffy, Dr. L. Marion, D. Minnis, D. Winston

The Department of Education is concerned with the total process of helping individuals become teachers. Students who wish to become elementary or secondary teachers learn to understand and utilize the principles of learning, human growth and development, and interpersonal relationships. The department also provides specialized educational experiences in participating elementary and secondary schools under the supervision of experienced teachers. The professional training of a prospective teacher is normally scheduled throughout the sophomore, junior, and senior years, culminating with a final professional semester. The professional education sequence complements a broad general education curriculum. A sound command of a major teaching field is integrated throughout the student's 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 Missouri Department of Elementary and Secondary Education. To be certified to teach, students must have fulfilled all degree requirements and, according to section 168.031 of the Missouri School Laws, must 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 applicants must meet the following requirements.

General Requirements

- The applicant's record must be without incident which could be found detrimental to future success as a teacher.
- The applicant must be of good moral character as demonstrated by objective evidence.
- The applicant 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.
- The applicant must have command of standard acceptable English usage and be able to communicate as expected of a teacher.
- The applicant 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, the student must submit an application as determined by those in charge of the teacher education program, and have a 2.0 CGPA.

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

- successfully complete Participation in Teaching I,
- submit the designated application,
- have a 2.3 CGPA, and
- have the recommendation of college and cooperating school personnel.

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

- successfully complete Experience in Teaching II,
- submit the designated application,
- have a 2.5 CGPA,
- have at least a 2.0 grade for each course in the professional sequence (any applicant with a grade lower than C in his or her major could be upon review be denied admission to student teaching), and
- have the recommendation of college and cooperating school personnel.

Completion: To be recommended for certification a student must have at least a 2.0 grade in his or her student teaching experience, and a CGPA of 2.5. Additionally, any grade lower than C in the major field and professional sequence could be grounds for the denial of certification. Decisions concerning exceptions will be determined by the Teacher Education Admissions and Retention Committee. Such refusal of certification will be so stated on the person's transcript.

Special Programs

Academic contracts (one- and two-year-temporary Missouri certification) 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 of elementary grades,
- warm, understanding, and empathetic in the area of humanizing education, and
- ready to assume an active role in the profession of teaching.

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; ENG 210; ART 100 or MUS 101 or THR 113; PED 101; PED or MIL activity.

In addition to the general studies and the professional sequence, the elementary major is required to complete successfully the following courses: ART 300; EED 310, 320, 330, 340, 360, 409; ENG 300; GEO 100; MAT 350,* 351*; MUS 300 or 330; PED 300, 380 or 382; PHS 230; PSC 101; and SED 331 (Comps II and III).

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 creative arts (art or music concentration), English, foreign language, mathematics, physical education, general science, and social 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 emotionally disturbed child, and teaching of the learning-disabled child.

The requirements for emphasis areas and specialized certificate programs are available from an elementary education advisor. Early planning of one's total program is highly desirable.

The Professional Sequence

The professional sequence is as follows.

EED 202 Introduction to Elementary Education	Credits 2
EED 203 Participation in Elementary Teaching I	1
EED 303 Experience in Elementary Teaching II	3
EED 305 Psychology in Elementary Teaching	4
EED 403 Seminar in Elementary Education and Human Relations	3
EED 408 Elementary Student Teaching III	9
EED 410 Psychology and Education of the Exceptional Child	<u>2</u>
<i>Total credits</i>	24

*To meet the wide variance of individual mathematic backgrounds the elementary major after consulting the Mathematical Sciences and Education departments may elect to be placed 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 MAT 95, 101, 350, and 351; Algebra 1 and A/B within past five years: enroll in MAT 101, 350, and 351; three or more years of college-preparatory high school math A/B: enroll in MAT 350 and 351.

Elementary Student Teaching III (EED 408) is to be taken during the student's senior year. Seminar in Elementary Education and Human Relations (EED 403), and Elementary Problems in Reading (EED 409) are to be taken concurrently with Elementary Student Teaching III. This semester is designated as a professional education semester.

Course work during the professional education semester is usually limited to EED 403, EED 408, and EED 409.

Petition for any additional course work must be submitted to the coordinator of clinical experiences in the semester prior to Elementary Student Teaching III. If granted, approval will be endorsed by the cooperating teacher to whom the student petitioner is to be assigned.

A student enrolled in Elementary Student Teaching III will assume the daily teaching schedule of the cooperating teacher.

Elementary Education Courses

EED 101 Speed Reading (2). Designed to improve the skills, speed, and comprehension of those individuals who feel a need for such improvement in schools, professional, business, or recreational pursuits. Open to both regularly enrolled students or any interested individual.

EED 202 Introduction to Elementary Education (2). Basic introduction to professional education. An on-campus exploratory course to aid the participant in deciding whether or not to become a teacher and to provide basic information and attitude development necessary for successful teaching. Taken the same semester as EED 203. Prerequisite: ENG 104 and 108 or 112.

EED 203 Participation in Elementary Teaching I (1). Laboratory course following EED 202. During this off-campus experience, the participant will serve as a teacher assistant. Provides the participant with concrete exposure to teaching, students, and the school. Prerequisite: EED 202 and approved admission to the Teacher Education Program.

EED 303 Experience in Elementary Teaching II (3). Continuation of the off-campus experiences in cooperating schools as a teacher associate. To be taken concurrently with EED 305. Prerequisite: EED 203 and 310, and approved admission to the Teacher Education Program.

EED 305 Psychology in Elementary Teaching (4). Studies 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; 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. Prerequisites: 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 needs and interests. A student may take as many sections as desired. a. Creative Dramatics b. Written Expression c. Poetry d. Listening e. Speech Development f. Handwriting g. Oral Communication h. Spelling i. Grammar and Linguistics j. Language Arts for Children.

EED 330 Science Methods in Early Childhood and Elementary School (2). Designed for teachers in early childhood and elementary schools emphasizing methodology, strategies, materials, and curriculum development of elementary science. Prerequisite: PHS 230.

EED 331 Audio-Visual Education (1-3). (See Secondary Education)

EED 340 Social Studies Methods for Elementary Teachers (2). General survey course of skills, concepts, methodology, strategies, and curriculum development of elementary social studies. Includes inquiry learning, problem solving, current events, interpretation of pictures, charts, graphs, tables, maps, time lines, and location and evaluation of information. Prerequisites: HIS 140, PSC 101, GEO 100.

EED 342 Measurement and Evaluation in Education (3). Principles and techniques of admin-

istration, application, and interpretation of tests, test results, and data. Prerequisites: EED 303 and 305 or SED 304, MAT 201 or consent of department chairperson.

EED 360 Assessing and Individualizing Reading (3). Designed to acquaint the classroom teacher with the philosophy, theories, pertinent studies and findings, and test instruments aiding perception and analysis of performance levels and behaviors in learning to read. Develops expertise in determining the strengths and weaknesses of each pupil and the cause-and-effect relationship of the total reading performance pattern. Develops observation and evaluation skills to study, develop, and utilize selected evaluation instruments, for adapting class methods and materials to the needs of students. Prerequisite: EED 310 and 311.

EED 385 Explorations in Reading Approaches (1-6). A component course designed to refine teaching techniques for particular reading methods currently used in area schools. Each section is one semester hour. a. Phonic Methods b. Linguistic Methods c. Enrichment Methods d. Language Experience e. Individual Methods f. Basal Programs. Prerequisite: EED 310 or 311.

EED 403 Seminar in Elementary Education and Human Relations (3). Studies philosophical, ethical, and legal problems related to elementary education. Explores instructional strategies, general methodology, evaluation procedures, and interpersonal relations 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, 303, and 305.

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 expertise. To be taken concurrently with EED 403 and EED 408.

EED 410 Psychology and Education of the Exceptional Child (2). Designed to give all teachers background and experience in working with the exceptional child in the regular classroom. Prerequisite: EED 305.

EED 413 Speech Correction for the Classroom Teacher (3). Methods and techniques of speech correction utilized by the classroom teacher.

EED 414 Methods of Teaching the Mentally Retarded (3). Prerequisite: EED 303 and 305 or SED 304 or approval of the department chairperson.

EED 415 Methods of Teaching the Emotionally Disturbed (3). Prerequisite: EED 303 and 305 or SED 304 or approval of the department chairperson.

EED 416 Methods—Learning Disabilities (3). Prerequisite: EED 303 and EED 305 or SED 304 or approval of the department chairperson.

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 Parents.

EED 450 Independent Study (credit hours open). A research-oriented course intended to extend the competencies of the student in a particular area. Prerequisite: Approval of the department chairperson.

EED 483 Practicum I in Reading: Diagnosis of Reading Difficulties (4). Clinical diagnosis in evaluation of reading and learning problems. Prerequisite: EED 310, 360, and consent of the education chairperson. (Two hours lecture, three hours laboratory.) Courses can only be taken on the MWSC campus.

EED 484 Practicum II in Reading: Remediation of Reading Difficulties (4). Clinical treatment of identified reading and learning problems. Prerequisite: EED 483 (Two hours lecture, three hours laboratory.) Course can only be taken on the MWSC campus.

EED 490 Applied Education Practices (1-9). Workshops will be developed in selected areas in accordance with student interest.

SECONDARY EDUCATION

The Department of Education has an overall objective of providing secondary schools with the best possible teachers, by 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,” with a background well attuned to the human aspects of the educational process, and
- functioning in a variety of teaching situations, from the traditional to the innovative; in professional preparation, students learn new and different approaches to secondary education as well as time-tested methods

The general studies requirements must be completed satisfactorily. The specific requirements in the major field are set by the departments. Secondary education majors are available in the following fields: art, biology, business, mathematics, music, English, chemistry, physical education, social science, and speech and theatre. Certification in a second teaching area is available in the majority of the above named fields.

The professional sequence is as follows:

SED 202 Introduction Secondary Education	Credits 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
<i>Total credits</i>	<hr/> 24

The Professional Semester

Secondary Student Teaching III (SED 409) is to be taken during the 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 professional education semester is usually limited to SED 404, 407, and 409. Petition for any additional course work must be submitted to the coordinator of clinical experiences in the semester prior to Secondary Student Teaching III. If granted, approval will be endorsed by the cooperating teacher to whom the student is assigned.

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

Driver Education and Safety Theory

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 304, LAW 140 or 160, SED 331 (all three components must be taken). A total of 21 credits is required.

Secondary Education Courses

SED 100 Introduction to Personal Development (2). Intensive eight-week course designed to increase the participant's understanding of his or her unique role as a learner and to stimulate the 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 personal values.

SED 154 Principles and Practices of Safety (3) iii. Prepares students to assume responsibility for safety education and accident prevention programming in school, industry, and public service. (Three-hour lecture.)

SED 202 Introduction to Secondary Education (2). Basic introduction to professional education. 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). Laboratory course following SED 202 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, students, and the school. Prerequisite: SED 202 and approved admission to the Teacher Education Program.

SED 254 Developmental Traffic Education (3) iii. Introductory course to prepare teachers of driver education. Includes classroom instruction, laboratory experiences, and driving skills.

SED 303 Experience in Secondary Teaching II (3). Continuation of the off-campus experience in a cooperating school as a teacher associate. To be taken concurrently with SED 304. Prerequisite: SED 203.

SED 304 Psychology in Secondary Teaching (4). Studies psychological principles as applied to educational settings. To be taken concurrently with SED 303. Prerequisite: PSY 101, SED 202 and 203.

SED 331 Audio-Visual Education (1-3). A component course designed to give students in-depth experiences in selected areas of instructional media/audio-visual education. a. Classroom Utilization and Selection of Instructional Media b. Preparation of Instructional materials c. 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 354 Advanced Traffic Education (3) iii. Advanced course to prepare teachers of driver education. Actual experiences in teaching beginning drivers in the classroom and the car. Two hours lecture, two hours lab arranged. Prerequisite: SED 254.

SED 404 Seminar in Secondary Education and Human Relations (3). Study of philosophical, ethical, and legal problems related to secondary education instructional strategies, including classroom and laboratory experiences. Considers 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). 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). 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). On-campus course designed for the experienced teacher. Activities will include microteaching and human relations training. Not open to baccalaureate degree candidates. Prerequisite: One full academic year of teaching experience plus a bachelor's degree.

SED 450 Independent Study (credit hours open). Research-oriented involvement intended to extend the competencies of the student in a particular area of education. Prerequisite: Approval of the education chairperson.

SED 490 Applied Education Practices (1-9). Workshops in selected areas according to interest.

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

DEPARTMENT OF HEALTH, PHYSICAL EDUCATION, AND RECREATION

Dr. C. Erickson, *chairperson*, J. Adcox, Dr. D. Deaton, G. Filbert, J. Grechus, G. Hazelrigg, J. Long, Dr. J. Terry, N. Thomas, M. Wilson, V. Keegstra, Dr. D. Laudie

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.

Students may satisfy general education requirements in category five by taking PED 101, Concepts of Physical Activity, and one activity course. The concepts course is designed to acquaint students with basic knowledge, understanding, and values, and should assist the student in the selection of appropriate activity courses.

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 the general education activity requirement.

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.

PED 160, Dance Participation, is offered to members of the MWSC Dance Company only. This course may be repeated up to four times. It will count as an elective, 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 and 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 programs. Students who desire a major in this department encounter the various strategies of successful team coaching and 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. The major includes a core of required courses as well as related course work in an area of professional emphasis as determined by the student's interest and upon approval of the advisor. A minor in leisure management is also available.

MWSC coaching certification courses are offered by this department for any education major who desires to teach in this area.

Major in Physical Education

Courses in physical education must total 52 credits and courses in biology, 5 credits. The specific courses required are BIO 250 and PED 191, 192, 201, 243, 244, 245, 246, 301, 302, 303, 304, 310, 374, 380, 382, 384, 385, and 393; 3 credits from PED 311, 312, 313, 314, and 315; 4 credits from PED 320, 321, 322, 323, 324, and 325; 1

credit from PED 153 or 183; 1 credit from PED 184, 185, or 186; and 2 credits 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: 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 the student has a physical handicap he or she 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. The student must be approved by this committee before being allowed to sign up for SED 409, Student Teaching III.

Bachelor of Science Degree, Major in Leisure Management

Courses for this major must total 62 credits, including LMA 220, 250, 230, 320, 323, 330, 420, 424, 430; PED 201, 395; and 30 credits within the professional emphasis area of the student's choice (community, outdoor, private, commercial, special populations, or youth agency).

Minor in Leisure Management

For a leisure management minor, the student must successfully complete 21 credits including LMA 220, 225, 230, 243, 320, 322, 323, 326, 424.

Certification in Athletic Coaching

Majors in any department who receive a degree in education may also receive an MWSC athletic coaching certificate. The following courses make up the 19-credit requirement: PED 201, 340, 310, 374, and 385 (PED 304 and 385 have the prerequisite of BIO 250); 3 credits from 311, 312, 313, 314, 315; 4 credits from 320, 321, 322, 323, 324, and 325.

Certification in Health Education

Teachers holding valid elementary or secondary teaching certificates may be granted additional certification in health upon successful completion of BIO 250, BIO 252 or equivalent, PED 192, PSY 210, PED 201, PED 300, PED 301, and BIO 260 or PED 384.

Teachers certificated to teach general home economics, vocational consumer homemaking education, biology, or physical education may be certificated to teach health in grades K-9 with the completion of BIO 250, PED 201, PED 301, PSY 210, and PED 384 or PED 300.

Facility and Special Fees

A facility fee of \$3 is required for all courses in the department. The fee entitles the student to use the locker and shower rooms. Special fees are charged for some courses which require special equipment and facilities.

Physical Education Theory Courses

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

PED 191 Foundations of Physical Education (2) i, ii. Historic and philosophic analysis of physical education emphasizing physical education as an academic discipline, professional opportunities, and associated fields. Recommended for freshmen.

PED 192 Personal and Community Health (2) i, ii. Personal health concerns and family and community health responsibilities.

PED 201 First Aid (2) i, ii, iii. General emergency care, major disaster, civil defense; Red Cross standard, and instructor 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, such as shooting sports, angling, backpacking, orienteering, rock climbing, canoeing, and wilderness living. Emphasizes attitudes, skills, environmental awareness, safety, teaching methodology, and principles of group leadership as they relate to adventure activities. (Field trips may be required.) Four hours lab. Same as LMA 243.

PED 244 Methods and Techniques of Team Sports (2) i. Presents teaching methodology and develops 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. Presents teaching methodology and develops 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. Presents teaching methodology and develops knowledge and skills in social, folk, and square dance, stunts and tumbling, and apparatus gymnastics. Four hours lab.

PED 300 Elementary School Health Education (2) i. Emphasizes content, methods, and materials at the elementary grade levels. Designed for the elementary school classroom teacher.

PED 301 Health Teaching in the Schools (2) i. Emphasizes content, methods, and materials in health education at all levels (K through 12). Prerequisite: PED 192.

PED 302 Issues and Materials in Physical Education (2) i, ii. Emphasizes 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, iii. The analysis of movement from study of anatomical structures and mechanical principles of the human body. Applicable to elementary, secondary, and adult populations. Prerequisite: BIO 250.

PED 304 Physiology of Exercise (3) i, iii. Basic physiology applied to physical education and the training and conditioning of athletes. Applicable to elementary, secondary, and adult populations. Two hours lecture, two hours lab. Prerequisite: BIO 250.

PED 310 Principles and Administration of Coaching (3) ii. Designed to provide insight into the coaching profession. Includes 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), and appreciation for non-technical aspects of the total job. Prerequisite: Junior classification.

PED 311 Coaching of Football (1) ii. Theory and fundamentals of football; includes 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; includes 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; includes 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; includes team selection, organization, and control as well as fundamentals and strategies of the sport. One hour lecture, one hour lab. Prerequisite: Sophomore classification.

PED 315 Coaching of Volleyball and Tennis (1) i. Theory and fundamentals of volleyball and tennis; includes team selection, organization, and control as well as fundamentals and strategies of the game. One hour lecture, one 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. Emphasizes the psychology and sociology of the sports participant from the standpoint of participant's behavior toward other individuals and groups. Prerequisite: Junior classification.

PED 380 Rhythms and Creative Movement for Elementary School (2) ii. Designed to teach elementary teachers how to approach the use of rhythms as a means for developing neuromuscular growth and body space awareness. Uses a variety of musical styles and rhythmic devices to develop a knowledge in movement exploration including body awareness, space utilization, time, and energy change. One hour lecture, two hour lab. Prerequisite: Sophomore classification.

PED 381 Outdoor Education (2) (on demand). A methodology course with an emphasis on establishing learning experiences in natural environments through varied disciplines of study.

PED 382 Elementary School Physical Education (3) i, iii. 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 of, prevention of, and practical experience with structural deviations from normal body mechanics.

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.

PED 385 Athletic Training (2) ii. Prevention and care of common athletic injuries, protective equipment, and training methods. Prerequisite: BIO 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. Applicable to elementary, secondary and adult populations.

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

PED 450 Independent Study in Physical Education (1-5) i, ii, iii. Research-oriented course to extend the competencies of the student in a particular area of education. Prerequisite: Approval of the department chairperson.

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 chairperson.

Leisure Management Courses

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

LMA 225 Philosophy of Leisure (2) ii. Analyzes fundamental philosophical concepts as they relate to principles and practices of leisure patterns in modern society.

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, back-packing, orienteering, rock climbing, canoeing, wilderness living). Emphasizes attitudes, skills, environmental awareness, safety, teaching methodology, and principles of group leadership as they relate to adventure activities. (Field trips may be required.) Four hours 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. Prerequisite: LMA 220.

LMA 322 Social Recreation (2) (on demand). Principles and techniques of administering and conducting social events. Emphasizes planning, discussion, demonstration, and participation.

LMA 323 Foundations for Recreation Programs (3) i. Basic principles and practices in planning recreation programs in a variety of settings; includes practical application of the planning principles. Prerequisite: LMA 220, 225.

LMA 326 Recreational Arts, Crafts, and Music (2) (on demand). Survey of various arts, crafts, 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 a 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 the profession including job-finding skills, interview techniques, values of recreation associations, and visits from field professionals. 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. Prerequisites: LMA 220, 225, 323.

LMA 430 Recreation: Field Experience III (9) i, ii, iii. Full-time summer internship with a 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 chairperson.

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 Activity Courses

No activity course can be repeated for credit except 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 the individual's 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). Introduction to sport fishing with emphasis on casting skills, methods of fishing, fish habitat, conservation practices, and luremaking.

PED 117 Beginning Riflery and Trap Shooting (1) Instruction in recreational shooting with emphasis on firearms safety. Students learn rifle, handgun, and shotgun marksmanship with range practice emphasized. Students purchase only shotgun 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). An exciting new recreational sport which combines use of map and compass with physical activity. Several styles of orienteering combined with practice on actual courses.

PED 123 Beginning Judo (1). Students must furnish gi.

PED 124 Beginning Survival and Primitive Living (1). Instruction in preparing for environmental emergencies with emphasis on the psychological aspect of survival situations and establishment of priorities for sustaining life in an environmental emergency. An overnight experience is required.

PED 125 Beginning Handball (1). Students must furnish their own glove.

PED 126 Beginning Squash (1).

PED 127 Beginning Archery (1). Introduction to target and field archery with emphasis on shooting technique and various types of archery games and competition. Students must furnish a matched set of six arrows.

PED 128 Beginning Backpacking (1). Instruction in backpacking with emphasis on equipment orientation, personal conduct within the natural environment, clothing and shelter, preservation of wilderness area integrity, safety, foods, and cooking. Course includes on-the-trail instruction and practicum. All equipment furnished by the department.

PED 129 Beginning Mountaineering (1). Introduction to mountaineering with concentrated instruction in rock climbing. Includes equipment orientation, rope handling, belaying, rappelling, traverses, emergency first aid and rescue, mountain weather, alpine living, and clothing principles. Particular stress on safety and climbing ethics. All equipment furnished by the department.

PED 130 Beginning Swimming (1). Basic skills in swimming. Swim suit required. Prerequisite: nonswimmers 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 and 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). Practical instruction in sailing and canoeing with emphasis on safety and techniques. On-the-water experiences are integral with instruction.

PED 139 Beginning Downhill 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 142 Hop Ki Do (Self-Defense) A martial art activity with emphasis on self-defense. Students must furnish gi.

PED 144 Beginning Recreational Games (1). Shuffleboard, table tennis, horseshoes, croquet, and others.

PED 146 Beginning Social Dance (1).

PED 148 Beginning Folk and Square Dance (1).

PED 153 Beginning Modern Dance (1). Students must furnish leotard.

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, women's volleyball, or women's basketball 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, and women's softball teams only. Will not satisfy general educational requirements in physical education. Must have permission of coach.

PED 160 Dance Participation (1). Limited to members of the MWSC Dance Company. Must have permission of dance company sponsor. Will not satisfy general education requirements in physical education.

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 188 Wilderness Canoeing (1). Comprehensive course in flatwater and river canoeing. Emphasis on whitewater paddling technique and personal conduct in wilderness environments. Also includes wilderness camping skills and expedition dynamics. Class is usually held in Minnesota, south Missouri, or Arkansas.

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 217 Intermediate Recreational Shooting (1). Emphasis on competitive shooting with rifle, handgun, shotgun, and blackpowder firearms. Students must purchase a portion of the ammunition. Prerequisite: PED 117 or permission of the instructor.

PED 218 Intermediate Bowling (1). Prerequisite: PED 118 or permission of instructor.

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

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

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

PED 229 Intermediate Rock Climbing (1). Continuation of PED 129, Beginning Mountaineering. Applied instruction, on-site, in classifying climbs, belay variations, and anchors; protection placements for lead climbing; climbing team organization; aid (class 6) climbing; and protected lead experience. Prerequisites: PED 129 or exhibited competence and skills of basic rock climbing technique.

PED 239 Intermediate Downhill Skiing (1). A continuation of PED 139, Beginning Downhill Skiing. Emphasis to be on downhill skiing as a leisure activity for a lifetime. Prerequisite: PED 139 or permission of instructor.

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

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

DEPARTMENT OF PSYCHOLOGY

Dr. M. Johnson, *chairperson*, J. Bargar, M. Bargar, P. Wann, J. Huntermark

The study of psychology gives the student a better understanding of human nature and of the behavior of oneself and others as individuals and as members of groups. The Department of Psychology offers either a Bachelor of Arts degree or a Bachelor of Science degree. The department also serves other disciplines by offering courses which meet their needs.

Bachelor of Arts or Bachelor of Science

Major in Psychology

This program requires 37 credits in the major and can lead to either a B.A. or B.S. degree. In addition to the major requirements, the student must fulfill the requirements for the specific degree program.

REQUIRED CORE COURSES

PSY 101 General Psychology	Credits 3
PSY 200 Intermediate Psychology	3
PSY 300 Measurements and Appraisals	3
PSY 301 Experimental Psychology	5
PSY 490 Senior Seminar	<u>2</u>
	16

RESTRICTED ELECTIVE CORE COURSES

The student must take at least two courses (6 credits) from each of the following restricted elective core groupings.

Natural science core

PSY 335 Learning and Motivation	Credits
PSY 355 Sensation and Perception	
PSY 345 Animal Behavior	
PSY 350 Physiological Psychology	
PSY 415 Intermediate Statistics for the Behavioral Sciences	<u>6</u>

Social science core

PSY 304 Child Psychology	
PSY 310 Industrial Psychology	
PSY 325 Psychology of Personality	
PSY 401 Social Psychology	
PSY 405 Psychology of Communication	<u>6</u>

PSYCHOLOGY ELECTIVES

The student must take an additional 9 credits of electives in psychology. These electives may be chosen either from the remaining courses in the natural or social science cores or from the other offerings in the catalog.

Total credits for major 37

Note: It is recommended that all students preparing for graduate school take PSY 330, since this is a requirement for entrance to many graduate schools.

Minor or Emphasis in Psychology

A minimum of 22 credits in psychology is required. Required courses totaling 16 credits are PSY 101, 200, 300, 301, and 490. The additional 6 credits to meet the 22-credit requirement must consist of electives in psychology.

Cognate in Psychology

Students in the Two Plus Two program (see page 42) who elect psychology as a cognate field will obtain an advisor from the psychology department and may be asked to take up to 16 credits of required courses. A minimum of 24 credits in psychology is recommended for a cognate in psychology.

Psychology Courses

PSY 101 General Psychology (3) i, ii, iii. General information about psychology in everyday life, designed to correct misconceptions and to give the student a better understanding of self and others.

PSY 200 Intermediate Psychology (3) i, ii, iii. 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-numbered 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 (5) i, ii. Provides training in the techniques and methods of scientific psychology. Emphasizes construction of hypotheses, experimental design, data interpretation, and style of reporting research. Three hours lecture, four hours lab. Prerequisite: PSY 101, 200, 300.

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 323 Psychology of Women (3) i. Evaluation of theories of physiological, cognitive, and personality sex differences, female problems in adjustment, and clinical interventions for women. 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 History and Systems in Psychology (3) i. Consideration of the major ways of defining, organizing, and explaining psychological phenomena. Prerequisite: PSY 101, 200.

PSY 335 Learning and Motivation (3) i (even-numbered years). Survey of 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-numbered years). Introduction to the comparative method in exploring and classifying behavior in animals. Prerequisite: PSY 101, 200, or consent of instructor.

PSY 350 Physiological Psychology (3) i (even-numbered years). Investigates the physiological correlates of behavior. Prerequisite: PSY 101, 200, or consent of instructor.

PSY 355 Sensation and Perception (3) ii (odd-numbered years). Consideration of data and theory concerning sensory and perceptual processes. Includes sensory mechanisms, neuropsychological bases of perception, perceptual development, and psychological phenomena encountered in the various senses. Prerequisite: PSY 101, 200, or consent of instructor.

PSY 401 Social Psychology (3) i, (ii even-numbered years). Considers the individual in relation to society. Includes 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-numbered years). Analyzes the elements of interpersonal communication with emphasis on techniques of communicating thoughts and ideas, listening techniques, understanding meaning, 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 410 Introduction to Counseling Psychology (3) ii. Provides an overview of counseling as applied in a variety of institutional settings. Reviews differing counseling techniques and theories as well as types of problems encountered in counseling. Includes survey of research related to counseling. Prerequisite: PSY 101, 325, or consent of instructor.

PSY 415 Intermediate Statistics for the Behavioral Sciences (3) i (even-numbered years or on demand). Applies basic statistical procedures to behavioral research. Considers some statistical procedures not taught in MAT 201, and the use of computers in data analysis. Two hours lecture, two hours lab. Prerequisite: PSY 301 or MAT 201.

PSY 420 Practicum in Psychology (4) i. Provides senior students in psychology the experience of applying their knowledge to an actual situation in the field. An additional 4 credits may be earned by taking PSY 421. Prerequisite: Senior status in psychology and consent of department.

PSY 421 Practicum in Psychology (4) ii. Provides senior students in psychology the experience of applying their knowledge to an actual situation in the field. An additional 4 credits 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. Prerequisite: Consent of department chairperson.

PSY 480 Independent Research (1-5) i, ii. Research on selected topics or problems on an individual conference basis. Prerequisite: Consent of department chairperson.

PSY 490 Senior Seminar (2) i, ii. Designed for seniors majoring in psychology. Emphasizes discussion of current areas of interest in psychology and vocational and educational opportunities. Prerequisite: Consent of instructor.

THE DIVISION OF LIBERAL ARTS AND SCIENCES

The Division of Liberal Arts and Sciences includes the Departments of Art, Biology, Chemistry, English and Modern Languages, Mathematical Sciences, Music, Social Science, and Speech, Theatre, and 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 the division's disciplines, knowledge is investigated as the human endeavor to understand the nature of mankind and the universe, and as the means for developing human potential to its fullest.

To make its work most effective, the division is also concerned with the application of knowledge to specific pursuits, and to the development of competencies in its students. Since Missouri Western State is an open-door college with especially close ties to the community, the division must provide opportunities for growth to all interested students, and also must act as a catalyst in the cultural life of the community. In all its activities, the division must strive for academic excellence.

DEPARTMENT OF ART

Dr. W. Eickhorst, *chairperson*, J. Estes, J. Harmon, J. Hughes, J. Nelson

The Department of Art provides a foundation of knowledge and skills in the visual arts which will prepare students to practice art on a professional level. Students may elect either the Bachelor of Arts degree program, which is designed to prepare practicing artists, or the Bachelor of Science in Education degree, which is designed for students who wish to teach art in the public schools. Both studio courses and historical-critical studies are an integral part of each program. Studio courses introduce the student to a wide variety of media and techniques while providing opportunities to deal with problems related to professional practice. Historical-critical studies acquaint the student with artistic styles, movements, and aesthetic problems in art, and place them in historical perspective.

The degree requirements in both programs are such that it is very important that students majoring in art see their faculty advisor each semester. Students are responsible for contacting their advisor to schedule a Junior Review during the second semester of the junior year. For the review, students are expected to submit a representative sampling of their work for examination by a committee of the art faculty. Permission of the Junior Review Committee is required for a student to enroll in ART 485, Senior Exhibit.

The Department of Art has an active gallery exhibition program and endeavors to expose students to regional and national artists working in the area of visual communication. Studio workshops, critiques, seminars, and lectures by professional artists and scholars, as well as field trips to the numerous galleries and museums in the St. Joseph/Kansas City area, are an integral part of many class experiences.

Bachelor of Arts with a Major in Art

The B.A. in art requires 16 credits in a single foreign language. Courses in art must total 57 credits. The following specific courses are required: ART 205, 206, plus 6 additional credits selected from courses in art history; ART 130, 170, 260, 310, 330, 340, 360, 370, 380, 390, 460, 485, and 495, plus 9 additional credits in one specific studio area.

Bachelor of Science in Education with a Major in Art

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

History and Appreciation of Art Courses

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. Investigation of selected problems or topics on an individual conference basis. Prerequisite: The student must have completed the major-minor application form, obtained the consent of the department chairperson, and earned a minimum of 2.5 GPA in the major field of study.

ART 495 Seminar in Art (3) i. Examination of critical thought in art theory, philosophy, and criticism. Prerequisite: 9 credits in art history or consent of instructor.

Studio Art Courses

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

ART 170 Introduction to Tools and Techniques (2) i, ii. 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. Four studio hours.

ART 260 Two-Dimensional Design (3) i. Exploration of design principles and fundamentals in two-dimensional media using a problem-solving approach.

ART 300 Art Teaching: Media and Concepts (3) i, ii, iii. Current methods and materials for the teaching of art in the elementary grades; theory and experience with elementary school art projects. Prerequisite: EED 202 or consent of instructor.

ART 310 Beginning Ceramics (3) i, ii. Traditional and contemporary approaches to ceramics as an art form; emphasis on technical, historical, and aesthetic problems. Six studio hours. (Students must purchase the clay they use.)

ART 320 Beginning Graphic Design (3) ii. Basic layout work: emphasizes typography and symbology and their interrelationship in communicating ideas visually. Six studio hours. Prerequisite: ART 130, 260, 390.

ART 325 Beginning Jewelry (2) i, ii. Basic jewelry techniques relating to design and sheet stock fabrication. Four 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. Relief and intaglio printmaking processes. Six studio hours. Prerequisite: ART 130, 260, 330.

ART 360 Three-Dimensional Design (3) ii. Emphasis on form and composition using a problem-solving approach; exploration of a wide variety of three-dimensional materials and processes. Prerequisite: ART 170, 260.

ART 370 Beginning Painting (3) i, ii. Color, composition, technique; the figure and still life. Six studio hours. Prerequisite: ART 170 plus 6 credits in drawing.

ART 380 Beginning Sculpture (3) i. Basic foundations in sculpture: theory, techniques, materials, processes. Six studio hours. Prerequisite: ART 170, 360.

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. Six studio hours. Prerequisite: ART 130, 260.

ART 400 Secondary Art Education: Philosophy and Methods (2) ii (even-numbered years). Exploration of teaching methodologies and materials for the secondary school art teacher; design of appropriate art learning experiences for the adolescent. Prerequisite: ART 300 or consent of instructor.

ART 410 Advanced Ceramics (3) i, ii. Advanced techniques and problems in ceramics.

Six studio hours. May be repeated for credit. (Students must purchase the clay they use.) Prerequisite: ART 310 and consent of instructor.

ART 420 Advanced Graphic Design (3) ii. Advanced layout work: camera-ready work, mechanicals; emphasizes typography and symbology, their interrelationship in communicating ideas visually. May be repeated for credit. Six studio hours. Prerequisite: ART 320.

ART 425 Advanced Jewelry (2) i, ii. Continuation of basic jewelry-making techniques. Emphasis on various casting techniques, handling of different metals, and related materials. May be repeated for credit. Four studio hours. Prerequisite: ART 325.

ART 440 Advanced Printmaking (3) i, ii. Continued exploration of relief and intaglio process; introduction to serigraphy. Six studio hours. May be repeated for a maximum of 9 credits. Prerequisite: ART 340.

ART 460 Composition in Art (3) i. Studio problems in composition using a wide variety of media and materials; emphasis on studio projects and critiques. Six studio hours. May be repeated for a maximum of 9 credits. Prerequisite: ART 360 and 6 credits in drawing.

ART 470 Advanced Painting (3) i, ii. Continuation of ART 370. Six studio hours. May be repeated for credit. Prerequisite: ART 370.

ART 480 Advanced Sculpture (3) i. Advanced techniques in various media. Six studio hours. May be repeated for credit. Prerequisite: ART 380.

ART 485 Senior Exhibit (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. Six studio hours. Prerequisite: ART 390.

DEPARTMENT OF BIOLOGY

Dr. R. Crumley, *chairperson*, Dr. W. Andresen, R. Boutwell, L. Evinger, H. Force,
Dr. T. Rachow, Dr. D. Robbins, Dr. J. Rushin

Biology students study all forms of life at the molecular, organismal, and population levels of complexity. Students work in well-equipped laboratories using current 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 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, and research biologists, among others, and for professional programs in medicine, dentistry, and veterinary medicine.

The Earth Science curriculum is also listed in the biology department.

Bachelor of Arts Degree

The B.A. requires 16 credits in a single foreign language.

Major in Biology

Courses in biology must total 36 credits. The following specific courses are required: BIO 111, 112, 309, 310, 311, 312, 411, 412, plus 9 additional credits selected from biology courses numbered 300 or higher, of which a minimum of 3 credits must be in plant science; CHE 111, 120, 310, 311, 370; MAT 105 and 201; PHY 101 or 110.

Major in Natural Science with Biology Emphasis

Courses in biology must total 27 credits. The following specific courses are required: BIO 111, 112, 310, 312, 412, plus 12 additional credits 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 credits. The following specific courses are required: BIO 111, 112, 309, 310, 311, 312, 411, 412, plus 13 additional credits selected from biology courses numbered 300 or higher, of which a minimum of 3 credits must be in plant science; CHE 111, 120, 310, 311, 370, MAT 105 and 210; PHY 101 or 110.

Bachelor of Science in Education Degree

Major in Biology

Courses in biology must total 36 credits. The following specific courses are required: BIO 111, 112, 260, 309, 310, 311, 312, 380, 411, 412, plus 3 additional credits 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 credits 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 Courses

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. Four hours lecture, two hours lab.

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

BIO 112 General Biology (3) ii. Continuation of BIO 111; two hours lecture, three 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. Four hours lecture, three 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. Three hours lecture, three hours lab. Credit for this course is not applicable toward a major in biology.

BIO 252 Basic Nutrition (3) ii. The science of human nutrition and its importance in the maintenance of health; translation of the basic principles of nutrition to the needs of individuals. Credit for this course is not applicable toward a major in biology.

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

BIO 301 Ecology Seminar (1) spring intercession. Interrelationships of fish, game, forest, the physical environment, and mankind. May be repeated for a maximum of 2 credits. Course grades assigned on pass-fail basis.

BIO 305 Human Ecology (3) ii, iii. Mankind and the 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. Three hours lecture, three 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. Three hours lecture, two 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. Three hours lecture, two 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. Three hours lecture, three hours lab. Prerequisite: BIO 310 and MAT 210, 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. Two hours lecture, three hours lab. Prerequisite: BIO 111 or consent of instructor.

BIO 350 Plant Systematics (3) i. Identification, characteristics, and importance of seed plants. Study of classification, techniques, and literature of taxonomy. Requires a plant collection and field trips. Two hours lecture, two 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 credits in 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. Three hours lecture, four hours lab. Prerequisite: BIO 111 or 112.

BIO 400 Microbiology of Human Disease (5) ii (odd-numbered years). Pathogenic microorganisms, medically important parasites of man; immunological principles, collection, isolation, and identification techniques. Three hours lecture, four hours lab. Prerequisite: BIO 399.

BIO 405 Plant Morphology: Nonvascular Plants (3) i (odd-numbered years.) Structure, development, and relationships of algae, fungi, and bryophytes. Two hours lecture, two hours lab. Prerequisite: BIO 111 or 112.

BIO 406 Plant Morphology: Vascular Plants (3) ii (even-numbered years). Structure, development, and relationships of vascular plants. Two hours lecture, two hours lab. Prerequisite: BIO 111 or 112.

BIO 411 Developmental Biology (4) ii. Plant and animal development; formation of organs and organ systems. Three hours lecture, three 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 of 2 credits. Prerequisite: Consent of instructor.

BIO 415 Invertebrate Zoology (3) i (even-numbered years). Comparative anatomy and biological principles of the invertebrates. Two hours lecture, two hours lab. Prerequisite: BIO 111 or 112.

BIO 416 Vertebrate Zoology (3) ii (odd-numbered years). Principles and evolution of vertebrate structure and function. Two hours lecture, two 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 completed the major-minor application form, obtained the consent of the department chairperson, and earned a minimum 2.5 GPA in the 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 Courses

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

DEPARTMENT OF CHEMISTRY

Dr. R. Schwarz, *chairperson*, Dr. L. Archer, A. Heckel, Dr. L. Lambing, Dr. R. Smtih, Dr. G. Zweerink

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

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

Bachelor of Arts Degree

Requires 16 credits in a single foreign language.

Major in Chemistry

Courses in chemistry must total 35 credits. The following specific courses are required: CHE 111, 120, 310, 311, 312, 313, 321, 431, 432, 495, plus an additional 5 credits 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 credits. The following specific courses are required: CHE 111, 120, 310, 311, 312, 313, 321, 326, 431, 432, 433, 434, 440, 441, 495; MAT 107, 108, 209; PHY 210, 211, 212; GER 102, 112.

Major in Medical Technology

Missouri Western State College offers a program leading to the Bachelor of Science degree with a major in medical technology. The first three years of the program are spent completing specified college course work (94 credits). The fourth year is spent in a hospital clinical program which is approved by the Council on Medical Education of the American Medical Association and accredited by the National Accrediting Agency for Clinical Laboratory Sciences. When a student successfully completes the hospital clinical program, Missouri Western State College will award 30 credits for the fourth year's work.

Acceptance into a hospital clinical program is highly competitive. Enrollment in the college program does not guarantee acceptance of the student into a clinical program. The student must make separate application to a hospital for the clinical program, which consists of twelve months of full-time day clinical instruction. Clinical programs in the Kansas City area are located at the following hospitals: Baptist Memorial, Menorah, North Kansas City Memorial, Providence-St. Margaret Health Center, Research, St. Luke's, St. Mary's, and Trinity Lutheran. Presently most Kansas City-area hospitals participate in a common acceptance-date system. Students should consult the medical technology adviser at the college to ascertain the time schedule for application to the hospital clinical program and

the approximate date when acceptance notices will be given.

Upon completion of the clinical program, students are eligible to take a national credentialing examination. Passing the examination is not a requirement for the Bachelor of Science degree with a major in medical technology; however, the student must pass the examination to become certified to practice as a medical technologist.

Degree Requirements: Courses in the natural sciences and mathematics must total 57 credits; courses in medical technology must total 31 credits. The following specific courses are required: CHE 111, 120, 310, 311, 321, 326, 370; BIO 111, 311, 399, 400, plus 4 credits selected from biology courses numbered 300 or higher; MAT 105, 106; PHY 101 or 110; MTE 441, 442, 443, 444, 445.

Major in Natural Science with Chemistry Emphasis

Courses in the natural sciences and mathematics must total 70 credits. The following specific courses are required: CHE 111, 120, 310, 311, 321, 370, 495, plus an additional 7 credits selected from chemistry courses numbered 300 or higher; BIO 111, 310, 311 plus an additional 12 credits 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 credits. The following specific courses are required: CHE 111, 120, 310, 311, 321, 431, 432, 465, 495, plus an additional 5 credits from chemistry courses numbered 300 or higher; MAT 107, 108, 209; PHY 110, 111.

Minor in Chemistry

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

Chemistry Courses

The student must furnish required laboratory apron and safety glasses in laboratory courses. A \$2 refundable laboratory deposit is also required.

CHE 101 Introductory Chemistry (5) i, ii, iii. Chemistry for Liberal Arts and Sciences students; meets the minimum physical science requirement. Three hours lecture, one hour discussion, two 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 or agriculture. Three hours lecture, two 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. Three hours lecture, one hour discussion, three hours lab. Prerequisite: 2 units of algebra. High school chemistry is also recommended.

CHE 120 General Chemistry II (5) i, ii. Continuation of CHE 111; thermochemistry, equilibrium, electrochemistry, radiochemistry, 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. Three hours lecture, six 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. Three hours lecture, three hours lab. Prerequisite: CHE 104 with a grade of C or better.

CHE 304 Biochemistry and Natural Products (3) i (odd-numbered years). Chemistry of biologically important compounds; emphasizes their relationship to agriculture. Three hours lecture. Prerequisite: CHE 204 or consent of instructor.

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. Three 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. Six hours lab. Prerequisite: Concurrent enrollment in CHE 310.

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

CHE 313 Organic Chemistry Laboratory II (2) ii. Laboratory course to accompany CHE 312. Six hours lab. Prerequisite: Concurrent enrollment in CHE 312.

CHE 321 Quantitative Analysis (4) i. Analytical chemistry; gravimetric, volumetric, colorimetric, and electro-analytical determinations. Emphasizes the instrumental approach to analysis. Two hours lecture, six 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. Two hours lecture, six hours lab. Prerequisite: CHE 321 with a grade of C or better.

CHE 370 Biochemistry (4) ii. Chemistry of biological compounds, metabolism, and biochemical genetics. Three hours lecture, three 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. Three hours lecture. Prerequisite: CHE 311 with a grade of C or better; MAT 209 (MAT 209 may be taken concurrently), PHY 110 or 210.

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

CHE 433 Physical Chemistry II (3) ii. Continuation of CHE 431. Electrochemistry, chemical kinetics, absorption and emission spectroscopy, and introduction to quantum chemistry. Three 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. Six hours lab. Prerequisite: Concurrent enrollment in CHE 433.

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

CHE 441 Advanced Inorganic Chemistry (3) i (even-numbered years). Modern concepts of inorganic chemistry, encompassing chemical bonding theories, acid-base theories, mechanisms of inorganic chemistry, symmetry in molecules, inorganic thermodynamics, and atomic and molecular structure. Three hours lecture. Prerequisite: CHE 431, 432.

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 completed the major-minor application form, obtained the consent of the department chairperson, and earned a minimum 2.5 GPA in the major field of study.

CHE 465 Chemistry Teaching: Methods and Techniques (2) ii. Modern techniques in teaching high school chemistry: use of audiovisual 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 chairperson.

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 Courses

MTE 105 Introduction to Health Science (1) i. Survey of the various health fields; job descriptions, employment opportunities, educational requirements, personal qualifications. One hour lecture.

The following courses are taken by fourth-year students enrolled in the clinical medical technology program as a part of the requirements for the degree in medical technology. These courses are not offered on the Missouri Western State College campus; they are included in a twelve-month internship program in a hospital affiliated with Missouri Western State College and approved by the Society of Clinical Pathologists.

MTE 441 Clinical Microbiology (6-8). The theory and laboratory study of pathogenic bacteria, viruses, rickettsiae, fungi, and parasites. Includes morphology, physiology, taxonomy, and medical significance.

MTE 442 Clinical Chemistry (6-8). Theory and laboratory study of analytical biochemistry, incorporating both routine and special chemical procedures.

MTE 443 Clinical Hematology (4-6). Study of blood cell derivation, maturation and function, principles of hemastasis, and blood coagulation. Methodology used in routine and special hematology studies.

MTE 444 Clinical Immunology (2-6). Includes immunohematology, the study of fundamentals of antigen-antibody reactions, blood groups and types, crossmatches, blood components, and the laboratory methods used in immunohematology studies; and serology, the theory of immunologic responses, and procedures used in determination of serological studies.

MTE 445 Topics in Medical Technology (3-6). Includes basic principles and practices of the medical laboratory, techniques, and special projects.

Physical Science Courses

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

PHS 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 (on leave)*, Dr. J. Castellani (*acting chairperson*), W. Chelline, M. Drummond, Dr. F. Flanagan, J. Frick (*on leave*), Dr. K. Fulton, Dr. R. Galloway, Dr. J. Gilgun, R. Hoffman, Dr. C. McCay, M. Magoon, R. Miller, K. Rosenauer, Dr. E. Sawin, Dr. R. Shell, I. Sparks, P. Vehlow; 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 students receive 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 four goals: (1) an improvement of communication skills through practice in diverse types of expository and imaginative writing; (2) a development 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 its students to grow in self-knowledge and the knowledge of others through its emphasis on the humane and liberal characteristics of its offerings.

Bachelor of Arts Degree

The B.A. requires 16 credits in a single foreign language.

Major in English, Communications Emphasis

The Bachelor of Arts degree in English with a communications emphasis is designed for students interested in entering business or seeking careers such as public relations work which demand a knowledge of and proficiency in communication skills.

The requirements for a Bachelor of Arts degree in English with a communications emphasis include the satisfactory completion of the following courses.

	Credits
Two courses in freshman English composition as required	
in the general studies program	6
ENG 210 Approaches to Literature	3
ENG 224 Advanced Composition and Literature	3
ENG 234 Structure of English	3
ENG 248 Approaches to Film Literature	3
ENG 338 Creative Writing	3
ENG 310 British Literature to 1798 <i>or</i>	
ENG 312 British Literature since 1798	3
ENG 360 American Literature to 1865 <i>or</i>	
ENG 362 American Literature since 1865	3

JOU 102 Principles of Journalism and Mass Media or	
SPH 204 Mass Communication	3
SPH 312 Advanced Public Speaking	3
SPH 305 Interpersonal Communication or	
SPH 335 Theories of Rhetoric and Communication	3
Additional literature course numbered 300 or above	3
Additional electives from the following:	6
JOU 302 Advanced Reporting: Opinion Writing	
JOU 306 Newspaper and Magazine Production Management	
JOU 314 Special Topics in Journalism	
SPH 345 Nonverbal Communication	
SPH 410 Organizational Communication	
SPH 475 Rhetorical Criticism	
PSY 405 Psychology of Communication	
<i>Total credits required</i>	<u>45</u>

Major in English, Literature Emphasis

The Bachelor of Arts degree in English with a literature emphasis is a broad-based program providing students with a wide perspective on literature, language, and world views. The program prepares students 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 courses.

	<i>Credits</i>
Two courses in freshman English composition as required in the general studies program	6
ENG 210 Approaches to Literature	3
ENG 224 Advanced Composition and 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 and American Poetry or	
ENG 478 Modern Drama	3
Additional British literature courses numbered above 300	6
ENG 488 Senior Seminar in English	<u>3</u>
<i>Total credits required</i>	<u>45</u>

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. Students interested in pursuing graduate work emphasizing writing, or in seeking employment with companies or businesses demanding proficiency in written communication skills, are advised to select this program. Students interested in journalistic writing are also encouraged to minor in journalism. Such students should consult the journalism faculty for advisement.

The requirements for this degree include the satisfactory completion of the following courses.

	<i>Credits</i>
Two courses in freshman English composition as required in the general studies program	6
ENG 210 Approaches to Literature	3
ENG 224 Advanced Composition and Literature	3

ENG 234 Structure of English	3
ENG 248 Approaches to Film Literature	3
ENG 338 Creative Writing	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 and Mass Media	3
JOU 202 Basic News Reporting	3
JOU 302 Advanced Reporting: Opinion Writing	3
JOU 306 Newspaper and Magazine Production Management	3
Additional literature courses numbered above 300	<u>6</u>
<i>Total credits required</i>	45

Bachelor of Science in Education Degree

Major in English

The Bachelor of Science in Education degree program leads to certification to teach English in the secondary schools. Students who pursue this program should consider teaching 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 courses.

	<i>Credits</i>
Two courses in freshman English composition as required in the general studies program	6
ENG 210 Approaches to Literature	3
ENG 224 Advanced Composition and 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 and Materials	2
ENG 488 Senior Seminar in English	3
Additional literature courses numbered above 300	6
EED 311 Teaching Reading in the Secondary School	<u>3</u>
<i>Total credits required</i>	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 students with an opportunity to broaden their understanding and appreciation of literature and culture, and to improve their communication skills. As such, the minor is a valuable asset to those seeking careers in the professional or business world.

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

	Credits
Two courses in freshman English composition as required in the general studies program	6
ENG 210 Approaches to Literature	3
ENG 224 Advanced Composition and Literature	3
ENG 310 British Literature to 1798 <i>or</i>	
ENG 312 British Literature since 1798	3
ENG 360 American Literature to 1865 <i>or</i>	
ENG 362 American Literature since 1865	3
ENG 368 Shakespeare	3
ENG 420 American Short Story <i>or</i>	
ENG 422 American Novel	3
Additional British literature courses numbered above 300	<u>6</u>
<i>Total credits required</i>	30

Minor in English, Education Emphasis

Structured to meet the requirements for teacher certification, the following minor in English is specifically offered to prepare students to teach English in grades 7 through 12.

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

	Credits
Two courses in freshman English composition as required in the general studies program	6
ENG 210 Approaches to Literature	3
ENG 224 Advanced Composition and Literature	3
ENG 234 Structure of English	3
ENG 310 British Literature to 1798 <i>or</i>	
ENG 312 British Literature since 1798	3
ENG 360 American Literature to 1865 <i>or</i>	
ENG 362 American Literature since 1865	3
ENG 400 Literature for Adolescents	3
Additional literature courses numbered above 300	6
EED 311 Teaching Reading in the Secondary School	<u>3</u>
<i>Total credits required</i>	33

Minor in Journalism

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

	Credits
JOU 102 Principles of Journalism and Mass Media	3
JOU 202 Basic News Reporting	3
JOU 210 Journalism Lab: Newspaper Production <i>or</i>	
JOU 212 Journalism Lab: Specialized Publication Production	2
JOU 304 Photojournalism	3
JOU 306 Newspaper and Magazine Production Management	3
JOU 310 Journalism Lab: Newspaper Production Management <i>or</i>	
JOU 312 Journalism Lab: Special Publication Production Management	2
JOU 314 Special Topics in Journalism	3
Additional journalism electives	<u>5</u>
<i>Total credits required</i>	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 courses.

FRE 102 Elementary French I	Credits 4
FRE 112 Elementary French II	4
FRE 202 Intermediate French	4
FRE 212 French Conversation and Composition	4
FRE 300 Topics in French	4
(FRE 300 must be repeated to complete 24 credits)	<u>4</u>
<i>Total credits required</i>	<u>24</u>

Minor in German

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

GER 102 Elementary German I	Credits 4
GER 112 Elementary German II	4
GER 202 Intermediate German	4
GER 212 German Conversation and Composition	4
GER 300 Topics in German	4
(GER 300 must be repeated to complete 24 credits)	<u>4</u>
<i>Total credits required</i>	<u>24</u>

Minor in Spanish

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

SPA 102 Elementary Spanish I	Credits 4
SPA 112 Elementary Spanish II	4
SPA 202 Intermediate Spanish	4
SPA 212 Spanish Conversation and Composition	4
SPA 300 Topics in Spanish	4
(SPA 300 must be repeated to complete 24 credits)	<u>4</u>
<i>Total credits required</i>	<u>24</u>

Teacher Certification in Foreign Language

State certification to teach foreign languages in grades K-12 in Missouri requires 30 credits in foreign languages, including 24 credits in the language taught, or 24 credits in one language plus 2 or more high school units in a foreign language.

State certification to teach foreign languages in grades K-9 in Missouri requires 21 credits in foreign languages, including 18 credits in the language taught, or 18 credits plus 2 or more high school units in a foreign language.

English Composition and Language Courses

ENG 100 Basic Written Communication Skills (3) i, ii. Instruction in reading and writing open to any student, but mandatory as first course for students scoring below 14 on ACT English test. Does not fulfill the English composition requirement for baccalaureate degree.

ENG 104 Composition and Rhetoric I (3) i, ii, iii. Instruction and practice in reading and writing, with emphasis given to expository prose.

ENG 108 Composition and Rhetoric II (3) i, ii, 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 Workshop (3) i, ii. An intensive twelve-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 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 332 History of the English Language (3) ii (odd-numbered years). Growth and structure of the English language. Prerequisite: Sophomore standing.

ENG 338 Creative Writing (3) i. Intensive practice in writing poetry, fiction, or drama, in accordance with the interests of the student. May be repeated for a maximum total of 6 credit hours. Prerequisite: ENG 108 or 112.

English Education Courses

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

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, or consent of instructor.

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 or consent of instructor.

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.

Literature Courses

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 104 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) i. 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. 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. Same as THR 368.

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 completed the major-minor application form, obtained the consent of the department chairperson, and earned a minimum 2.5 GPA 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. Same as THR 478.

ENG 488 Senior Seminar in English (3) i. Discussion of the relationships and significance of major texts and periods covered in the degree programs in English. Prerequisite: Consent of department chairperson.

Journalism Courses

JOU 102 Principles of Journalism and Mass Media (3) i. Analysis of the communications process: the role of newspapers, magazines, radio, television, and their impact on contemporary society.

JOU 104 Photography Fundamentals (3) i (odd-numbered years). Basic techniques of picture taking, 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 consent of 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 consent of instructor.

JOU 302 Advanced Reporting: Opinion Writing (3) ii. Writing editorials and expanded features: interpretive and investigative reporting. Prerequisite: JOU 202 or consent of instructor.

JOU 304 Photojournalism (3) ii (even-numbered years). Pictures as reportorial or interpretive statements of human events; photostrips, outlines, photo essays. Prerequisite: JOU 102 and 202, or consent of instructor.

JOU 306 Newspaper and 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. Prerequisites: JOU 202, 210 or 212, or consent 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 consent of 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 consent of 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 Courses

A student with extensive background in a language is 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 enable the student to test out of the second course.

French Courses

FRE 102 Elementary French I (4) i. Basic structural patterns of the language and essential grammar; development of active proficiencies and comprehension of grammatical concepts. Three hours lecture, two hours lab.

FRE 112 Elementary French II (4) ii. Continuation of FRE 102. Three hours lecture, two hours lab. Prerequisite: FRE 102 or equivalent.

FRE 202 Intermediate French (4) i. Continuation of French 112; completion of essential grammar. Three hours lecture, two hours lab. Prerequisite: FRE 112 or consent of instructor.

FRE 212 French Conversation and Composition (4) ii. Refinement of writing and speaking skills through review of structural patterns and mastery of idiomatic usages; and study of vocabulary distinctions. Three hours lecture, two hours lab. Prerequisite: FRE 202 or consent of instructor.

FRE 300 Topics in French (4) i, ii. Advanced course in French literature, language, or culture. Topics will vary from semester to semester. May be repeated for credit (with consent of instructor). Three hours lecture and two hours lab, or four hours lecture. Prerequisite: FRE 212 or consent of instructor.

German Courses

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. Three hours lecture, two hours lab.

GER 112 Elementary German II (4) ii. Continuation of GER 102. Three hours lecture, two hours lab. Prerequisite: GER 102 or equivalent.

GER 202 Intermediate German (4) i. Continuation of GER 112; completion of essential grammar. Three hours lecture, two 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. Three hours lecture, two hours lab. Prerequisite: GER 202 or consent of instructor.

GER 300 Topics in German (4) i, ii. Advanced course in German literature, language, or culture. Topics will vary from semester to semester. May be repeated for credit (with permission of instructor). Three hours lecture and two hours lab, or four hours lecture. Prerequisite: GER 212 or consent of instructor.

Spanish Courses

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. Three hours lecture, two hours lab.

SPA 112 Elementary Spanish II (4) ii. Continuation of SPA 102. Three hours lecture, two hours lab. Prerequisite: SPA 102 or equivalent.

SPA 202 Intermediate Spanish (4) i. Continuation of SPA 112; completion of essential grammar. Three hours lecture, two hours lab. Prerequisite: SPA 112 or consent of instructor.

SPA 212 Spanish Conversation and Composition (4) ii. Conversations and written compositions based on textual materials as well as contemporary topics. Three hours lecture, two

hours lab. Prerequisite: SPA 202 or consent of instructor.

SPA 300 Topics in Spanish (4) i, ii. Advanced course in Spanish literature, language, or culture. Topics will vary from semester to semester. May be repeated for credit (with consent of instructor). Three hours lecture and two hours lab, or four hours lecture. Prerequisite: SPA 212 or consent of instructor.

DEPARTMENT OF MATHEMATICAL SCIENCES

Dr. K. Lee, *chairperson*, G. Bishop, S. Hinrichs, B. Huston, Dr. D. John, K. Johnson, E. Johnston, B. Kelley, Dr. K. Klose, Dr. J. Leech, L. Schmitz, Dr. T. Scott, J. Wilkerson

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 students who desire a more thorough preparation for jobs in business, government, industry, and educational institutions.

Bachelor of Arts Degree

The B.A. requires 16 credits in a single foreign language.

Major in Mathematics

The major in mathematics requires the completion of the following program for a total of 54 credits: MAT 107, 108, 209, 305, 312, 316, 420, 430, plus an additional 6 credits of upper-division mathematics electives; PHY 210, 211, 212.

Bachelor of Science Degree

Major in Computer Science

The major in computer science requires the completion of the following program for a total of 54 credits: CSC 182, 188, 245, 284, 286; MAT 107, 108, 201, 209, 305, 312, 417; plus 12 credits of computer science electives (excluding CSC 250), 9 credits 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 credits: CSC 182, 188, 240, 245, 284, 286; plus 12 credits of computer science electives (excluding CSC 250); MAT 201 or MGT 210; and an approved program of 21 credits in a related area. (The student 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 54 credits: MAT 107, 108, 209, 305, 312, 316, 420, 430, plus an additional 6 credits of upper-division mathematics electives; PHY 210, 211, 212; CSC 188, plus an additional 3 credits 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 credits: MAT 107, 108, 209, 305, 312, 315, 316, 420, 430, 465.

Minors

Minor in Computer Science

The minor in computer science requires the completion of the following program for a total of 22 credits: MAT 107, 108; CSC 188, 284; plus 6 credits 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 credits: CSC 182, 240, 245, and 345; ACC 230; plus 6 credits of computer science electives.

Minor in Mathematics

The minor in mathematics requires the completion of the following program for a total of 21 credits: 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 20 credits: PHY 210, 211, 212, 310, 411.

Computer Science Courses

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 micro-computers 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 nine weeks before registration for this course. Prerequisite: Sophomore standing and completion of at least one programming language course.

CSC 255 Introduction to PL/Programming (3) i. Structure and facilities of PL/I (Programming Language/I). Prerequisite: CSC 188 or 245.

CSC 284 Symbolic Assembler Language I (3) i, ii. Assembly language-level programming: symbolic machine instructions, dumps, assembly language instructions, subprogram linkage and vendor-supplied sub-programs. Prerequisite: CSC 188.

CSC 286 Computer and Programming Systems (3) ii. 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 indexed-sequential disk processing, sort and report writer features, and structured programming concepts. 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 Languages 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 operational search techniques; linear programming, transportation and network theory, scheduling problems, inventory control, simulation. Prerequisite: CSC 188 and MAT 201 or MG

CSC 418 Operations Research II (3) i (even-numbered years). Queuing theory, queueing theory, regression analysis, dynamic programming. Prerequisite: CSC 388, MAT 107, and ..

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 the 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: Junior or senior status 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: Junior or senior status and one programming language course.

Mathematics Courses

MAT 090 Basic Mathematics (3) i, ii, iii. 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. (Not open to the student who has credit in MAT 101 or higher.)

MAT 095 Basic Algebra (3) i, ii, iii. Review of elementary algebra including the algebra of polynomials, linear equations, quadratic equations, systems of three equations, linear inequalities, integer and rational exponents, factoring, and 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. (Not open to the student who has credit in MAT 105 or higher.)

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 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 equivalent.

MAT 108 Calculus with Analytic Geometry II (5) i, ii. Continuation of MAT 107 with selected topics from analytic geometry and calculus. Prerequisite: Grade of C or better in MAT 107 or equivalent.

MAT 201 Elementary Statistics (3) i, ii, iii. 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 equivalent.

MAT 204 Applied Calculus (5) ii. Functions; limits; the derivative; application 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 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 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 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 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 equivalent.

MAT 332 Mathematical Statistics (3) i (even-numbered years). The theory of mathematical statistics; probability, distribution theory, and point estimation. Prerequisite: MAT 209 or 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 equivalent. (Not applicable to the major or minor in mathematics.)

MAT 351 Mathematics Methods 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 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 of ordinary differential equations. Prerequisite: MAT 312 and CSC 188 or 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 equivalent.

MAT 430 Analysis II (3) ii. Connectedness, completeness, compactness, the derivative, the Riemann integral, elementary transcendental functions. Taylor's theorem, sequences, and series of functions. Prerequisite: MAT 420 or 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 completed the major-minor application form, obtained the consent of the department chairperson, and earned a minimum 2.5 GPA in the major field of study.

MAT 465 Mathematics Teaching: Methods and Materials (2) ii. Techniques, materials, and resources used in the mathematics curriculum in secondary schools. Prerequisite: SED 303 or 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 equivalent.

Physics Courses

PHY 101 Concepts and Principles of Physics (4) i, ii, iii. Comprehensive treatment of the concepts and laws of physics using a nonmathematical approach. Three hours lecture-demonstration, two hours lab.

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

PHY 110 College Physics I (5) i, ii. Classical treatment of mechanics, waves, energy, heat, electricity, magnetism, and optics. Four hours lecture, three hours lab. Prerequisite: MAT 105 or consent of instructor.

PHY 111 College Physics II (3) ii. Relativity, atomic physics, and nuclear physics. Two hours lecture, three hour lab. Prerequisite: PHY 110 or consent of instructor.

PHY 210 University Physics I (5) i. Calculus-level mechanics, sound, and thermodynamics. Four hours lecture, three hours lab. Prerequisite: MAT 107.

PHY 211 University Physics II (4) ii. Calculus-level electricity, magnetism, waves, and optics. Three hours lecture, three hours lab. Prerequisite: MAT 108 (may be taken concurrently), and PHY 210.

PHY 212 University Physics III (3) i. Calculus-level modern physics. Three 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. Three hours lecture. 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. Three hours lecture, six hours lab. Prerequisite: PHY 310.

DEPARTMENT OF MUSIC

D. Rogers, *chairperson*, J. Anderson, C. Crittenden, Dr. M. Gilmour, S. Groh, W. Mack, M. Mathews, R. Yeager, F. Thomas

The Department of Music provides a curriculum for the training of musicians and music educators. It is primarily concerned with improving the skills and disciplining the talents of music majors. The department also offers courses and activities for all college students to enhance their appreciation and understanding of music. Students are encouraged to broaden their contact with music through attendance at the many cultural programs in St. Joseph and area concert halls and through participation in programs by student musicians.

Bachelor of Arts Degree

The B.A. requires 16 credits in a single foreign language.

Major in Music

Courses in music must total 49 credits. The following specific courses are required: MUS 160, 161, 162, 163, 169, 247, 260, 261, 262, 263, 350, 462, 9 credits on the applied instrument, 4 credits in MUS 100, 6 credits of restricted music electives selected from MUS 240, 241, 242, 349, 449, 463.

Bachelor of Science in Education Degree

The following programs lead to K-12 teaching certification in Missouri.

Major in Music, Vocal Emphasis (Secondary)

Courses in music must total 69-71 credits. 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 credits), 462, 465, plus 10-12 credits in restricted electives.

Restricted electives for students concentrating in applied voice: MUS 370, 8 credits (seven semesters); MUS 349e, 2 credits.

Restricted electives for students concentrating in applied piano: MUS 371, 8 credits (seven semesters); MUS 370, 2 credits (two semesters), MUS 349b, 2 credits.

Major in Music, Vocal Emphasis (Elementary)

Courses in music must total 72 credits. 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 credit), 351, 449b (1 credit), 462, 465, plus 4 credits (four semesters) in applied voice and 2 credits (two semesters) in applied piano or voice by advisement.

Major in Music, Instrumental Emphasis (Secondary)

Courses in music must total 71 credits. 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 credits (seven semesters) on the applied major instrument.

Degree Candidates in Music

- All degree candidates must pass a piano proficiency examination at the conclusion of MUS 247 (B.S. Ed. candidates must pass this proficiency examination prior to SED 409).
- B.S. Ed. candidates must participate in one major ensemble each semester (with the exception of the student teaching semester).
- All degree candidates must 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 Courses

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

MUS 101 Perspectives in Music (3) i, ii, iii. Music materials, forms, historical-social development of composers and compositions. For nonmusic 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 MUS 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 consent 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. Laboratory course in problems of choral conducting. Provides supervised conducting experience. Prerequisite: MUS 240.

MUS 242 Instrumental Conducting (2) ii. Laboratory course in problems of instrumental conducting. Provides supervised conducting experience. Prerequisite: MUS 240.

MUS 260 Advanced Theory I (3) i. Continuation of MUS 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 MUS 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. 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. Overview of methods and materials for teaching music in grades K-6. For students majoring in elementary education 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: Consent of instructor.

MUS 350 History of Music: Primitive to Baroque (3) i. Musical styles and techniques, 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 modern. 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: Consent 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 completed the major-minor application form, obtained consent of the department chairperson, and earned a minimum 2.5 GPA in the major field of study.

MUS 462 Form and Analysis (3) i. The elements, harmonic content, and formal structures of music; historical development. Prerequisite: MUS 169 and 262.

MUS 463 Arranging (2). Classification of instruments and voices; arranging for various combinations of instruments and voices. Prerequisite: MUS 169, 262, or consent 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 Ensemble Courses

Ensembles may be repeated for credit.

Major Ensembles

MUS 110 Chorus (1) i, ii. Group singing of various styles of music literature. Two hours.

MUS 135 Marching Band (1) i. Performance of marching maneuvers. Five hours per week. May be repeated for credit. Rehearsals commence about two weeks before beginning of semester. Prerequisite: Consent of director.

MUS 311 Choir (1) i, ii. Emphasizes tone production and musicianship, public performance of sacred and secular works. Three hours. Prerequisite: Consent of director.

MUS 312 Vocal Ensemble (1) i, ii. Madrigal group, trios, and quartets for public appearance. Three hours. Prerequisite: Consent of director.

MUS 323 String Ensemble (1). Chamber, music performance. Two hours. Prerequisite: Consent of director.

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

MUS 334 Symphonic Band (1) ii. Select ensemble emphasizing musicianship, playing skills; representative literature and public performance. Prerequisite: Consent of 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. Prerequisite: Consent of director.

Chamber Ensembles

MUS 313 Swing Choir (1) i, ii. Performance of popular music with choreography. Three

hours. Prerequisite: Consent of director.

MUS 320 Percussion Ensemble (1). Chamber music performance. Two hours. Prerequisite: Consent of director.

MUS 321 Brass Ensemble (1). Chamber music performance. Two hours. Prerequisite: Consent of director.

MUS 322 Woodwind Ensemble (1). Chamber music performance. Two hours. Prerequisite: Consent of director.

MUS 333 Jazz Ensemble (1) i, ii. Select ensemble for public performance. Prerequisite: Consent of director.

Applied Music Courses

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 consent of instructor.

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

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 consent of instructor.

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

Individual Instruction

Special fees are assessed for these courses.

MUS 370 Applied Voice (1-2) i, ii. May be repeated for a total of 8 credits. Half-hour weekly lessons for each credit. Prerequisite: Consent of instructor.

MUS 371 Applied Piano (1-2) i, ii. May be repeated for a total of 8 credits. Half-hour weekly lessons for each credit. Prerequisite: Consent of instructor.

MUS 372 Applied Strings (1-2) i, ii. May be repeated for a total of 8 credits. Half-hour weekly lessons for each credit. Prerequisite: Consent of instructor.

MUS 373 Applied Brass (1-2) i, ii. May be repeated for a total of 8 credits. Half-hour weekly lessons for each credit. Prerequisite: Consent of instructor.

MUS 374 Applied Percussion (1-2) i, ii. May be repeated for a total of 8 credits. Half-hour weekly lessons for each credit. Prerequisite: Consent of instructor.

MUS 375 Applied Woodwinds (1-2) i, ii. May be repeated for a total of 8 credits. Half-hour weekly lessons for each credit. Prerequisite: Consent of instructor.

MUS 376 Applied Organ (1-2) i, ii. May be repeated for a total of 8 credits. Half-hour weekly lessons for each credit. Prerequisite: Consent of instructor.

MUS 377 Composition (1-2) i, ii. Private lessons in composition. Half-hour weekly lessons for each credit. May be repeated for credit. Prerequisite: Consent of instructor.

DEPARTMENT OF SOCIAL SCIENCES

Dr. D. Steiniche, *chairperson*, J. Allen, Dr. R. Askins, Dr. M. Hoover, J. Jordan, Dr. F. Kessler, Dr. P. McLearn, E. Phelan, H. Pilgram, Dr. T. Ragland, Dr. J. Ripple, Dr. A. Rogers, R. York

The social sciences study human societies to understand their history, components, varieties, and behavior. These sciences study the changes, organization, and disorganization of societies, and they examine the varieties of people in society, their character and conduct, and the evidences of their "human nature." Students who major in social sciences generally prepare for careers in teaching, government, law, or social work.

Bachelor of Arts Degree

The B.A. requires 16 credits in a single foreign language.

Major in History

Courses in history must total 30 credits, with an additional 24 credits required in supporting areas. The following specific courses are required: HIS 100, 110, 140, 150, 200, 330, or 340, plus 12 additional credits in history, including 9 credits numbered 300 or higher; PSC 101, 110, plus 3 additional credits in political science; SOC 110 plus 3 additional credits in sociology; GEO 100; ECO 260; 3 credits in social science (other than history).

Major in Political Science

Courses in political science must total 30 credits, with an additional 24 credits required in supporting areas. The following specific courses are required: PSC 101, 110, 200, 210, 310, 320, plus 12 additional credits in political science courses numbered 300 or higher; HIS 100, 110, 140, 150; SOC 110 plus 3 additional credits in sociology, GEO 100, ECO 260.

Major in Sociology

Courses in sociology must total 30 credits, with an additional 27 credits required in supporting areas. The following specific courses are required: SOC 110, 120, 230, 310, 440, 460, plus 12 additional credits in sociology, including 9 credits in courses 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 Degree

Major in History

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

Major in Political Science

The requirements for the B.S. are the same as the requirements for the B.A. except that the foreign language requirement is replaced by an 18-credit minor. The

course work for this minor area should be worked out with the student's major advisor.

Major in Sociology

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

Bachelor of Science in Education Degree with a Major in Social Science

Course work in the social sciences must total a minimum of 50 credits including at least 11 credits in social science courses numbered 300 or above. Specific requirements are: 12 credits in European or world history including HIS 100, 110; 12 credits in American history including HIS 140, 150; 9 credits in political science including PSC 101; 9 credits in sociology; 3 credits in geography; 3 credits in economics; HIS 465.

Bachelor of Social Work Degree

The student who is interested in pursuing the Bachelor of Social Work degree is encouraged to complete a major-minor form as soon as possible, declaring an intention to major in social work; however, formal entry into the baccalaureate program in social work is through interview and acceptance by the social work faculty. Prior to the interview the student must have completed at least 45 credits in college course work with a minimum GPA of 2.3.

Courses in social work must total 35 credits, with an additional 42 credits 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 and related areas must total 18 credits. The following specific courses are required: GEO 100, 210, 220, 320, 330; ESC 304.

Minor in History

Courses in history must total 18 credits.

United States history option: HIS 140, 150, 300, 330, plus an additional 6 credits in history courses numbered 300 or higher.

European history option: HIS 100, 110, 200, 320 or 340, plus an additional 6 credits in history courses numbered 300 or higher.

Minor in Political Science

Courses in political science must total 18 credits.

American government option: PSC 320, 330, 410, 430, plus an additional 6 credits in political science courses numbered 300 or higher.

International affairs option: PSC 200, 210, 340, 440, plus an additional 6 credits in political science courses numbered 300 or higher.

Minor in Social Work

Courses in social work must total 16 credits. Courses in related areas must total 12 credits. 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 credits. The following specific courses are required: SOC 230, 310, 340, 440, plus an additional 6 credits in sociology courses numbered above 300.

Geography Courses

GEO 100 World Geography (3) i, ii, iii. Introductory course which emphasizes the inter-relationships between man and the natural environment.

GEO 210 Geography of the United States and Canada (3) i (even-numbered years). Regional study of the physical, cultural, and economic geography of the United States and Canada. Prerequisite: A course in geography.

GEO 220 Map Evaluation and 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 agricultural, industrial, and extractive production; world trade routes, increasing industrial production, problems of nonindustrial nations.

History Courses

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 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 HIS 140; reconstruction, industrialization, urbanization, emergence as a world power, progressivism, World War I, the New Deal, World War II, and postwar 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: 6 credits in 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-Mis-

Mississippi frontier; significance of the frontier in American history. Prerequisite: 6 credits in 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 325 American Economic History (3) i (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: 6 credits in American history.

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 postwar 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. Prerequisites: 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 American (3) ii. A survey course including 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: 6 credits in European history.

HIS 400 Civil War and Reconstruction (3) i (odd-numbered years). Sectionalism in antebellum America; developing sectional crisis and coming of the Civil War; effects of the war and reconstruction on the nation. Prerequisite: 6 credits in American history.

HIS 420 History of Africa (3). North Africa in the ancient world, Africa during the age of geographical discoveries, nineteenth century European imperialism, the emergence of modern African states and their problems. Prerequisite: 6 credits in European history.

HIS 450 Independent Study in History (1-5) i, ii. Investigation of selected problems or topics on an individual conference basis. Prerequisite: The student must have completed the major-minor application form, obtained the consent of the department chairperson, and earned a minimum 2.5 GPA in the major field of study.

HIS 465 Methods of Teaching Social Studies (2) i. Principles and methods of teaching social studies in secondary school. Objectives, problems, materials, and methods applied to the social studies curriculum. Prerequisite: Consent of advisor.

Political Science Courses

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. 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). Evolution of the American two-party system; place of the interest group in decision making through interaction with executive and legislative branches. Prerequisite: 6 credits in 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.

PSC 320 Public Administration (3) ii. Organization, functions, and problems of public administration in the United States. Prerequisite: 6 credits in political science.

PSC 330 Municipal Government (3) ii (odd-numbered years). The growth of cities, their legal status, municipal politics and elections, forms of city government, municipal services and functions. Prerequisite: 6 credits in political science.

PSC 340 Latin American Political Systems (3) i (even-numbered years). Comparative approach to Latin American political institutions; investigates causes for political instability; revolution, the new military, socialism vs. communism, and economic development and U.S. policy. Prerequisite: 6 credits in 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: 6 credits in political science.

PSC 360 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: PSC 101.

PSC 400 American Foreign Policy (3) i (odd-numbered years). Policy-making, the role of the public in decisions, formulation and implementation of national policy, U.S. policy goals in various areas of the world, decision making in crisis situations. Prerequisite: PSC 101 and 200.

PSC 410 The Legislative Process (3) ii (odd-numbered years). The American Congress, its organization, rules, role in law making; the role of interest groups, congressional investigations, and the modern presidency in the legislative process. Prerequisite: 6 credits in 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: 6 credits in 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. Investigation of selected problems or topics on an individual conference basis. Prerequisite: The student must have completed the major-minor application form, obtained the consent of the department chairperson, and earned a minimum 2.5 GPA in the major field of study.

Social Work Courses

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

SWK 310 Social Work: A Profession (3) i. The profession of social work, its values, and its view in approaching problems; social work methods and settings; approaches and innovations within the profession; the function of the individual social worker. Prerequisite: SWK 250.

SWK 320 Philosophy and Policy in Social Services I (3) ii. Historical significance of social legislation, its impact on the individual and society; social philosophy, social service, and social change. Prerequisite: SWK 250.

SWK 330 Human Behavior and 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. Three hours lecture, three hours lab per week. Prerequisite: SWK 250, junior status in social work.

SWK 410 Social Work Methods II (3) i. Continuation of SWK 350. Social interventive skills: generalist practice skills systems, integration of experiences and current practical literature. Prerequisite: SWK 350 and formal acceptance into the social work program.

SWK 420 Philosophy and Policy in Social Services 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. Investigation of selected problems or topics on an individual conference basis. Prerequisite: The student must have completed the major-minor application form, obtained the consent of the department chairperson, and earned a minimum 3.0 GPA in the major field of study.

SWK 460 Practicum in Social Work (5) i, ii. Field experience under the supervision of trained professionals in the field of social work. Sixteen hours per week in an agency setting. (Two semesters required, for a total of 10 credits.) 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 Courses

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 biocultural evolution of the human species, with emphasis on culture as adaptation for survival; comparison of human nonliterate 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 familial, religious, and educational institutions. Prerequisite: SOC 110.

SOC 310 Social Deviation (3) ii. Individual and social disorganization; delinquency, alcoholism, minority groups, discrimination; and marital conflict. Prerequisite: SOC 110, 230.

SOC 320 Urban Sociology (3). Population dynamics and urban growth: processes of urbanization, social differentiation, bureaucratization, and inequality as they affect social organization and life style, the modern city and metropolitan area as distinctive units of analysis. Prerequisite: 6 credits in 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: 6 credits in sociology.

SOC 340 Social Relations (3) i. The individual as a social actor: sociological conceptualizations of mind, self, and society; interrelationships between the individual and the structure and process of society. Prerequisite: SOC 110.

SOC 400 Minority Groups (3) ii. The characteristics of minority groups, theoretical interpretations of minority-majority relations, group conflict and social differentiation in complex societies. Prerequisite: 6 credits in sociology.

SOC 420 Collective Behavior (3) ii. Analysis of collective phenomena, propaganda, crowds, public opinion polls, pressure groups, and social movements. Prerequisite: 6 credits in sociology.

SOC 430 Criminology (3) i. Theories of criminal behavior, legal concepts, criminal statistics, corrective treatment, and crime control. Prerequisite: SOC 110, 230.

SOC 440 Sociological Theory (3) i. Historical and empirical treatment of the development, structure, and functioning of human social systems. Prerequisite: 12 credits in sociology.

SOC 450 Independent Study in Sociology (1-5) i, ii. Investigation of selected problems or topics on an individual conference basis. Prerequisite: The student must have completed the major-minor application form, obtained the consent of the department chairperson, and earned a minimum 2.5 GPA in the 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 credits in sociology, including SOC 440.

DEPARTMENT OF SPEECH, THEATRE, AND HUMANITIES

Dr. J. Mehl, *chairperson*, Dr. L. Dobbins, Dr. M. Heim, Dr. P. Mullins, Dr. I. Parmenter, B. Reule, Dr. A. Ruffino, J. Sirianni, Dr. J. Tapia, B. Wise, M. Wise

The Department of Speech, Theatre, and Humanities comprises several diversified areas of knowledge and experience. The humanities center on the human being— aspirations, potentialities, relationships with others—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 introduced to many aspects of mankind'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 others.

The Department of Speech, Theatre, and Humanities offers majors in speech and theatre applicable to both the Bachelor of Arts and the Bachelor of Science in Education degrees. The department as a whole also contributes to the general education of all students, the objective being to provide meaning to the term "humanities."

Bachelor of Arts Degree

The B.A. requires 16 credits in a single foreign language.

Major in Speech Communication

Courses must total 36 credits. The following specific courses are required: SPH 305, 312, 314, 324, 334, 335, 475, plus 12 additional credits in speech; THR 124.

Major in Theatre

Courses in theatre and related areas must total 39 credits. The following specific courses are required: THR 124, 217, 239, 249, 259, 318, 338, 457, 467, plus an additional 12 credits selected from theatre courses, 9 credits of which must be numbered 300 or higher (6 credits may be selected from nontheatre courses, but must have departmental approval).

Minor in Speech Communication

Courses in speech must total 21 credits. The following specific courses are required: SPH 305 or 324, 312, 314, 334, 335, plus 6 additional credits in speech.

Minor in Theatre

Courses in theatre must total 20 credits. The following specific courses are required: THR 140, 218, 249 or 259, 338, 457 or 467, plus elective credits in theatre or departmentally approved course work to total 6 credits, 3 credits of which must be numbered 300 or higher.

Minor in Humanities

Courses in humanities and approved electives must total 21 credits. The following

specific courses are required: HUM 203, 205, 210, 230 or 420, plus an additional 9 credits 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

Major in Speech and Theatre

Courses in speech and theatre must total 42 credits. The following specific courses are required: SPH 204, 305 or 324, 312, 314, 334, 465; THR 124, 217, 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 Courses

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). Oral reading and analysis of prose, poetry, and drama. Same as THR 218.

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 4 credits.

SPH 305 Interpersonal Communication (3) ii (odd-numbered years). Analyzes communication interaction in relatively unstructured, person-to-person settings with application of interpersonal communication concepts to resolving problems emerging from human interactions.

SPH 312 Advanced Public Speaking (3) ii (even-numbered years). 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) i (even-numbered years). Persuasion as a process of influencing attitude and behavior; preparation and delivery of suasive discourse. Emphasizes experimental research as reflected on the persuasive process. Prerequisite: SPH 104 or 105 or 106.

SPH 317 Speech for the Classroom Teacher (3) i (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 (even-numbered years). 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 (odd-numbered years). Philosophical and theoretical foundations of logic and argumentation to the persuasive process; experience in preparation and presentation through debate and discussion formats. Prerequisite: SPH 104 or 105 or 106.

SPH 335 Theories of Rhetoric and Communication (3) i (odd-numbered years). Survey of the formation and transformation of rhetorical precepts from the classical period to modern; studies recent theories of communication. Prerequisite: 9 credits in speech.

SPH 345 Nonverbal Communication (3) i. Nonverbal aspects of communication; factors which affect and modulate verbal messages. Interpretation of nonverbal information; kinesics (body motion), proxemics (social/personal space), and paralanguage (vocal cues accompanying words). Prerequisite: SPH 104 or 105 or 106.

SPH 410 Organizational Communication (3) ii (odd-numbered years). Theories and problems of human communication within a variety of organizational settings; the relationship of communication to motivation, organizational structure, nonverbal behavior, surroundings, leadership style, and information accuracy. Prerequisite: SPH 305 or 324 or consent of instructor.

SPH 450 Independent Study in Speech (1-5) i, ii. Investigation of selected problems or topics on an individual conference basis. Prerequisite: The student must have completed the major-minor application form, obtained the consent of the department chairperson, and earned a minimum 2.5 GPA in the 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 (even-numbered years). Application of various theories of rhetoric and communication to the analysis and criticism of discourse. Prerequisite: SPH 335.

Theatre Courses

THR 113 Introduction to Theatre (3) i, ii. The contributions made by directors, actors, designers, technicians, and playwrights to modern dramatic productions. Participation in a production as performer, member of stage or construction crew, or member of production committee is an optional activity but is not required.

THR 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 credit. May be repeated for a maximum of 6 credits. Course grades assigned on a pass-fail basis.

THR 217 Play Analysis (3) i (odd-numbered years). Study of the written script from the standpoint of the actor, director, and designer; strategies of plotting, characterization, thematic development, and style; descriptive analysis of the principal dramatic genres and styles.

THR 218 Oral Interpretation (3) i (even-numbered years). Oral reading and analysis of prose, poetry, and drama. Same as SPH 218.

THR 229 Stage Makeup (2) ii (even-numbered years). Techniques and materials involved in makeup and hair styling as required by the various styles and periods of dramatic productions. One hour lecture, two hours lab. (Student must furnish assorted makeup accessories.)

THR 239 Costume History and Construction (2) i (even-numbered years). 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. Three hours lecture-demonstration, four hours lab.

THR 259 Stage Lighting (3) ii (even-numbered years). Continuation of THR 249; emphasizes the element of stage lighting as a production requirement. Two hours lecture/demonstration, two 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. Two hours lecture, two hours lab. Prerequisite: THR 239.

THR 368 Shakespeare (3). A study of selected works. Same as ENG 368. Prerequisite: ENG 108 or 112, 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. May be repeated for a maximum of 6 credits. Prerequisite: Consent of instructor.

THR 418 Independent Projects in Acting (1-3) i, ii, iii. Specialized research or 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 6 credits. Prerequisite: THR 218, 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. Includes directing a laboratory production. Formal production prospectus must have instructor's approval prior to student's registration. Prospectus must be submitted to the theatre staff for consideration one semester in advance of enrollment. May be repeated for a maximum of 6 credits. Prerequisites: 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 makeup for a full-length departmental production. Student must submit project proposal to theatre staff one semester in advance of enrollment. Prerequisites: 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). 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. Three hours lecture.

THR 467 History of the Theatre: Restoration to the Present (3) ii (odd-numbered years). Continuation of THR 457. Study of the theatre from Restoration period to the present. Three hours lecture.

THR 478 Modern Drama (3). Drama from Ibsen to the present. Same as ENG 478. Prerequisite: ENG 108 or 112, or consent of instructor.

Humanities Courses

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 the classical period to the 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 the Renaissance to the present.

HUM 210 Introduction to Philosophy (3) i, ii, iii. Survey of the origins and development of philosophical thought.

HUM 219 Logic (3) i. Basic forms of reasoning with emphasis on the evaluation of arguments.

HUM 230 Ethics (3) ii. Definition, meaning, scope, and application of ethics to every phase of mankind as comprehended by an analysis of ethics in ancient, medieval, and modern times.

HUM 250 Comparative Religions (3) i (odd-numbered years). Survey of nature and effects of major and minor religions on the culture and civilization of mankind.

HUM 263 Religion of the Old Testament (3) i. Introduction to the major elements of the Old Testament from the perspective of contemporary biblical scholarship.

HUM 265 Religion of the New Testament (3) ii. Introduction to major elements of the New Testament from the perspective of contemporary New Testament scholarship.

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) i (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

The philosophy of the Division of Continuing Education is to provide for the needs and interests of the adult student in the community. As interests and needs are identified, the resources of both the college and the community are considered in the viability of any particular offering, as well as whether a proposed course is classified as credit or noncredit.

In general, the courses provide training in vocational or technological fields, professional growth opportunities within careers, cultural knowledge, and avocational experiences. Through the means of short courses, seminars, and workshops scheduled independently of the traditional college calendar, courses can be offered to specialized populations in addition to the public at large.

A total of six (6) Continuing Education credits may be used in meeting the total credits required for graduation, but may not be used to meet credit requirements in a major.

Admissions and Registration Procedures

Admission is open to anyone who may profit from the class. In some instances, a competency level is required to enroll in an advanced class. Enrollment is usually accomplished during the first meeting of the class. If the class meets for four or more sessions, students may enroll during the second session. Enrollment consists of the completion of a short form needed for report and roster purposes.

Fees

Students 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 course to another. Fees are set by the division and published at the time a particular program announcement is made.

For information concerning programs being offered, fees, or suggestions for programs of interest to the community, contact the director of the Division of Continuing Education, telephone 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 as follows.

- Degree programs. In the fields of business and psychology, course work is designed to enable students to complete total degree requirements in the Evening and Saturday Program.
- Professional and career advancement.
- Programs 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 students in enrollment plans, and serves as a communication center for both students and faculty.

Saturday and Evening Program students who must withdraw from college during the semester must contact the director of evening and Saturday classes in person, by telephone, or by letter. Students will be given failing grades in each subject if this formal notification of withdrawal is not 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.

Appendices

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
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APPENDIX A: COURSE ABBREVIATIONS

ACC	— Accounting	HUM	— Humanities
AEC	— Agricultural Economics	JOU	— Journalism
AGN	— Agronomy	LAT	— Lawyers' Assistant
AGR	— Agriculture	LAW	— Criminal Justice
ALH	— Allied Health	LMA	— Leisure Management
ASI	— Animal Science	MAT	— Mathematics
ART	— Art	MGT	— Management
AUT	— Automotive Technology	MIL	— Military Science
BAN	— Banking	MKT	— Marketing
BIO	— Biology	MTE	— Medical Technology
BUS	— Business	MUS	— Music
CET	— Construction Engineering Technology	NUR	— Nursing
CHE	— Chemistry	PED	— Physical Education
CSC	— Computer Science	PHS	— Physical Science
ECO	— Economics	PHY	— Physics
EED	— Elementary Education	PSC	— Political Science
EET	— Electronic Engineering Technology	PSY	— Psychology
EGT	— Engineering Technology	PTR	— Pilot Training
ENG	— English	SEC	— Secretarial Science
ESC	— Earth Science	SED	— Secondary Education
FRE	— French	SER	— Small Engine Repair
GEO	— Geography	SOC	— Sociology
GER	— German	SPA	— Spanish
HIS	— History	SPH	— Speech
		SWK	— Social Work
		THR	— Theatre

APPENDIX B: THE BOARD OF REGENTS

Appointed by Governor Joseph P. Teasdale, December 1977:

Shirley W. Bradley

Ken Christgen, Jr., *President*

Fred Eder

W. Dale Maudlin, *Vice-President*

Appointed by Governor Joseph P. Teasdale, July 1979

Peter O'Donnell

APPENDIX C: ADMINISTRATIVE STAFF

President

Dr. M. O. Looney

Vice-President for Academic Affairs

Dr. Robert J. Nelson

Dean of Career Programs

Dr. Stephen L. Capelli

Dean of Education and Psychology

Dr. Charles Coyne

Dean of Liberal Arts and Sciences

Dr. Bob R. Scott

Director of Continuing Education

Dr. George Richmond

Director of Learning Resources Center

Helen J. Wigersma

Director of Learning Skills Center

Gloria Rapinchuk

Vice-President for Business Affairs

Kenneth L. Hawk

Business Manager

Don Miller

Director of Athletics

Charles Burri

Director of the Computer Center

Marc Solomon

Director of Institutional Research

Thomas Robinson

Director of Personnel

Sara Dickey

Director of Physical Plant

Larry Smith

Purchasing Agent

Kathy Rogers

Vice-President for College Relations

Martyn W. C. Howgill

Director of Public Relations

Ann Meffert

Director of Publications

Sara Chilton

Vice-President for Student Affairs

Dr. Nolen E. Morrison

Dean of Students

Forrest Hoff

Director of Admissions and Records/Special Programs

George Ashworth

Director of Counseling and Testing

Marvin McDonald

Director of Financial Aid

Robert Berger

Director of Placement and Off-Campus Services

William Kuechler

Director of Security

Allen Forsen

Director of Student Health Center

Margaret Sullivan

Administrative Support Staff

Admissions Counselor

Pamela Potter

Baseball Coach

Douglas Minnis

Basketball Coach

Gary Filbert

Coach and Coordinator of Women's Athletic Programs

Rhesa Sumrell

Coach of Women's Basketball

Debbie Bumpus

Computer Project Coordinator

Richard Ivers

Controller

Charlene Rainey

Coordinator of Alumni Affairs

Carleton Schirmer

Coordinator of Housing

Joe Vigliaturo

Coordinator of Instructional Media Center

Max Schlesinger

Coordinator of Maintenance

Stephen L. McWilliams

Coordinator of News and Sports

Paul Sweetgall

Coordinator of Planetarium

Russell Maag

Coordinator of Theatre

Richard Leahy

Costumer

Birgit Wise

Counselor
Robert Hines
Counselor
Dorothy Miriani
Equipment Manager and Assistant Football Coach
Howard McCauley
Field Services Assistant/Assistant Football Coach
Steve Schottel
Football Coach
Robin Hicklin
Reference Librarian
Douglas Ernest
Reference Librarian
Elaine Jurries
Reference Librarian
Paula Spurlock
Research Analyst/Institutional Research
Judy Ann Fields
Student Health Physician
Dr. Dewey P. Ballard
Student Health Physician
Dr. G. Tyson Carpenter
Student Health Physician
Dr. William Challener
Student Health Physician
Dr. Orlyn O. Lockard, Jr.
Student Health Physician
Dr. F. James Marston, Jr.
Student Health Physician
Dr. Donald J. Stallard
Student Health Physician
Dr. Eugene G. Wolanski
Systems Analyst/Programmer
Diana Lynn Bell
Systems Analyst/Programmer
Karen Miller
Technical Processes Librarian
Julia Schneider

APPENDIX D: FACULTY 1980-81

Adair, MSG Paul, Instructor of Military Science

Adcox, Jay D., Instructor of Physical Education and Assistant Football Coach (B.S., Missouri Western State College, M.A., Northwest Missouri State University)

Allen, Margaret J., Assistant Professor of Social Sciences (B.A., Mississippi College, M.S.W., Tulane University)

Anderson, Jerry L., Assistant Professor of Music (B.S., Southwest Missouri State, M.M., Wichita State University)

Andresen, William F., Professor of Biology (B.A., Wayne State Teachers College, M.S., University of Nebraska, Ph.D., University of Nebraska)

Archer, Leonard J., Assistant Professor of Chemistry (B.S., Northwest Missouri State University, M.S., University of Nebraska, Ph.D., University of Nebraska)

Aschermann, Jerry R., Associate Professor of Education (B.A., University of Northern Colorado, M.S., Utah State University, Ed.D., Utah State University)

Askins, Roy L., Assistant Professor of Social Sciences (B.A., University of California—Santa Barbara, M.S., Illinois Institute of Technology, Ph.D., University of Tennessee)

Bargar, James S., Assistant Professor of Psychology (B.A., William Jewell College, M.A., Southern Methodist University)

Bargar, Marcy S., Instructor of Psychology (B.A., Southern Methodist University, M.A.Ed., East Carolina University)

Bishop, George L., Assistant Professor of Mathematical Sciences (B.S., Northwest Missouri State University, M.Ed., Emporia State University)

Blankenship, Bill H., Assistant Professor of Business (A.A., Coffeyville Community Junior College, B.S., Oklahoma State University, M.S., Oklahoma State University)

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INDEX

- Abbreviations, course, 145
- Academic
 - policies and regulations, 32
 - standards, table of, 36
- Accounting, 53, 56
- Activities, student, 30
- ACT test schedule, 15
- Administrative staff, 137
- Admission, 11
- Advisement, academic, 27
- Agri-business technology, 49
- Agricultural economics, 49
- Agricultural supply technology, 49
- Agriculture, 48
 - general, 49
- Agronomy, 49
- Alumni Association, 29
- Animal science, 49
- Architecture transfer program, 64
- Art, 102
- Associate degree programs, 41
 - general requirements for, 38
- Athletics, 30
- Auditors, class, 32
- Automotive technology, 74
- Baccalaureate degree programs, 42
 - general requirements for, 38
- Bachelor of Arts, 42
- Bachelor of Science, 42
- Bachelor of Science in Business
 - Administration, 42
- Bachelor of Science in Education, 42
- Bachelor of Science in Technology, 42
 - "Two Plus Two," 42
- Bachelor of Social Work, 42
- Banking and finance, 56
- Biology, 105
- Board of Regents, 146
- Bookstore, 28
- Business and economics, 53
- Business education, 55
- Calendar, academic, 6
- Campus, access to, 5
 - map, 5
- Career Programs, Division of, 47
- Certificate programs, one-year, 41
- Change of schedule, 32
- Chemistry, 108
- Class attendance, 32
- CLEP general test and credit hours, 14
- Coaching certification, athletic, 91
- College Center, 28
- Commencement, 38
- Communications, 112
- Computer science, 121
- Construction engineering technology, 65
- Continuing Education, Division of, 140
- Corrections, 61
- Counseling, 27
- Course numbering system, 33
- Course load, 32
- Credit, 12
- Credit units, 36
- Criminal justice, 61
- Data processing, 56, 121
- Degree programs, 41
- Description of courses, 36
- Dramatics, 30
- Driver education and safety theory, 88
- Earth science, 107
- Economics, 54
- Education
 - driver, 88
 - elementary, 85
 - physical, 90
 - secondary, 88
 - special, 85
- Education and Psychology, Division of, 82
- Electronic engineering technology, 65
- Elementary and special education, 85
- Engineering technology, 64
- Engineering transfer program, 64
- English and modern languages, 112
- English honors, 14
- Evening and Saturday program, 141
- Faculty, 150
- Fees, 16
 - physical education facilities, 91
- Fee waiver scholarships, 20
- Financial aid, 18
- Foundation, 29
- French, 115
- General electives, 81
- General studies program
 - four-year, 43
 - two-year, 41
- Geography, 121
- German, 116
- Goals of the college, 4
- Grade-point averages, 39
- Grading system, 33
- Graduate honors, 39
- Graduation, 38
- Health education, 91
- Health, physical education, and recreation, 90

Health service, 28
History, 130
Honors, 34
Housing, 28
Humanities, 136
Incomplete grades, 34
Instrumental music, 126
Intramurals, 30
Journalism, 115
Languages, modern, 112
Lawyers' assistant, 76
Leisure management, 91
Liberal Arts and Sciences, Division of, 101
Library, 28
Literature, 113
Major-minor applications, 39
Management, 54
Map, campus, 5
Marketing, 54
Mathematical sciences, 121
Medical technology, 108
Mid-management, 55
Military science, 69
Missouri Western State College, 3
Multiple degrees, 39
Music, 126
Musical groups, 30
Natural science
 biology, 105
 chemistry, 109
Nursing, 72
Organizations, student, 31
Pass-fail, 34
Physical education, 90
Physical science, 111
Physics, 122
Pilot training, 78
Placement and off-campus services, 29
Policies and regulations, academic, 32
Political science, 130
Probation, scholastic, 35
Psychology, 98
Readmission, 34
Records of academic work, 35
Recreation, 90
Registration, 16
Repeating courses, 35
Residence, 16
Retailing, 56
Scholarships, 22
Secondary education, 88
Secretarial science, 79
Semester designation, 36
Small engine repair, 75
Social life, 30
Social sciences, 130
Social work, 121
Sociology, 130
Spanish, 116
Special education, 85
Special topics courses, 33
Speech communication, 136
Speech, theatre, and humanities, 136
State legislation requirement, 39
Student
 affairs, 27
 conduct, 27
 government, 30
Summer session, 141
Suspension, 35
Teacher education, 83
Testing, 27
Theatre, 136
Transcripts, 35
Transfer programs, 44
"Two Plus Two" program, 42
Veterans, 17
Vocal music, 126
Withdrawal from college, 35
Writing, 113