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2012-2014

**Undergraduate
Academic Catalog**

Northwest Missouri State University 2012-2014 Undergraduate Catalog

Students are expected to read and conform to the regulations in this catalog. The student, not the University nor faculty members, is primarily responsible for knowing the regulations and policies, and for meeting the requirements for a degree or certificate.

A copy of this catalog is issued to each new student. Students are expected to keep the catalog throughout their college career. Students are advised to study closely the course offerings available on the website and to consult with faculty advisors for planning.

The information in this publication endeavors to be as current and accurate as possible. Due to the constant change in economic conditions and in student program needs, the accuracy of the details appearing here may be affected. There may be a possibility from time to time that classes will be deleted from this catalog or from trimester course offerings for lack of sufficient enrollment.

This catalog does not constitute a contract but is for information only.

Address of all University offices:

Northwest Missouri State University
800 University Drive
Maryville, Missouri 64468-6001

Academic and Administrative Office Hours:

8 a.m. to 5 p.m., Monday through Friday (except holidays)

University Information: (660) 562-1212

Web Address: www.nwmissouri.edu

Statement of Non-Discrimination

Applicants for admission and employment, students, and employees of Northwest Missouri State University are hereby notified that this institution does not discriminate on the basis of race, color, creed, religion, national origin, sex, age, or handicap in admission or access to, or treatment or employment in, its programs and activities. Any person having inquiries concerning Northwest Missouri State University's compliance with the regulations implementing Equal Employment Opportunity Commission (EEOC) and Americans with Disabilities Act (ADA) guidelines is directed to contact the President's Office, Northwest Missouri State University, 800 University Drive, Maryville, MO 64468-6001, (660) 562-1110. Any person may also contact the Assistant Secretary for Civil Rights, U.S. Department of Education, regarding the institution's compliance with the regulations implementing EEOC and ADA guidelines.

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2012-2013 Academic Calendar

Fall Trimester 2012

August 22-23	Wednesday-Thursday	Department Planning and Development
August 24	Friday	University/College meetings
August 25	Saturday	General Registration
August 27	Monday	Classes begin
September 3	Monday	Labor Day, no classes
October 12	Friday	First Block ends
October 15	Monday	Second Block begins
November 2	Friday	Walkout Day, no classes
November 3	Saturday	Homecoming
November 20	Tuesday	Thanksgiving Vacation begins, 5 p.m.
November 26	Monday	Classes Resume, 8 a.m.
December 10-14	Monday-Friday	Final Exams
December 14	Friday	Commencement
December 17	Monday	Grades due at 10 a.m.

Spring Trimester 2013

January 9-10	Wednesday-Thursday	Department Planning and Development
January 11	Friday	University/College meetings
January 11	Friday	General Registration
January 14	Monday	Classes begin
January 21	Monday	Martin Luther King Holiday, no classes
March 1	Friday	First Block ends
March 4	Monday	Second Block begins
March 25-29	Monday-Friday	Spring Break
April 1	Monday	Classes Resume
April 29-May 3	Monday-Friday	Final Exams
May 4	Saturday	Commencement
May 6	Monday	Grades due at 10 a.m.

Summer Trimester 2013

May 13	Monday	First Session begins and Registration
May 27	Monday	Memorial Day, no classes
June 7	Friday	First Session ends
June 10	Monday	Second Session begins and Registration
July 3	Wednesday	Second Session ends
July 4	Thursday	Independence Day, no classes
July 8	Monday	Third Session begins and Registration
August 1	Thursday	Commencement
August 2	Friday	Third Session ends
August 5	Monday	Fourth Session begins and Registration
August 19	Monday	Fourth Session ends
August 20	Tuesday	Grades due at 10 a.m.

2013-2014 Academic Calendar

Fall Trimester 2013

August 21-22	Wednesday-Thursday	Department Planning and Development
August 23	Friday	University/College meetings
August 24	Saturday	General Registration
August 26	Monday	Classes begin
September 2	Monday	Labor Day, no classes
October 11	Friday	First Block ends
October 14	Monday	Second Block begins
October 25	Friday	Walkout Day, no classes
October 26	Saturday	Homecoming
November 26	Tuesday	Thanksgiving Vacation begins, 5 p.m.
December 2	Monday	Classes Resume, 8 a.m.
December 9-13	Monday-Friday	Final Exams
December 13	Friday	Commencement
December 16	Monday	Grades due at 10 a.m.

Spring Trimester 2014

January 8-9	Wednesday-Thursday	Department Planning and Development
January 10	Friday	University/College meetings
January 10	Friday	General Registration
January 13	Monday	Classes begin
January 20	Monday	Martin Luther King Holiday, no classes
February 28	Friday	First Block ends
March 3	Monday	Second Block begins
March 24-28	Monday-Friday	Spring Break
March 31	Monday	Classes Resume
April 28-May 2	Monday-Friday	Final Exams
May 3	Saturday	Commencement
May 5	Monday	Grades due at 10 a.m.

Summer Trimester 2014

May 12	Monday	First Session begins and Registration
May 26	Monday	Memorial Day, no classes
June 6	Friday	First Session ends
June 9	Monday	Second Session begins and Registration
July 3	Thursday	Second Session ends
July 4	Friday	Independence Day Holiday, no classes
July 7	Monday	Third Session begins and Registration
July 31	Thursday	Commencement
August 1	Friday	Third Session ends
August 4	Monday	Fourth Session begins and Registration
August 18	Monday	Fourth Session ends
August 19	Tuesday	Grades due at 10 a.m.

Message from the President

Northwest students:

It is with Bearcat fervor that I welcome you and invite you to explore Northwest and all it has to offer. Please use this catalog to advance your knowledge about the array of academic opportunities available at Northwest.

At Northwest, our mission is focusing on the success of our students - every student, every day. Not only does Northwest boast a significantly higher freshman success rate than other moderately selective universities in Missouri, but our graduation rate is also considerably higher than the national average. We put a high premium on your success!

Across the nation, the buzzwords of access, affordability and accountability permeate nearly all conversations in higher education. While these terms have different meanings for different constituents, we at Northwest tend to look at these from a dual perspective: Our responsibility as an institution and your responsibility as a Bearcat.

Access: The traditional definition is that citizens have access to environments of higher education. However, we don't believe our responsibility ends once you are admitted to Northwest. "Access" to us also means that we provide open-door policies, student-faculty ratios ensuring access to faculty, and student services designed by and for students and available at the times you need them. Your responsibility is simple: to access faculty as advisors and mentors, and to access student organizations and services. We want you to access everyone who works diligently on a daily basis with one goal in mind: to ensure the best possible learning opportunities and living environment for you.

Affordability: We consider this responsibility every day and ensure we stretch every dollar we can to its fullest. That said, we focus on the highest quality for you as we help design your experiences. It's a balancing act and we are quite proud of what we provide - as are more than 70,000 Northwest alumni and friends! Your responsibility is to be a smart consumer and to join us in respecting our environment.

Accountability: Northwest is accountable to you, taxpayers and a range of others, and our institution is managed in a transparent environment. We expect you, too, to be accountable for your experience at Northwest. Actively engage with your professors both in and out of the classroom. Take advantage of services and academic support resources. Develop relationships with fellow students that will contribute positively to your ongoing success.

So, when Northwest says it will be THE university of choice for a comprehensive, exceptional student experience, what does that look like? It includes:

- A general education curriculum designed to deepen your understanding of the world and how to communicate this understanding. It will help you appreciate the ways in which others interpret the world around us, which will equip you for success as citizens and as professionals in your chosen disciplines;

- Majors and minors designed by faculty, who are experts in the discipline, and shaped by industry professionals to ensure your courses meet the demands of the marketplace;
- More than 180 student organizations in addition to numerous extracurricular academic, practicum and internship experiences that allow you to apply learning beyond classroom situations;
- One-on-one learning opportunities with the most committed faculty anywhere as well as other academic services such as tutors and supplemental instruction to help you succeed at an even higher rate;
- The opportunity for you to engage in the learning and living environment as much as you wish and to shape your learning plan as you progress;
- A robust intramural program and club sports in addition to an NCAA Division II athletic program featuring championship-caliber teams;
- A student employment program designed to augment your classroom learning, to provide professional development and to help keep your Northwest education affordable;
- A safe environment punctuated by a campus designated as the Missouri Arboretum that is also focused on sustainability and alternative energy; and
- Access to and interaction with passionate and committed alumni who are dedicated to advancing Northwest and ensuring learning opportunities for you.

Notice the above does not just focus on the classroom and the ensuing catalog offerings. Why? It's because we view the academic experience as a *comprehensive* experience. I challenge you to truly engage in the collegiate experience. All research shows that engaged students are successful students. Better yourself. Better Bearcat Nation. Better our community. You'll be a productive and engaged citizen and make our world a better place.

Thank you for being a Bearcat. We believe in you. You believe in yourself. Together we believe in the Green and White.

Sincerely,



Dr. John Jasinski
President

University Core Values

Mission

Northwest Missouri State University focuses on student success - every student, every day.

Vision

We will be the university of choice for a comprehensive, exceptional student experience.

Values

We value:

- Student Success
- Scholarship and life-long learning
- Intercultural experience
- Collaboration
- Respect and integrity
- Strategic thinking
- Excellence

History of Northwest Missouri State University

Northwest Missouri State University began in 1905 as Missouri's Fifth District Normal School to provide teachers for the schools of a 19-county region in northwest Missouri. The University still fulfills that function, but the institution has now grown into a comprehensive state university that offers more than 130 undergraduate programs, 34 master's degrees, three collaborative graduate programs, three specialist degrees, a cooperative doctoral program and five certificate programs.

Northwest's history includes three name changes. In 1919, the Missouri General Assembly changed the name to Northwest Missouri State Teachers College and established the privilege of granting baccalaureate degrees. On July 21, 1949, the Board of Regents changed the name to Northwest Missouri State College. The final name change occurred August 14, 1972, when the Board of Regents, recognizing the evolution of the school into a comprehensive institution, changed the name to Northwest Missouri State University.

Northwest has evolved into a vibrant and diverse learning community with an enrollment of more than 7,200 students from 47 states and 30 countries. About 750 faculty and staff are employed by the University, which offers classes on its Maryville campus, at centers in Liberty and St. Joseph, online and through instructional television.

In 1987, Northwest unveiled its unique Electronic Campus program that was designed to accelerate student learning and enrich faculty teaching and research by placing a computer terminal in every student residence hall room and faculty office. The program was the first of its kind on a public college or university campus in the United States. Today, all full-time students are provided a fully-loaded laptop computer, enabling all students access to technology and the software they need to be successful.

The Missouri Academy of Science, Mathematics and Computing was founded at Northwest in 2000. The rigorous program is an accelerated, two-year residential program for high school juniors and seniors academically talented in science, mathematics or technology. Students are challenged by college coursework tailored to individual abilities and taught by Northwest faculty. Students who complete the program earn both a high school diploma and associate of science degree.

Northwest serves its community and region in economic development. The state-of-the-art 46,679-square-foot Center for Innovation and Entrepreneurship, which opened on the campus in 2009, is a mixed-use business incubator and an academic facility that fuels high-tech enterprise and creates jobs while providing academic opportunities and career paths for students. Additionally, the facility houses the University's undergraduate program in nanotechnology.

With its emphasis on student success - every student, every day - the university is focused on providing an exceptional student experience that places high value on scholarship and life-long learning, intercultural competence, collaboration, respect and integrity, strategic thinking and excellence.

Admissions

Admission to Undergraduate Study

Northwest accepts students regardless of age, race, creed, sex, color, religion, national origin or handicap. Prospective students and their parents are encouraged to visit the campus. To schedule a visit, call the Northwest Office of Admissions toll-free at 1-800-633-1175.

To apply, complete the Northwest Application for Admission and submit official high school and/or college transcripts and ACT/SAT scores as appropriate. All materials should be received by the Northwest Office of Admissions at least two weeks before the anticipated date of enrollment.

Freshman Admissions

Northwest is moderately selective; admission is based on a combination of academic and personal considerations. Northwest takes an individual, holistic approach to the review of applications. All applicant's academic accomplishments are a priority and are demonstrated by test scores, grades, class rank and exposure to a college prep curriculum. Admission to Northwest is not viewed as an entitlement based on grades and test scores. Our admission process combines an examination of academic ability with flexible assessment of an applicant's experiences and potential.

New freshmen graduating from high school in the Spring of 2010 or after are required to have completed a 24-unit curriculum (16-unit core curriculum for 1996-2009 graduates). In addition, students must be from an accredited high school and meet the requirements in **Category I or Category II** below.

Category I

1. 21 ACT composite or higher (or the SAT equivalent: SAT-980-1010) and
2. Minimum 2.00 cumulative GPA or above (on 4.00 scale)

Category II

1. Have a combined percentile index (see page 12) that equals or exceeds 100 points; and
2. Minimum 2.00 cumulative GPA or above (on 4.00 scale)

For those students not meeting these requirements, the University will consider each case on an individual basis and will use professional judgment in admitting students that demonstrate academic promise and potential for success. Additional information, such as letters of recommendation and a personal statement, may be requested. Conditions may be placed on the enrollment of such students, if accepted into the University.

Application Fee

An application fee may be required for new students applying to Northwest. A complete listing of application fees is available by phone at (800) 633-1175.

Combined Percentile Index

Figure the class rank percentile by dividing class rank by class size, then subtract that percentile from 100 percent.

Using the Test Score Percentile Chart given below, find the appropriate ACT/SAT composite test score percentile.

Add it to the class rank percentile to get the Combined Percentile Index.

For example:

Class Rank = 6

ACT Composite Score = 19

Class Size = 30

ACT Percentile = 42

$1 - (6 \text{ divided by } 30) = .80$ or 80 percentile

Class Rank percentile = 80 percentile

Combined Percentile Index = $80 + 42 = 122$

Combined Percentile Index of 122 exceeds the minimum combined percentile index of 100, so the student would be admissible to Northwest if core curriculum and GPA requirements were met.

Composite ACT	Test Score Percentile Chart	
	Minimum SAT I	Percentile
36	1600	99
35	1540-1590	99
34	1490-1530	99
33	1440-1480	99
32	1400-1430	99
31	1360-1390	99
30	1330-1350	98
29	1290-1320	96
28	1250-1280	94
27	1210-1240	91
26	1170-1200	87
25	1130-1160	83
24	1090-1120	78
23	1050-1080	72
22	1020-1040	66
21	980-1010	58
20	940-970	51
19	900-930	42
18	860-890	34
17	820-850	26
16	770-810	19
15	720-760	13
14	670-710	8
13	620-660	4
12	560-610	2
11	510-550	1

(NOTE: SAT I Exam became effective after April 1, 1995)

24-Unit Core Curriculum-2010 high school graduates and beyond

- 4 units of English
- 3 units of Mathematics
(high school level algebra and beyond, including Algebra II-students who take algebra prior to freshman year will be expected to complete three additional math units)
- 3 units of Science
(not including general science; at least one unit must be a laboratory science)
- 3 units of Social Science
(must include American history and at least one semester of government)
- 1 unit of Fine Arts
- 3 units of Additional Coursework (1 practical art, 1 physical education, 1/2 health education, 1/2 personal finance)
- 7 units of Elective (At least three units must be in English, mathematics, science, social science or foreign language. The additional four units may include computer science and fine arts courses.)

Note: 1 unit = 1 year

Requirements

- Northwest requires of freshman students an **official** ACT score report sent by either their high school or by ACT to the Office of Admissions. The ACT is used for admission, placement and advisement purposes; the Scholastic Aptitude Test (SAT) may also be used. Residual test scores are not acceptable, unless taken at Northwest.

To Apply

- Carefully and promptly complete the Application for Admission and submit it to the Northwest Office of Admissions.

Online Only Application Deadline: Students applying for online only courses must apply two weeks prior to the first day of classes.

- Students should arrange to have their high school principal or guidance counselor forward a final and official copy of their high school transcript of courses taken and the grades received, cumulative GPA, class rank and expected date of graduation to the Northwest Office of Admissions. Provisional acceptance will be considered upon receipt of a six-semester partial transcript showing class rank. Students enrolled in college credit courses under the Dual Credit Program need to request an official college transcript be sent to the Office of Admissions upon completion of the course.
- Students should ask ACT or their high school to send an official copy of their ACT scores to the Office of Admissions (SAT is acceptable).

Homeschooled Students

Homeschooled students will be evaluated similar to those students who attended/are attending a public or private high school. Applicants must submit their ACT or SAT results and a transcript listing of high school courses and grades for each course.

In order to be accepted, homeschooled students must meet one of the following criteria:

1. A 24 or higher on the ACT (or SAT equivalent) **OR**
2. A 21 ACT **and** a GED score of 2250 or better (or 225 depending on date of test).

Former Missouri Academy Students

Former Missouri Academy students will be evaluated similar to those students who attended/are attending a public or private high school. Applicants must submit their ACT or SAT results if they have not already been provided to the Missouri Academy. Any student who has previously attended the Missouri Academy of Science, Mathematics and Computing will only be considered for undergraduate admission to Northwest Missouri State University if one of the following criterion has occurred or been met:

1. The student has earned their Associate of Arts degree from Northwest Missouri State University **OR**
2. The student's initial cohort class has graduated from the Missouri Academy.

Credit for External Examinations

Northwest utilizes the College Board Advanced Placement Tests (AP), the College Level Examination Program (CLEP) examinations, and the International Baccalaureate (IB) to award credits toward graduation. The AP exam and IB are administered through the student's high school, while the CLEP may be taken on campus through the Assessment Office or at any other institutional testing center. Students may not receive credit for any of these exams in subject areas already enrolled in at the college level or in which college credit has already been granted; students may not receive credit for CLEP exams retaken less than six months after the previous exam. In order to receive credit, students must supply the Office of Admissions with original score reports from the testing agency.

Northwest does not award credit for all AP, CLEP or IB examinations. Northwest will allow credit for scores on selected exams as follows:

Advanced Placement Course (Northwest Equivalent)	Score Required	Hours Granted
American Govt./Politics* (34-924)	4	3
American History (33-905)	4	3
Art History (13-102)	3	3
Biology (04-102/103)	3	4
Calculus AB (17-120)	4	4
Calculus BC (17-120)	3	4
Calculus BC (17-120, 17-121)	4	8
Chemistry (24-114/115)	3	4
Chemistry (24-114/115, 24-116/117)	4	9
Computer Science A+	–	–
Computer Science AB+	–	–
English Language and Comp (10-111)	3	3
English Literature and Comp (10-908)	4	3
Environmental Science (04-920)	3	4
European History (26-103)	4	3
French Language (14-131)	3	3
French Literature (71-916)	3	3
German Language (14-191)	3	3
Human Geography (32-101)	3	3

Macroeconomics (52-150)	3	3
Microeconomics (52-151)	3	3
Music Theory (19-173)	4	3
Music Listening and Literature (19-201)	4	3
Physics B (25-110/111)	3	4
Physics B (25-110/111, 25-112/113)	4	8
Physics C – Mechanics (25-120/121)	3	5
Physics C – Mechanics (25-120/121, 25-230/231)	4	10
Psychology (08-103)	4	3
Spanish Language (14-141)	3	3
Spanish Literature (71-916)	3	3
Statistics (17-114)	3	3
Studio Art-Drawing++	–	–
Studio Art-General++	–	–
World History (26-103)	3	3

*Students are required to take POLS 34-201 Missouri Politics in order to fulfill the state's requirement for graduation. See page 47-49 for Graduation Policies and Requirements.

+ The Department of Mathematics, Computer Science and Information Systems faculty will review and award credit on an individual basis.

++The Department of Fine and Performing Arts faculty will review and award credit on an individual basis.

CLEP Subject Examinations

Exam (Northwest Course Equivalent)	Criterion Score	Hours Granted
Composition and Literature:		
American Literature (10-908)	50	3
Analysis and Interpretation of Literature (10-908)	51	3
English Literature (10-908)	49	3
History and Social Sciences:		
American Government* (34-924)	55	3
American History I—to 1877 (33-905)	49	3
American History II—1865 to Present (33-905)	49	3
Introductory Macroeconomics (52-150)	50	3
Introductory Microeconomics (52-151)	50	3
Western Civilization I (26-102)	50	3
Western Civilization II (26-103)	50	3
Science/Mathematics:		
Calculus with Elementary Functions (17-120)	49	4
College Algebra (17-118)	48	3
Trigonometry (17-119)	54	2
Pre-Calculus (17-111)	50	3
College Algebra/Trigonometry (17-118, 17-119)	50	5
General Biology (04-102/103)	49	4
General Chemistry (24-114/115)	50	4
Business:		
Financial Accounting (51-201)	55	3
Principles of Management (54-313)	50	3

Foreign Language:

French (14-131, 14-132)	50	6
Spanish (14-141, 14-142)	50	6
French (14-131, 14-132, 14-232, 14-233)	63	12
Spanish (14-141, 14-142, 14-242, 14-243)	63	12

*Students are required to take POLS 34-201 Missouri Politics in order to fulfill the state's requirement for graduation. See pages 47-49 for Graduation Policies and Requirements.

CLEP General Examinations

CLEP General exams may be used to fulfill General Education requirements and receive credits, but are not equated to specific Northwest courses.

Exam (Northwest Course Equivalent)	Criterion Score	Hours Granted
Natural Science (98-911)	50	3
Social Science (35-906)	50	3
Humanities (26-909)	50	3
Mathematics (17-912)	50	3

International Baccalaureate Credit

Credit is given in the following disciplines: art, economics, English, foreign language, geography, history, humanities, mathematics, music, philosophy and theatre. Specific course equivalencies and hours of credit vary. Credit is awarded for higher-level examinations only unless otherwise stated. Contact the Office of Admissions for additional information.

Course	Score Required	Hours Granted
Art++	–	–
Biology (04-102/103)	4	4
Economics SL (52-130)	4	3
Economics HL (52-150)	4	3
English (10-111)	3	3
English (10-111, 10-220)	4	6
Environmental Systems & Society (32-501)	5	3
Foreign Language ‡	–	–
Geography (32-101)	5	3
Twentieth Century History SL/HL (33-155)	5	3
History of Europe and the Islamic World SL/HL (26-102)	5	3
Information Technology in a Global Society (44-920)	4	3
Math Studies SL (17-118)	4	3
Math SL (17-120)	5	3
Math HL (17-120, 17-121)	6	6
Music (19-201)	4	3
Philosophy SL/HL (39-171)	4	3
Physics (25-110, 25-111)	4	4
Physics (25-110, 25-111, 25-112, 25-113)	5	8
Psychology (08-103)	4	3
Theatre Arts SL (43-101)	4	3

++The Department of Fine and Performing Arts faculty will review and award credit on an individual basis.

‡The Department of Communication and Mass Media faculty will review and award credit on an individual basis.

Dual Credit Courses (Transferred to Northwest)

Northwest will accept for credit, courses taken while enrolled in high school under the Dual Credit Program as long as the courses are not vocational in nature and follow the State Guidelines for Dual Credit Courses issued June 1999. In order to receive credit, the Office of Admissions must receive an official college transcript from the college or university granting the credit.

Military Service

Students who have completed active military service may be granted credit as determined by the Northwest Office of Admissions. Credit may also be granted for specific military training and MOS designations as recommended by the American Council on Education.

Transfer Admissions

Transfer students are accepted for the fall, spring, and summer trimesters.

Students who wish to transfer to Northwest are strongly encouraged to schedule a campus visit by calling the Northwest Office of Admissions at (800) 633-1175, in order to discuss transfer of credits with the Office of Admissions and with the departmental major advisor. Upon presentation of an official transcript, a degree audit will be prepared which indicates what courses remain for a student to take to complete their degree at Northwest.

Requirements

To be considered for admission on transfer criteria rather than high school criteria, a student must have completed at least 24 hours of transferable, college-level coursework. (These hours must have been earned after high school graduation.) Students who have less than 24 hours completed will be considered for admission on the basis of the freshman admission requirements in addition to college work that has been completed. (Students transferring from non-regionally accredited institutions will also be considered as first-time freshmen. Credits cannot be transferred to Northwest from a non-regionally accredited institution.)

Transfer students must submit an application for admission along with official transcripts from all accredited colleges or universities attended. Students currently enrolled at a college or university should send an official partial transcript when making application for admission. Students must have a 2.00 (on a 4.00 scale) cumulative college grade point average in transfer in order to be accepted to Northwest. For students with a cumulative college grade point average in transfer below 2.00, consideration will be given based on professional judgment and acceptance may be granted on a probationary basis. In all cases, a student must be eligible to return to the last institution attended in order to be accepted to Northwest. If admitted, a transfer student who has less than 30 credit hours in transfer and a college cumulative GPA between 1.75 and 1.99 will be regularly admitted to the University, rather than on probation.

Application Fee

An application fee may be required for new students applying to Northwest. A complete listing of application fees is available at (800) 633-1175.

Transfer of Credits

Students transferring to Northwest from another regionally-accredited institution may be given transfer credit as their transcripts are evaluated by the Northwest Office of Admissions. Non-college parallel courses or technical credit can be transferred only for the Bachelor of Technology degree unless the Office of Admissions and the academic department concerned determine that the courses are academic in nature.

Continuing students at Northwest who wish to take courses at another institution as a visiting student should contact the Office of Admissions prior to enrolling to ensure the viability of transferring those courses into Northwest.

Transfer students have the option of meeting degree requirements as governed by the academic catalog in force at the time of the student's initial enrollment in higher education (provided that the student has maintained continuous enrollment and has remained in the same major program) or by the academic catalog in force at the time of the student's initial enrollment at Northwest.

Transfer credits do not always have equivalents at Northwest but may satisfy general education, institutional, or departmental requirements. The following 900-series course numbers are used to show if transfer courses meet general requirements, even though the courses are not directly equivalent, or transfer as electives only:

Aside from possible waiver of General Education requirements as detailed below, transfer credit will be evaluated on the same criteria established for native students as set forth in the academic policies section of this catalog. Students may challenge the interpretation of such criteria made by the Office of Admissions by petitioning the Committee on Admissions and Advanced Standing.

900 ACT English Credit	910 Fine Arts
901 English 111	911 Science
902 English 112	912 Math
903 Speech Communication	915 Computer Competency
904 American Government (with MO)	916 Multiculturalism
924 American Government (without MO)	918 Science Lab
905 American History	920 Lower Division Elective
906 Social Science	950 American Sign Language
907 Psychology	990 Upper Division Elective
908 Literature	988 B.T. credit only
909 Humanities/Philosophy	999 Elective, before summer 1990

A student has the right to appeal a denial of credit made by the Office of Admissions to the academic department concerned. If the student is not satisfied with the decision of the academic department, further appeal may be made to the Committee on Admissions and Advanced Standing.

Transfer of Credit from Two-Year Institutions

Two-year institution credit may not substitute for upper division credit, unless approved by the major department.

Transfer Students Holding Associate of Arts or Associate of Science Degrees

Students who hold an associate of arts degree from a regionally-accredited institution will have satisfied the Northwest general education requirements with the exception of courses required by their specific academic program and the government requirement stated on page 47.

Students who have completed the 42-hour block at a Missouri college/university will have satisfied Northwest's 42-hour general education requirements with the exception of courses required by their specific academic program.

Students who hold an associate of science degree from a regionally-accredited institution or an associate of arts degree from a regionally-accredited institution that is not in Missouri will have satisfied the Northwest requirements in general education if the student has at least 42 semester hours of general education with the following distribution of courses:

- Communication skills in the English language—three courses, at least two of which must be written; one oral communication course is recommended;
- Humanities—three courses, from at least two disciplines;

- Physical and life sciences—one course in each area including its associated laboratory component;
- Mathematics—one course in college algebra, an alternative course that includes a significant component of college algebra, or a course which has college algebra as a prerequisite; and
- Social and behavioral sciences—three courses from at least two disciplines; needs to include American history.
- American National Government—one course.

These 42 hours must be classified at a level designated for application towards a baccalaureate degree.

Students should note that additional courses in these areas may be required by their specific academic program and in that case are not waived by the associate degree. Please consult the major requirements outlined in this academic catalog.

Transfer students from outside the state of Missouri should be aware of the state law requirement for graduation as detailed on page 47 of this catalog; due to this requirement, such students will be required to take American Government or Missouri Politics even though their general education requirements have been waived.

Supersede Policy for Transfer Courses

When a student completes the same course two or more times before transferring to Northwest, credit will be awarded for only the highest grade when calculating the transfer grade point average. If a student completes the same course, once at Northwest and once at another institution, the procedures listed on page 41 will be followed like so:

- If the student receives a grade of “D” or “F” in transfer, that grade will be superseded when the class is completed with same or higher grade at Northwest. A petition for superseding must be completed at the time of registration in the course and can be obtained from the Registrar’s Office. The transfer grade will be averaged with the Northwest grade if a lower grade is received at Northwest.
- If the student receives a grade of “A”, “B”, or “C” in transfer, that grade will always be averaged with the Northwest grade that is earned. The grade in the transfer course will never supersede the grade earned when the course is taken at Northwest, regardless of the grade received during the time it was taken at Northwest.

To Transfer:

- Carefully and promptly complete the Application for Admission and submit it to the Northwest Office of Admissions.
- Students must also submit current official transcripts from each regionally accredited college or university previously attended (a composite transcript will not be accepted). Students currently enrolled should submit an official partial transcript at the time of application.
- Students who are transferring into Northwest’s College of Education and Human Services should see page 314 for additional requirements.

International Student Admissions

Before deciding to attend Northwest, the international student should examine his or her financial situation very carefully. The U.S. Immigration and Naturalization Service requires Northwest to certify that international students have been accepted for full-time enrollment and have sufficient funds to meet all expenses: tuition, housing, transportation, etc. Northwest

requires a Statement of Support and a certified bank statement from the student's family, sponsor, or government. The statement certifies that tuition, room and board, and personal funds are available, and that the student is permitted to export and exchange those funds into the United States. Without this certification, an I-20 Form cannot be issued.

Students entering Northwest are required to have a reading, writing, and conversational knowledge of the English language. If the student's native language is not English, then he or she is required to meet a minimum score requirement on the Test of English as a Foreign Language (TOEFL), International English Language Testing System (IELTS) or Pearson Test of English Academic (PTE Academic). Undergraduates should have a minimum score of 500 on the paper-based TOEFL, a 173 on the computer-based TOEFL or a 61 on the Internet-based TOEFL, a 5.5 on the Academic IELTS or a 44 on the PTE Academic. Graduates should have a minimum score of 550 on the paper-based TOEFL, a 213 on the computer-based TOEFL, a 79 on the Internet-based TOEFL, a 6.5 on the Academic IELTS or a 53 on the PTE Academic.

New International Students

To be fully admitted to Northwest, students must submit each of the following items to the Northwest Office of Admissions, Northwest Missouri State University, 800 University Drive, Maryville, Missouri, 64468-6001, USA. Forms are available by request from the Northwest Office of Admissions.

1. Application for admission (as appropriate).
2. Official academic transcripts from each secondary and post-secondary institution attended. If students are currently enrolled in a college or university, they should send official partial transcripts. Transcripts in a language other than English must have official translations attached to the official transcripts. All transcripts become the property of Northwest and cannot be released. Syllabi (course descriptions) must be submitted for all courses taken at universities outside the United States. Transcripts will not be evaluated until syllabi have been received.
3. Application fee of \$50.00 in U.S. currency. This is a non-refundable fee.
4. Score report from the Test of English as a Foreign Language (TOEFL), International English Language Testing System (IELTS) or Pearson Test of English Academic (PTE Academic). Undergraduates should have a minimum score of 500 on the paper-based TOEFL, a 173 on the computer-based TOEFL, a 61 on the Internet-based TOEFL, a 5.5 on the Academic IELTS or a 44 on the PTE Academic. Graduates should have a minimum score of 550 on the paper-based TOEFL, a 213 on the computer-based TOEFL, a 79 on the Internet-based TOEFL, a 6.5 on the Academic IELTS or a 53 on the PTE Academic.
5. Copy of passport.
6. Students who wish to apply for scholarships must have official SAT scores sent to Northwest.

International Application Deadlines

All documentation noted above must be received by the Office of Admissions prior to the deadline noted; applications not complete by the deadline will be considered for the next admission session.

Fall Trimester	July 1
Spring Trimester	November 15
Summer Trimester	April 1

I-20 Form

A Statement of Support completed and signed by the student's family, sponsor, or government and a certified bank statement are needed before an I-20 can be issued. Student visas should be

obtained before entering the United States, as converting from a tourist visa to a student visa is not assured.

An I-20 Form will be prepared for the applicant after the application and all necessary information have been received and the Office of Admissions has taken favorable action on the application. The I-20 Form cannot be prepared before the application is officially reviewed.

Freshman International Student Admissions

Freshman admission for international students is evaluated on an individual basis. Admission is offered to those students who possess academic qualifications equivalent to those required for domestic first-time freshmen. Consideration is given to the courses taken and grades received in secondary school, as well as to results of school leaving examinations and certificates. The integrity of the student's native educational system is respected in regard to the university entrance requirements in the native country; students not eligible for university admission in their native country will not likely be granted admission to Northwest.

For comparison purposes, admission requirements for domestic first-time freshman must include the following:

1. A minimum high school grade point average of 2.00 or "C" average and;
2. A college-preparatory curriculum in secondary school, including courses in mathematics, science, language and social studies.

International Transfer Students

In addition to items one through six listed previously, undergraduate and graduate international students who are transferring to Northwest from another American university should also submit a Transfer Form to the Northwest Office of Admissions. To be admitted to Northwest as a transfer student, students must also meet all the standards and requirements of American transfer students (see page 17). Students who have less than 24 transfer hours completed will be considered for admission on the basis of freshman admission requirements.

International Graduate Students

Whether the undergraduate degree is from a foreign university or from an American university, graduate students should also submit items one through five listed previously. The prerequisites for admission to graduate school are:

- A baccalaureate-level degree from either a regionally-accredited American university or foreign institution.
- A cumulative undergraduate grade point average of at least 2.50 on a 4.00 scale, depending on the program requirement. Students who have a cumulative GPA between 2.20 and 2.49 may be admitted on a conditional basis if other admission requirements are met.
- Each graduate program has specific admission policies in addition to the policies for admission to graduate study. These may include the GRE or GMAT test scores, or alternative admission requirements. See the appropriate program section in the online Graduate Academic Catalog for complete admission requirements.

The maximum graduate credit accepted for transfer is nine semester hours in no more than four courses. In order for graduate transfer credits to be evaluated, the prospective graduate student must also file an Approved Program Form with the Northwest Office of Graduate Studies.

For more information on graduate policies, procedures, and requirements, see the current Northwest *Graduate Catalog*, available online at www.nwmissouri.edu/academics/catalog.

Special Admissions

Non-Degree-Seeking Students

Individuals who do not wish to pursue a degree may apply and be accepted as undergraduate non-degree-seeking students. The student must be 18 years of age or older. Proof of high school graduation is required for non-degree status; however, students who have graduated from high school within the last two years cannot be admitted as non-degree students but instead must meet regular admission standards as outlined on page 11. The ACT exam is recommended for advisement purposes. Students under academic and/or disciplinary suspension or probation from this or any other institution may not be admitted in this category. A transfer student must be eligible to be admitted as a degree-seeking student. Non-degree seeking students are limited to an enrollment of six hours per trimester and can only receive 18 semester hours credit as a non-degree-seeking student. To continue taking coursework beyond the 18-hour limit, a student will have to reapply as a degree-seeking student and must meet regular admission requirements. Non-degree-seeking students are not eligible to receive federal student financial aid.

Re-Admission of Former Students

Undergraduate students who have been absent from Northwest for one trimester or longer (not including summer) must re-apply for admission. Students who have attended other universities since attending Northwest must submit a complete and official transcript of that college credit with their application for re-admission; coursework completed since attending Northwest must be at least "C" level work to qualify for re-admission. Students returning on probation or after being suspended must also provide an essay for re-admission. Contact the Northwest Office of Admissions for further information.

Visiting Students

A student may be admitted to Northwest through certification as a visiting student from another accredited college or university. The visiting student is required to present certification from an authorized person of the other institution (i.e., registrar, director of admissions, vice president, etc.) stating that the student is in good standing at the other institution. Contact the Northwest Office of Admissions for further information.

Servicemembers Opportunity Colleges (SOC) Consortium

Northwest Missouri State University is a member of the Servicemembers Opportunity Colleges (SOC) Consortium of approximately 1,900 colleges and universities. SOC Consortium members subscribe to principles and criteria to ensure that quality academic programs are available to servicemembers, including members of the National Guard and Coast Guard, their family members, reservists, and veterans of all Services. As a SOC Consortium member, this institution ensures that military students share in appropriately accredited postsecondary educational opportunities available to other citizens. Flexibility of programs and procedures, particularly in admissions, counseling, credit transfer, course articulations, recognition of non-traditional learning experiences, scheduling, course format, and residency requirements are provided to enhance access of servicemembers and their family members to higher education programs.

Adult Students

Anyone who is 24 years of age or older at the time of application will be considered an Adult Student. Admission for Adult Students will be based on their high school GPA or GED score, a personal essay, and ACT/SAT scores. Test scores are used for admission but primarily for course placement. If test scores are not available, students will be instructed to take the exam on the next national test date or sit for the residual ACT exam on Northwest's campus in the fall.

GED

Based on the 2002 GED score standards, a student may be considered for admission after receiving an equivalency certification meeting the following criteria: a total score of at least 2250, no sub-score lower than 410, and an average of all sub-scores of at least 450 and above. ACT/SAT is required.

Early Release

High school students who have satisfied all the credit requirements for a diploma at their high school before completing eight semesters at their high school may be considered for early release admission to Northwest. In order to satisfy high school attendance requirements, a letter of early release from the Board of Education governing the high school should be on file in the Northwest Office of Admissions. The University is not responsible for monitoring attendance or academic performance for high school purposes. Students are limited to enrolling in lower-level courses.

Dual Credit for High School Students in Northwest Courses

High school students who have not yet graduated from high school may be enrolled at Northwest in an on-campus course, online course, or a course taught at the local high school while still attending high school. Students must submit a Dual Credit application for admission, along with an official high school transcript. In addition, the student must submit a letter of recommendation and release from his or her high school counselor or principal for each trimester enrolled when enrolling in an on-campus course.

To be eligible to enroll in an on-campus or off-campus course for college credit, juniors or seniors must have an ACT composite score of 21 or higher and have at least a 3.00 grade point average on a scale of 4.00 OR a Combined Percentile Index of 100 or higher and have at least a 3.00 grade point average on a scale of 4.00. In addition, placement exams and specific ACT sub-scores are required for select courses. Freshmen and sophomores must score at the 90th percentile or above on the ACT or SAT to be eligible to enroll and have at least a 3.00 grade point average on a scale of 4.00. If dual credit is in a music activity, the student is also required to obtain the approval of the appropriate high school and University instructor.

Northwest Students at Conception Seminary College

In order to extend the range of course options, Northwest seniors and juniors have the opportunity to enroll for credit in certain courses at nearby Conception Seminary College in Conception, Missouri. The agreement is reciprocal: Conception Seminary College students are able to cross-register for Northwest courses. Students are eligible if they are in good standing at Northwest. The first nine semester hours earned at Conception Seminary College will be considered residence credit at Northwest.

Admission to Graduate Study

Northwest awards five master's degrees. These are the Master of Arts in English or History; the Master of Business Administration (also MBAs with emphasis in Agricultural Economics and Information Technology Management); the Master of Music Education, the Master of Science in Agriculture, Biology, Geographic Information Science, Applied Computer Science, Applied Health and Sport Science, and Recreation; and a Master of Science in Education in Teaching: Agriculture, Early Childhood Education, English, Elementary Education, English Language Learners/English as a Second Language, History, Instructional Technology, Mathematics, Middle School, and Science Education; and Master of Science in Education in Secondary Teaching: individually designed program concentration. Also offered are Master of Science in Education in Elementary, Secondary or K-12 Educational Leadership, Guidance and Counseling, Health

and Physical Education, Reading, Special Education and Teacher Leadership. Certificate programs are available in Geographic Information Science, Instructional Technology, Alternative Teaching Certificate, e-Teaching and English Language Learner/English as a Second Language Certificate (ELL/ESOL). Non-degree graduate study is offered in some areas.

Northwest also offers one post-master's degree: the Specialist in Education, with programs for Superintendents, Elementary Principals and Secondary Principals.

Requirements

Requirements are specifically stated in the *Graduate Catalog*.

To Apply

Interested students should carefully complete the Application for Graduate Admission and forward official transcripts from each undergraduate institution attended, except Northwest, to the Northwest Graduate Office. Admission to graduate study is not the same as admission to a graduate program. Applications should be in the Graduate Office at least one month before the fall and spring trimesters or summer sessions. International applicants should allow approximately two months from the time of application until the completion of the admission process.

Graduate Class Load

The maximum load is 16 hours in a trimester with no more than seven hours in a four-week summer session.

Graduate Fees

Courses taken for graduate credit are charged at the graduate rate. Courses taken for undergraduate credit are charged at the undergraduate rate.

Dual Enrollment of Northwest Seniors

Northwest seniors who have less than 30 semester hours to complete their baccalaureate degrees, and who need less than a full enrollment of required undergraduate courses in any term of their senior year, may petition to enroll for graduate level courses. Students must have at least a cumulative 2.50 GPA.

To enroll, complete the Petition for Dual Enrollment and submit to the Graduate Office at least one trimester prior to the anticipated dual enrollment. The maximum academic load for dually-enrolled students is 16 semester hours in a trimester with no more than seven semester hours in a four-week summer session. The student may not continue past 15 graduate hours unless he or she has met the requirements for admission and candidacy in the graduate program.

Northwest Outreach Centers

The mission of Northwest Outreach is to provide accredited, nationally recognized programs and professional development for place bound students. Faculty and adjunct instructors provide instruction for various programs, most of which may be completed at our Outreach Centers.

The Northwest Kansas City Center is located at 8 Victory Lane in Liberty, Mo. The University occupies the top two floors of Blue Jay Tower Plaza of the Liberty Public School District. The Center has regular office hours Monday through Thursday from 9 a.m.-6 p.m. and Fridays. are by appointment only. Classes and events may be held during other hours if necessary. For more information, contact the Northwest Kansas City Center at (816) 736-6600 or visit www.nwmissouri.edu/kc.

The Northwest St. Joseph Center is located in the historic Green Acres Building, 3500 N. Village Dr., Suite 100 S, St. Joseph, Mo. The Center has regular office hours Monday through Thursday from 9 a.m.-6 p.m. and Fridays are by appointment only. Classes and events may be held during alternate hours as requested. For more information contact the Northwest St. Joseph Center at (816) 364-5000 or visit www.nwmissouri.edu/.

Graduate Assistantships

Applications for graduate assistantships are available online at www.nwmissouri.edu/graduate/ and should be submitted by March 1 for the following school year.

Course Numbering

The 600-level courses are reserved for graduate students only, while 500-level courses are available for either graduate or undergraduate credit. The 700-level courses are reserved for students pursuing a Specialist in Education degree. The 800-level courses are reserved for those students pursuing the Ed.D. in Leadership.

For More Information

For further information on any aspect of the Northwest graduate program, consult the current *Graduate Catalog*, available online only at www.nwmissouri.edu/academics/catalog/.

Fees and Costs

General Information

Statements concerning fees are announcements and not to be regarded as offers to contract. The University reserves the right to change fees and other charges at any time by published notice before the opening of any trimester or session.

Courses taken for audit or courses taken for reduced credit or no credit will be counted at their normal credit value in computing the amount of fees to be paid.

It is the student's responsibility to pay fees and any other financial obligations to the University as they become due. The non-payment of any financial obligation may result in the administrative withdrawal of the student or in legal action (at the University's option). Records, future enrollment and charging privileges will be withheld for failure to meet payment deadlines. Delinquent accounts may be referred to external collection agencies and/or may be reported to national credit bureaus. The student is obligated to pay all costs of collection including attorney's fees.

If the University removes a student from the class rolls for any reason, charges will be reduced according to the schedules on page 28. Such removal will not forgive any amounts due to the University, and records and enrollment will be withheld until all obligations are cleared. See "Transcript/Diploma/Enrollment Hold" policy on page 46.

The appeal body for most financial matters is the Student Financial Appeals Committee. Forms are available at the Student Services Center and online at www.nwmissouri.edu/studentaccounts/forms.htm.

Residency for Fee Purposes

A student's residency status for fee purposes is determined at the time of admission according to state policy (Code of State Regulations 6CSR10-3.010). Copies of the residency policy and petitions for change of residency status are available on request from the Office of Admissions. Petitions must be submitted to the Office of Admissions at least three weeks prior to the beginning of the trimester for which the change is desired. A student who qualifies for Missouri residency maintains that residency as long as he/she is continuously enrolled.

The nonresident portion of the student fee may be credited in an amount equal to the actual Missouri income tax paid by the nonresident student or custodial parent for the previous calendar year. Students covered by this policy remain classified as nonresidents and must submit the Missouri income tax return to the Bursar/Cashiering Office to receive this credit.

Tax Credits

Education tax credits may be available to students or parents. Contact your tax preparer for more information. Tax credit links are available through the Bursar/Cashiering Office website (www.nwmissouri.edu/studentaccounts/taxlinks.htm).

Billing Policy – Email

The first bill for each trimester will be mailed to the student's permanent address. All subsequent bills will be emailed to the student's University email account. If the student is not responsible for payment, an additional email can be sent. The student must complete the second billing email address in their CatPAWS account from the Personal Information Tab.

Authorizations

Students can authorize online access to parents or other third party individuals. There are two separate authorizations to be completed. One is for account information and online payment. The second allows verbal information to authorized individuals and online access to grades and financial assistance.

1. Authorize online access to view student account and pay bills:
 - a. Students log into CatPAWS, go to Account Tab, then Account/Payment Center
 - b. Click Authorized users tab and complete sign up
2. Authorize Release of Information—concerning grades, financial assistance and billing:
 - a. Log into CatPAWS
 - b. Click Student tab
 - c. Click Authorize Release of Information and complete form

Tuition and Fees (per credit hour)

See Bursar/Cashiering, www.nwmissouri.edu/studentaccounts/tuition.htm

Fees for Special Programs

See Bursar/Cashiering, www.nwmissouri.edu/studentaccounts/specialprograms.htm

Room and Board

See Bursar/Cashiering, www.nwmissouri.edu/studentaccounts/roomcosts.htm

Housing Contract

A reservation and room prepayment of \$150 must accompany all applications for Housing. This payment is refundable if the student cancels his or her contract by June 1.

Miscellaneous Fees

A list of miscellaneous fees is available at www.nwmissouri.edu/studentaccounts/tuition.htm

Senior Citizen Fee Waiver

Standard tuition (incidental and designated fees) for individuals 65 and older are waived. Individuals under this policy must pay any other fees that may be required. Enrollment in a class for this group is contingent on available space.

University Installment Payment Plan

If the student's account cannot be paid in full, Northwest offers an installment plan. If a student chooses to pay by installment, a finance charge will be assessed on the remaining unpaid billed amount. Payment due dates for the fall are the 15th of August, September, October and November. Spring payment dates are the 15th of January, February, March and April.

Student Health Insurance

Health insurance is available. The premium is set by the company. International students are required to carry approved health insurance. Contact the Intercultural and International Center for approval of policies other than the one available through Northwest. Proof of adequate coverage must be provided every fall.

Refund/Reduction in Charge Schedule

Refund/Reduction	Full Trimester		Single Summer
	Course	Block Course	Session Course
100% reduction	1 week	3 days	1 day
75% reduction	1 week	2 days	1 day
50% reduction	1 week	3 days	1 day
25% reduction	1 week	2 days	1 day

Other time frames prorated accordingly.

Note: Cannot swap dropped courses. All added courses are charged 100%.

Specific dates are available on the Bursar's Office website: www.nwmissouri.edu/studentaccounts or contact the Bursar/Cashiering Office at (660) 562-1578.

1. Refunds are based on FULL payment of all fees assessed.
2. Payments made by financial aid may be refunded back to the program.
3. Refunds/reductions in charge are based on initial enrollment.
4. Refunds are not made if under \$1.00 (unless requested at the Bursar/Cashiering Office).
5. In withdrawal situations, *Tower* charges are reversed through October 25.
6. Refunds for off-schedule classes are prorated in line with the published schedule based on number of class meetings.

Determination of Return of Federal Aid

1. Percentage of payment period (first day of class through last day of final examinations) completed is the number of calendar days the student remained enrolled divided by the total number of calendar days in the payment period.
2. Percentage of Title IV funds eligible for disbursement earned is the percentage of the payment period completed through the 60% point and is 100% thereafter.
3. Percentage unearned (to be returned to Title IV programs) is 100% minus the percentage earned.
4. The return of the Title IV funds will be allocated in the following order up to amounts received from each program: Unsubsidized Federal Stafford Loans, Subsidized Federal Stafford Loans, Unsubsidized Federal Direct Loans, Subsidized Federal Direct Loans, Federal Perkins Loans, Federal PLUS Loans, Federal Direct PLUS Loans, Federal PELL Grants, Federal SEOG Grants, other grant or loan assistance authorized by Title IV of the HEA.
5. The University will return up to the unearned percentage multiplied by the total institutional charges. The student is responsible for any remainder.
6. Amounts to be returned by the student to loan programs may be paid according to the terms of the promissory note. Amounts to be returned by the student to grant programs are reduced by 50%.

Examples of the application of this policy may be obtained by contacting the Bursar/Cashiering Office, (660) 562-1106.

Calculated refund amounts due the students will be automatically credited to any unpaid charges.

Graduate Assistant Fee Reductions/Work Related Scholarships

If employment is terminated and the student remains enrolled, the fee reduction or scholarship is prorated for time employed.

Financial Assistance

Available Aid

Northwest awards and/or administers many types of financial aid from federal, state, University, and private sources. Financial aid can be divided into four general categories:

- Grants, which are financial gifts usually based on financial need.
- Scholarships, which are financial gifts usually based on academic, athletic, or other high achievement.
- Loans, which can be from the University or the Department of Education.
- Employment, which can be either on- or off-campus. If the student is employed on-campus, he or she may be “regularly” employed, or employed as “work-study.”

Grants and scholarships are gifts and usually do not have to be repaid. Loans must be repaid with interest at a future date, which usually commences six months after the student ceases to be enrolled as at least a half-time student. For information, contact the Office of Scholarships and Financial Assistance, (660) 562-1363.

Financial aid programs assume that the primary responsibility for educational and living expenses rests with the students and/or parents to the extent they are able to provide assistance. Most of Northwest’s aid is designed to supplement family resources. In addition to parental contributions and student savings, other sources of non-University funding to be considered are monetary service and religious organization awards, and high school awards.

Maximum Time Frame and Credit Hours

Undergraduate and graduate students are eligible to apply for aid for up to one-and-one-half times the normal program length. The normal program length for an undergraduate degree is 124 credit hours; therefore undergraduates are eligible to apply for aid for up to 186 attempted semester credit hours, including transfer credit.

Students who have attempted the maximum number of credit hours are ineligible for any type of federal financial aid. A change of major does not extend the number of credit hours that may be attempted.

Application Procedures

Students should contact the Northwest Office of Scholarships and Financial Assistance on or after January 3 for information and application procedures for federal student financial aid. Some of the information required on the Free Application for Federal Student Aid (FAFSA) must be taken from the student’s and/or parents’ federal income tax forms. **Northwest holds all financial information in strictest confidence and uses the information only to determine eligibility for federal aid.** See the “Student Records” section of this catalog for more information on records privacy.

Deadlines

For maximum consideration, applications and required documentation should be submitted at the earliest possible date after January 3 for the following academic year. Some federal programs have limited funds that will be awarded to the earliest pool of applicants.

Award Processing

The Office of Scholarships and Financial Assistance will attempt to meet all students' financial need pending the availability of funds. Federal financial assistance will continue to be awarded until all funds are committed or until the specified deadlines, whichever occurs first.

The priority order for awarding federal financial assistance is as follows:

- Federal Supplemental Educational Opportunity Grant (must be Pell eligible)
- Federal College Work Study Program
- Federal Direct Loan (subsidized)
- Federal Direct Loan (unsubsidized)

Award Notification

The Office of Scholarships and Financial Assistance will notify students of the types and amounts of federal financial aid for which they qualify. Students may accept all or part of their awards. Offers of financial aid are void if award notifications and all associated promissory notes, contracts, and required counseling sessions are not properly completed and returned.

Satisfactory Academic Progress

To be eligible to receive federal student aid, students must be maintaining satisfactory academic progress toward a degree or certificate. The two standards utilized by the University to determine satisfactory academic progress are quantitative and qualitative progress.

Quantitative progress requires students to pass a minimum number of credit hours. Qualitative progress requires students to earn predetermined Northwest and cumulative grade point averages. Students must be in compliance with the University's written standards for **both** qualitative and quantitative progress to maintain eligibility for any type of federal financial aid.

The University will attempt to notify students by email when they have not maintained satisfactory academic progress. Students are responsible for being aware of the satisfactory academic progress policies and will remain ineligible even if the University's notification is not received.

Failure to meet the appropriate completion rate by the end of the probationary term would result in the loss of eligibility for all types of federal financial aid until the deficiency is removed.

Quantitative Progress

Final quantitative progress will be determined annually at the end of **each trimester**. To be considered making satisfactory academic progress, undergraduate students must pass at least 75% of the cumulative credit hours which they have attempted, and graduate students must pass at least 66% of the cumulative credit hours which they have attempted. Failure to meet the appropriate completion rate at the end of the trimester will result in the student being placed on financial aid probation status for the next term.

Failure to meet the appropriate completion rate by the end of the probationary term will result in the loss of eligibility for all types of federal aid until the deficiency is removed.

Course Audits

Students are not eligible to receive federal financial assistance for courses that have been audited. Courses audited will not be included when determining the number of credit hours a student has attempted or completed.

Incomplete Grades

Courses in which students receive incomplete grades will be counted as hours attempted but will not be counted as successfully completed until the final passing grade is officially posted to the student's permanent record.

Qualitative Progress

Qualitative academic progress will be determined at the end of **each trimester**. To be considered making satisfactory qualitative progress, students must have the following minimum Northwest cumulative grade point averages:

Freshman	1.75
Sophomore	2.00
Junior	2.00
Senior	2.00

Students who do not meet qualitative academic progress will be placed on financial aid probation for the next term of attendance. Students who have not removed this grade point average (GPA) deficiency by the end of the probation period will not be eligible to receive aid for subsequent periods of enrollment until the required Northwest and cumulative GPA are attained.

Appeals Process

A student who fails to make satisfactory academic progress may appeal, in writing, the loss of eligibility. Students should provide documentation of circumstances that were clearly beyond their control. Types of documentation may include doctor and hospital reports, legal documents, and written confirmation from a parent or other official sources as deemed appropriate by the Financial Review Committee.

Written appeals and all supporting documentation must be submitted to the Office of Scholarships and Financial Assistance. The Financial Review Committee will review the written appeal, supporting documentation and notify the student in writing of the appeal decision within 14 days from the date received.

To appeal the decision of the Financial Review Committee, the student must submit a written appeal and all supporting documentation to the Provost Office and arrange to meet with the Provost or his/her appointee. The decision of the Provost is final.

Failure to Earn a Passing Grade

If a student who began attendance and has not officially withdrawn fails to earn a passing grade in at least one enrolled course for a term, the institution must assume, for Title IV purposes, that the student has unofficially withdrawn, unless the institution can document that the student completed the term. If it cannot be documented that the student completed the term then an unofficial withdrawal calculation will be performed and depending on the proration of the aid, a balance may be owed on the student account.

Financial Assistance Programs

The following types of student financial assistance are available to eligible Northwest undergraduate students:

- Federal Pell Grant
- Federal Supplemental Educational Opportunity Grant
- Federal Work Study Program
- Federal Perkins Loan
- Federal Direct Loan (subsidized)
- Federal Direct Loan (unsubsidized)
- Federal Parents Loan for Undergraduate Students (PLUS)
- Federal TEACH Grant
- Missouri Access Grant
- Institutional Employment
- State, Institutional, and Private Scholarships

The following types of financial assistance are available to eligible Northwest graduate students:

- Federal Work Study Program
- Federal Perkins Loan
- Federal Direct Loan (subsidized)
- Federal Direct Loan (unsubsidized)
- Federal TEACH Grant
- Institutional Employment
- Private Scholarships
- Graduate Assistantships

Withdrawal from the University

If a student withdraws from the University while receiving federal financial assistance, the hours of enrollment will be counted as attempted but not passed. The student must pass the required percentage of cumulative hours attempted to be considered as meeting satisfactory academic progress requirements.

For a student who withdraws, the financial assistance award received will be prorated and the unused portion of the financial assistance award will be refunded to the programs involved. Depending on the proration of the aid, a balance may be owed on the student account.

Summer

To determine eligibility for financial assistance during the summer trimester:

- a.) Students must complete a summer financial assistance application and submit it to the Office of Scholarships and Financial Assistance with a copy of their summer course schedule.
- b.) A Free Application for Federal Student Aid (FAFSA) must be completed for the current academic year.
- c.) Student must be enrolled at least half-time (6 hours for undergraduate level and 5 hours for graduate level to receive federal aid).
- d.) Students receiving Federal Direct Loans who drop below half-time and receive a 100% refund of tuition will be treated as a cancellation and loans will be removed from their summer account.
- e.) If enrolled full-time (12 hours) and the student is eligible to receive any of the academic renewal scholarships, they will be automatically applied.

Online Aid Applicants

Students must be degree seeking at Northwest and be enrolled at least half-time through Northwest before federal aid will be processed except for those who qualify for Federal Pell Grants.

Students must be enrolled in a minimum of 12 credit hours at Northwest to receive Northwest scholarships or to receive consideration for State of Missouri assistance programs.

- Students choosing to enroll in courses from other institutions concurrently with their Northwest enrollment must file a completed financial aid consortium agreement for each term with the Office of Scholarships and Financial Assistance.
- Consortium agreements are for courses that are not available at Northwest and are necessary to complete degree requirements.
- Each student is responsible for initiating consortium agreements for hours taken each term at institutions other than Northwest.
- Students must have grades from classes covered by a consortium agreement transferred back to Northwest before aid for future terms will be released.
- Contact the Office of Scholarships and Financial Assistance for details.

Taxation of Financial Assistance

Scholarships and fellowships are tax exempt only if used for tuition and fees, books, supplies, and equipment required for the course of study. Students must be candidates for degrees.

Scholarships and fellowships are taxable if designated for purposes other than tuition and related expenses or if attributable to service performed.

Fee reductions for employee dependent graduate students must be reported as taxable income for the employee. For specific information, contact a tax preparation professional.

Veterans' Affairs

The University maintains an Office of Veterans' Affairs to assist veterans and eligible persons in all phases of certification and retention of educational benefits. The Veterans' Office, located in the Office of Scholarships and Financial Assistance, also assists veterans and eligible persons in receiving payment for tutorial assistance, veterans' work-study and giving advice and counsel.

Northwest students receiving benefits from the Veterans' Administration will meet VA conditions for satisfactorily pursuing a program of study by meeting the University's general catalog requirements. However, a few VA requirements are more stringent than the general catalog requirements.

- **Regular Attendance.** VA students must attend all classes according to each instructor's attendance policies. VA students must have their attendance cards completed and signed by each of their instructors at the end of each month. The completed card must be promptly submitted to the Office of Veterans' Affairs by the student. VA benefits will be terminated as of the last date of attendance reported by the instructor for students with unsatisfactory attendance.
- **Unsatisfactory Progress.** The University is required to notify the Veterans' Administration that a student did not make satisfactory progress if the student:
 - a) fails or withdraws from all classes; b) accumulates more than 12 hours of grades of "F" (9 hours for graduate students); or c) is placed on academic probation or is suspended by the University.

Education benefits will be terminated for students who fail to make VA satisfactory progress.

- **Classes Not Completed.** The Veterans' Administration may require students to repay benefits received for classes dropped.
- **Delayed/Incomplete Grades.** Delayed/incomplete grades must be removed by the end of the next trimester or they will be changed to grades of "F."

VA students should contact the Office of Veterans' Affairs before deciding to repeat a course, withdraw from the University, drop a class, take a delayed grade or interrupt class attendance to assure compliance with VA regulations.

Vocational Rehabilitation

All students receiving vocational funding from the State Department of Rehabilitation or Veterans' Administration should contact the Office of Scholarships and Financial Assistance for certification and counseling assistance.

Registration

Academic Advisement

Academic advisement is regarded by the University as an extension of the teaching function, and therefore it is an important responsibility of the faculty. Academic advisors explain the University requirements and assist individual students in building programs which satisfy these requirements. Also, the advisors communicate to the students, particularly freshmen, the meaning of higher education and its significance to the student. However, students are expected to read the regulations in the University catalog and conform to them. The student is responsible for knowing the regulations and policies and for meeting the requirements for a degree or certificate.

Undeclared (Deciding) Major and/or Degree Objective

The student who is undecided about a major or pre-professional interest, or perhaps about both, should look upon the freshman year, and perhaps also the sophomore year, as exploratory. The student should also examine possible pre-professional interests and adapt the programs accordingly; and above all, consult with advisors about a program that will make it possible to change later into one of the several majors or pre-professional curricula.

General Registration

A registration period is set aside, with published dates and time schedules, preceding the beginning of courses for each trimester or session. Registration instructions are emailed to each student, available on the Registrar's website, and in 'CatPAWS on the Northwest website. Off-campus and off-schedule courses have specific registration deadlines which may differ from the regular registration periods.

Preregistration

The University provides a period for currently enrolled students to preregister for classes during regular terms. Before the first day of class, each preregistered student must verify registration by supplying information in regard to local address, emergency contacts, and other pertinent data.

A student who has preregistered and does not return for the term must notify the Office of the Registrar in writing before the date of general registration so that his or her enrollment can be cancelled (email: registrar@nwmissouri.edu). Students who fail to meet the deadline must complete withdrawal as outlined on page 45 and are subject to fees.

Students receiving veterans' benefits should consult with the coordinator of Veterans' Affairs prior to withdrawal.

Policies and Regulations

Academic Policies

Academic Load

The normal load for an undergraduate student is 14-18 academic hours per trimester.

Before a student can petition for excess credit, he or she must have completed one trimester of full-time academic work at Northwest. Petition forms are available in the Office of the Registrar.

A student who has a Northwest and overall GPA of 3.00 or above may take no more than 21 academic hours during any trimester. A student who has a Northwest and overall GPA of 2.00–2.99 may take no more than 18 academic hours in any trimester. A student who has a Northwest and/or overall GPA below 2.00 may take no more than 16 academic hours in any trimester. Petitions forms are available in the Office of the Registrar.

Courses taken for audit are included in the academic load.

There is a limit of 6 activity hours per trimester. Combined academic and activity hours cannot exceed 24 hours in a trimester.

For honors and certificates of attendance, an undergraduate student is considered to be full-time with 12 academic hours in any trimester.

Students must petition for exceptions to the above policies. Petition forms are available in the Office of the Registrar.

Attendance

Students are expected to attend all classes as specified in the course syllabi for each course. However, specific attendance policies may vary from instructor to instructor. Each instructor will clarify the attendance policy at the beginning of each course. It is the responsibility of the student to promptly notify his or her instructor when unable to attend class. Students receiving veterans' benefits should consult with the coordinator of Veterans' Affairs for the additional attendance requirements.

A student may make up class work without penalty if (1) engaged in University activities endorsed by the Provost, (2) prevented from attending class by illness, the validity of which is proven to the satisfaction of the instructor, or (3) prevented from attending by some other circumstances considered adequately extenuating by the course instructor.

After the add period until the end of the drop period, an instructor may request the Office of the Registrar to delete a student from the class roster due to non-attendance.

Freshman Seminar

Freshman Seminar is an academic course designed to introduce students to the Northwest community and collegiate environment. Each student develops a personal plan to understand and assume responsibility for their own university experience. Course content includes adjust-

ment to University life, skills necessary to make the most of the university experience, General Education Requirements, academic programs and advisement, career exploration, campus and community resources, and taking advantage of cultural and extracurricular events. Students are enrolled in specific Freshman Seminar sections according to their major field of study: The College of Arts and Sciences (Department 71), The College of Education and Human Services (Department 73), The Booth College of Business and Professional Studies (Department 76), and Undeclared Majors (Department 77).

Requirements:

1. Freshman Seminar is an entry-level course requirement, as well as a General Education Requirement for all two- and four-year programs.
2. All first-time, full-time (12 semester hours) freshmen entering the University are required to enroll in Freshman Seminar in their first trimester of enrollment. If the student does not pass the course, it must be retaken in successive terms until passed.
3. Students transferring or returning to Northwest with less than 15 semester hours are required to take Freshman Seminar.
4. Non-traditional (those out of high school more than five years) degree-seeking students are not exempted from Freshman Seminar. These students may attend special sections designed for non-traditional students or they may discuss alternatives with their Freshman Seminar instructor regarding the parts of the course which are deemed inappropriate because of their personal status.
5. A student who is dually-enrolled in high school prior to entering Northwest is not exempt. The student is still required to take Freshman Seminar.
6. Missouri Academy students who have successfully completed MOAC 81-102 and MOAC 81-103 and continue on to pursue undergraduate degrees at Northwest will have the Freshman Seminar requirement waived.

Petitions for exceptions to the above requirements are considered by the Curriculum and Degree Requirements Committee of the Faculty Senate.

Academic Honesty

Academic honesty is essential to the integrity of the mission and success of the University and is expected of all students. It is the responsibility of every student to avoid dishonest practices. There are eight broad areas of academic dishonesty: (1) obtaining unauthorized aid or information; (2) giving unauthorized aid or information; (3) committing plagiarism from written, electronic, or internet sources; (4) misrepresenting facts or data; (5) offering bribes; (6) using library resources unethically; (7) using computer resources unethically; and (8) knowingly assisting in any of the above practices.

A charge of academic dishonesty can be brought against a student by an instructor, a staff member, or another student in consultation with an instructor. The instructor or staff member will consult with the chairperson who may then notify the Registrar to put an academic hold on the course to prevent the student from dropping the class. The instructor or staff member then will notify the student in writing of the formal charge. If the instructor involved is a chairperson, the instructor will consult with the dean of the appropriate college before moving forward with the process. While in standard cases the instructor will give the student an automatic "F" in the course, the instructor, in consultation with the chair or dean, has the discretion to alter sanctions as appropriate. If the student chooses to appeal the charge of the instructor, the student may stay in the class until the appeal process is completed. All cases of academic dishonesty will be reported by the chairperson to the dean and to the Provost.

Once the charge is made, the student has the right to appeal. The student must make the appeal in writing to the department chairperson within 10 academic days of receiving the charge.

The chairperson (or dean if the case involves a chairperson) will then appoint a committee of at least three faculty or staff members from the department who are not directly involved in the case to consider the appeal. If the appeal fails, the student may then petition the Academic Appeals Committee. A charge that is successfully appealed will be reported by the appropriate committee to the chairperson of the appropriate department, to the dean and to the Provost so that the charge that has already been reported will be expunged from the record.

During the appeals process the departmental committee or the Academic Appeals Committee may alter the sanctions. In standard cases, the instructor's sanction will stand and the student will be prohibited from further attending the course. The second instance will result in immediate dismissal from the University.

Use of Calculators

Calculators may be permitted in some courses. If a calculator or programmable calculator is not to be used in a course, the faculty member is to include a clear statement on the course syllabus such as, "Calculators are not to be used during tests for this class" or "All memories in programmable calculators must be empty during tests for this class." It will be considered cheating in all classes when students violate the above statements.

Audit

The University will admit a limited number of auditors to classes. The instructor will decide the number permitted to audit. Auditors will enroll for the course, pay the same fees as other students and enjoy all the privileges of the University. Forms are available in the Office of the Registrar.

The auditing student is expected to attend regularly and is to determine from the instructor the amount of work expected. If an auditing student does not meet the criteria for the course, the instructor may drop the student from the class roll during the trimester and the audit will not appear on the student's record.

Students who initially enroll in a course for credit may be permitted to change their enrollment to audit or remove from audit any time within the first three weeks of a trimester, eight days of a six- or eight-week course, five days of a four-week course and two days of any shorter length course.

A course may be audited before it is taken for academic credit or before a student attempts a departmental test-out. A course may also be audited after it is taken for credit.

Students must petition the Committee on Admissions and Advanced Standing for exceptions to the above policies. Petition forms are available in the Office of the Registrar and on the Northwest website.

No Credit

The University makes available a procedure whereby persons may enroll in undergraduate courses for no credit on a space-available basis. Individuals admitted under this procedure must declare, at the time of enrollment, that they do not wish credit for the course. A course taken for no credit cannot be converted to credit except by repeating the course for credit. Students may not change status from credit to no credit.

Individuals enrolling for no credit are not required to go through the formal admissions process and are not required to submit transcripts of past academic work. Students presently under suspension from Northwest or any other institution of higher education are not eligible for enrollment for no credit. Fees for no credit courses are at the same rate as credit or audit courses. **600-level and above courses are not available on a no-credit basis.**

Correspondence and Extension Courses

Northwest does not offer courses by correspondence or extension; however, it does maintain the following policies in regard to credit earned in this manner.

No student will be permitted to be enrolled in correspondence or extension courses while being regularly enrolled at Northwest without prior approval of the major department. A course completed or attempted in residence may not be repeated by correspondence or extension for the purpose of raising a grade or removing a failure.

No student will be permitted to apply coursework in correspondence or extension toward their degree after a total of 30 hours has been completed in correspondence or extension courses.

Classification of Students

Students are classified at the opening of the regular school year in the fall and thereafter at the opening of the spring and summer trimesters as follows:

Freshman: less than 30 semester hours of academic credit.

Sophomore: less than 60 semester hours but more than 29 hours of academic credit.

Junior: less than 90 semester hours but more than 59 hours of academic credit

Senior: 90 or more semester hours of academic credit but has not earned a bachelor's degree.

Postbaccalaureate: a student who holds a bachelor's degree and is enrolled for undergraduate courses; a student pursuing another bachelor's degree.

Graduate Student: a student who holds a bachelor's degree and has been accepted for a course of study leading to a master's degree or graduate-level study.

Credit System

The unit of credit is the semester hour. Lecture-recitation courses average one hour of meeting per week in a trimester for each hour of credit given. Laboratory courses average two or more hours per week in a trimester for each hour of credit given.

The amount of credit for each course is indicated in the departmental statements, in this catalog, and on the Northwest website by accessing the CatPAWS "Class Schedule" links.

Course Numbering

Courses are numbered according to the following plan:

001 to 099:	Non-College Parallel: will not satisfy graduation requirements
100 to 299:	Lower Division
300 to 499:	Upper Division
600 to 699:	Graduate Only
700 to 799:	Education Specialist
800 to 899:	Cooperative Ed.D. Program

Grading System

The following marks are used in evaluating the work of students:

A: superior	P: pass on pass/fail system
B: above average	AT: audit
C: average	DL: delayed grade (prior to Fall 2004)
D: below average	I: incomplete
F: failure	IP: in progress
W: official withdrawal from University	NC: no credit

Incomplete Grade

The incomplete grade is initiated with the course instructor. This grade indicates that due to unusual circumstances a small portion of a course has not been completed. In each instance when an incomplete grade is assigned, the instructor of the course shall also submit an incomplete grade form indicating what the student must do to complete the course. The form is turned in to the Office of the Registrar at the final grading period for the course. The student must then complete the requirements for the course by the end of his or her next fall or spring term of enrollment or the grade becomes an “F” on the student’s permanent grade record. A student wishing to submit makeup work to remove an incomplete grade must make arrangements with the instructor two weeks prior to the final grade due date. Faculty members are not obligated to accept and evaluate make-up work in order to submit a grade after the above time periods.

A baccalaureate degree will not be awarded with an incomplete grade remaining on the student record by the end of the term of graduation. Upon removal of the incomplete grade, the student will then be eligible to apply for graduation at the next graduation period.

Requests for extension of time must be petitioned to the Committee on Admissions and Advanced Standing.

In-Progress Grade

The in-progress (IP) grade is used only for high school dual enrollment, outreach courses, and approved Missouri Academy courses which span more than one trimester. The IP designation is determined by the course, not the individual student. The IP grade is assigned at the end of the first trimester of the course and is replaced by the earned grade at the end of the course. If the student does not complete the course by the end of the established grading period, the appropriate grade will be assigned by the instructor. If the grade is incomplete, the existing incomplete grade policies would then apply.

A baccalaureate degree will not be awarded with an in-progress grade remaining on the student record at the end of the term of graduation. The IP grades become failing grades on the permanent record.

Calculating Grade Point

Grade points are calculated on the following basis: for each hour of “A,” four points; for each hour of “B,” three points; for each hour of “C,” two points; for each hour of “D,” one point; and for each hour of “F,” zero points. A grade point average is computed by dividing the grade points by the number of semester hours of academic work attempted. Grades assigned as NC, W, I, IP, or P are not computed in the grade point average.

Grade Point Average Requirements

Students with transfer credit will have three grade point averages: Northwest GPA—computed on work at Northwest only; Transfer GPA—computed on work transferred in from other institutions; and Cumulative GPA—computed on both Northwest work and that transferred in from other institutions.

The following are based on both the Northwest GPA and the cumulative GPA:

1. Academic status (good standing, probation, suspension or dismissal),
2. Financial assistance, except internal scholarships,
3. Graduation honors (summa cum laude, magna cum laude, or cum laude).

The Northwest GPA alone is used as the grade point average in determining eligibility for internal scholarships.

The cumulative GPA alone is used for the teacher certification grade point average, class rank and GPA at graduation.

Participation in the Assessment Program

Northwest must report the results of surveys and national tests to accrediting agencies (NCATE, North Central Association Team, and the Department of Elementary and Secondary Education) and to the Coordinating Board for Higher Education. In addition, the faculty must continue to evaluate the quality of its programs. Therefore, students may be required to take tests designed to measure general education achievement in selected areas, for purposes of evaluation and for the improvement of the academic programs at Northwest. No minimum score or level of achievement is required for graduation, unless a degree or certificate program so requires. Participation in testing may also be required of students in certain programs and of students selected on a sample basis.

Students who do not participate in scheduled and approved assessment projects may not be able to preregister or register for classes or receive a final transcript until the obligation is completed.

Superseding Grades/Repeating Courses

A student who has received a grade of “D” or “F” in a course may repeat the course to raise the grade, provided in the meantime the student has not completed a more advanced course for which the repeated course is a prerequisite. When a course is repeated both the old and new grades will appear on the student’s record, but only the higher grade earned will be used in determining the cumulative grade point average. A petition for superseding must be completed and returned at the time of registration for the course to be repeated. Petitions for superseding may be obtained in the Office of the Registrar.

A five-hour course may be superseded by a four-hour course if the five-hour course is no longer taught and the four-hour course is essentially the same in content as defined by the department which originated the five-hour course. Similar procedures apply to a four-hour course which has been changed to three hours.

A student will not be allowed to supersede a grade earned at Northwest by completing an equivalent course at another institution.

Students must petition the Committee on Admissions and Advanced Standing for exceptions to the above policies. Petition forms are available in the Office of the Registrar.

A student with veterans’ benefits must advise the coordinator of Veterans’ Affairs when he or she plans to supersede a grade.

Concurrent Enrollment

An undergraduate student enrolled at Northwest shall not receive credit toward graduation from Northwest for courses taken concurrently at another institution without permission of his or her major department.

Midterm Advisory Grades

In order to inform students of their academic progress at midterm, instructors assign deficiency grades (“D” or “F”) to students in courses in which the instructor has evaluated coursework. Students notified of unsatisfactory coursework at midterm are expected to follow up with the instructor in a conference, to address the areas of concern personally and systematically and/or to seek peer tutoring from a learning assistance program. These advisory grades are not permanently recorded.

Final Examinations

The University publishes an official final examination schedule for fall and spring terms. Summer examinations are scheduled by each instructor on the last day of the course. All examinations must be given on the day and time for which they are scheduled.

Students who wish to change their final examination schedule must obtain the approval of the instructor and file the change with the department chair. Students may petition for a change in their final examination schedule only in cases of major medical situations, personal or family crisis, or University-prescribed activities. Students faced with an emergency and unable to contact the instructor should contact an appropriate University office or person as soon as possible.

A student who has three examinations scheduled on the same day may petition for a schedule change by initiating a petition with any one of the instructors giving an examination on the day three are scheduled. The petition must be signed by the instructor granting the change. The student will file the change with the department chair. Petitions may be obtained at the academic department.

Grade Appeal Procedure

Faculty members have a professional obligation to evaluate the progress and/or performance in each course. Student progress and/or performance should be evaluated solely on the academic objectives of the course.

Students are responsible for maintaining standards of academic performance established for each course in which they are enrolled. Lack of success in meeting the academic grading standards established by the instructor shall not constitute a case for appeal.

A student who feels that the instructor has graded on the basis of personal opinions or other matters unrelated to the established academic standards is encouraged to consult with the instructor in the hope that a satisfactory solution can be achieved.

If the student still feels the instructor is biased or capricious in academic evaluation, the student shall have the right to make written appeal to the departmental-level Student Relations Committee through the department chairperson or coordinator. Such a committee shall consist of at least one faculty member and one student who are not directly involved in the case.

A departmental-level Student Relations Committee shall convene within a reasonable time following the student's request for a formal hearing. If the committee feels there is reasonable justification for the student's appeal, then it shall schedule a formal hearing in which testimony from both the student making the appeal and from the instructor concerned will be considered, along with any supporting evidence. At the conclusion of the hearing, the committee will make its recommendation for the resolution of the difference, and shall notify in writing the student, the instructor, and the department chair or coordinator. The written decision and the signatures of the committee members shall be filed in the department.

If the departmental-level Student Relations Committee supports the student but the instructor refuses to accept the decision of the committee, the student may, as a last resort, appeal to the department chairperson or coordinator. Should the allegation concern the department chairperson, the final appeal shall be made to the dean of the college or as otherwise designated by the chief academic officer.

Pass/Fail Option

The primary purpose of the pass/fail option is to encourage students to attempt courses in areas outside their major or minor area which would not ordinarily be attempted because of lack of

background. This option is made available so that students will feel free to broaden their educational experience somewhat without fear of a poor grade affecting their grade point averages.

Eligibility:

To be eligible to use the pass/fail privilege the student must:

1. Complete one term as a full-time student at Northwest.
2. Have a Northwest cumulative grade point average of at least 2.00 at the time of registration.

Procedure for Enrollment, Recording and Evaluation:

1. Courses to be taken on pass/fail must be so designated within the first 30 days of instruction of a trimester, the first eight days of a six-week or eight-week course, five days of any four-week course and two days of any two-week course. The student is to file a request for pass/fail grading in the Office of the Registrar.
2. Lecture/lab courses are considered as one unit.
3. Grades of "F" shall receive the same negative honor points as a regular "F."
4. Grades of "P" are not computed in the grade point average.

Limitations of Use of Pass/Fail:

1. Pass/fail may be used for a maximum of nine hours. Students transferring pass/fail hours to Northwest shall have those pass/fail hours counted toward their total pass/fail hours.
2. Pass/fail may not be used for any course:
 - a. In the student's major or minor requirements.
 - b. To meet a General Education requirement.
 - c. Required for language requirement on a B.A. degree.
 - d. Required for teacher certification or any pre-professional requirement.
3. Pass/fail cannot be used for graduate-level courses.
4. Pass/fail cannot be used to supersede.
5. The University, its faculty and administrators, will be under no obligation other than those regulated by law to release information regarding the grade originally earned by the student.
6. All courses that are used to meet a free elective, or any hours taken above the minimum required for graduation and not prohibited by No. 2 above, can be placed on pass/fail.

Students must petition the Committee on Admissions and Advanced Standing for exceptions to the above policies. Petition forms are available in the Office of the Registrar.

Honor Roll and Graduation Honors

The honor roll is compiled at each official grading period and includes all full-time undergraduate students earning a grade point average of 3.50 or above in academic courses. Students who take an incomplete grade will not be considered for the honor roll for that term. Students who earn a 3.50-3.99 GPA will be named to the Academic Honor Roll. Students who earn a 4.00 GPA will be named to the President's Honor Roll.

Graduation honors are determined by a student's Northwest GPA, and if there are transfer credits, the cumulative GPA (all college work attempted) must also meet the GPA requirements. Graduating seniors who have grade point averages (Northwest and cumulative) between 3.50 and 3.74 inclusive for their work in their first academic degree will be graduated "Cum Laude." Those who have GPAs between 3.75 and 3.94 inclusive will be graduated "Magna Cum Laude." Those who have GPAs between 3.95 and 4.00 inclusive will be graduated "Summa Cum Laude." Only first degrees are eligible for honors and class rank.

Honors designation for the commencement program will be determined on the GPAs based on grades recorded by the Registrar four weeks prior to the spring and fall commencement exercises and two weeks prior to summer exercises.

External Examinations

Students may establish advanced standing credit by examination through the College Level Examination Program (CLEP), the Advanced Placement program (AP), and the International Baccalaureate (IB). See “Admissions” section on page 11.

Departmental Test-Out

Departmental test-out differs from advanced placement in that the examinations are administered and credit awarded solely by the department, and not through national institutions such as CLEP, ACT, etc. Therefore, the student should contact the department for information on which courses are available for test-out and examination dates.

Policies: Students expecting to test out of a course should not enroll in the course. The student must be enrolled at Northwest, however, for the period during which the test-out is administered and credit is awarded.

The student must apply for test-out with the appropriate department chairperson. The chairperson or dean determines what courses are available for test-out and will arrange for the test-out process in accordance with department policy. Where a test-out will result in schedule changes, the entire test-out process should be completed before the end of the 100% refund period.

Test-out may not be taken to supersede a “D” or “F” grade. Test-out may be repeated twice in eligible classes, subject to department approval, but a period of six months must elapse between testings. A letter grade of “A,” “B,” “C,” or “D” will be assigned.

Procedure: Each time a test is taken, the student must purchase a test-out form from the Bursar/Cashiering Office. (See “Fees and Costs” section.) A separate form must be purchased for each course, except for unit courses with labs. The student is to submit the form to the department prior to testing. The department chairperson or coordinator will complete the form and return it to the Office of the Registrar for processing immediately after the testing period.

Military Service

Students who have completed a minimum of one year of active military service may be granted credit as determined by the Northwest Office of Admissions. Credit may also be granted for specific military training and MOS designations as recommended by the American Council on Education.

Academic Probation, Academic Suspension, and Dismissal

Any student classified as a freshman whose Northwest or cumulative grade point average falls below 1.75 on a 4.00 scale is automatically placed on academic probation.

Any student classified as a sophomore, junior, or senior whose Northwest or cumulative grade point average falls below 2.00 is automatically placed on academic probation.

A student on academic probation is limited to 16 academic hours per trimester. This enrollment restriction will apply as long as the student is on academic probation.

A student on probation who falls further behind (i.e., who does not make at least a 2.00 grade point average for any trimester) shall be automatically suspended for two consecutive trimesters.

Any student once placed on probation remains on probation until his or her Northwest and cumulative grade point average is at least 2.00.

A suspended student may apply to the Office of Admissions for readmission following his or her suspension period. Any student who has returned on probation following a period of academic suspension or who has been reinstated by the Committee on Admissions and Advanced Standing shall earn at least a 2.00 grade point average each probationary trimester in order to continue as a student. A second suspension will be for three consecutive trimesters. If a student is academically suspended from Northwest or from any other university or college for a total of three times, the student will be dismissed from Northwest.

Students must petition the Committee on Admissions and Advanced Standing for exceptions to the above policies. Petition forms are available in the Office of the Registrar and on the Northwest website.

Adding, Dropping, and Withdrawals

Adding Courses: Courses may be added during the first day of any short course, two-week course, or four-week course; during the first two days of a six-week or eight-week course, and during the first seven days of any course longer than eight weeks of instruction. This includes adding a course, exchanging courses, dropping courses, and transferring from one section of a course to another section. No change in program should be made without prior approval of the student's advisor.

Dropping Courses: Students may drop a course during the first half of any length course. (See "Fees and Costs" section.) Those who do not follow the prescribed procedure for dropping a course will have a grade of "F" recorded on their permanent record.

If due to extraordinary reasons—beyond the control of the student—a student desires to drop a course after the deadline, the student must petition the Committee on Admissions and Advanced Standing. Extraordinary reasons which may be considered include advisor error, administrative error, or documented medical reasons. **Courses may not be dropped during the final exam period.**

Withdrawal from the University: All students who wish to terminate their enrollment at the University during a term should initially consult with their advisor. If, after meeting with the advisor, a student decides to withdraw from the University, the student must complete an Exit Report in the Advisement Assistance and Orientation Office in the Administration Building. It is extremely important that a withdrawal be completed to ensure that proper entries are made on the academic transcript, that fee refunds are processed (See "Fees and Costs" section.) and that all University records reflect the withdrawal. If a student cannot initiate the withdrawal process in person, he or she should write or call the assistant director of advisement, who will process the withdrawal.

Students who wish to withdraw from the University must do so before two-thirds of any trimester or shorter-length term has expired. A "W" will be recorded for each class. Students on academic probation who withdraw from all classes will be readmitted on the same status they held at the time of their withdrawal from school. Students who do not follow the prescribed procedure to withdraw from the University will have recorded on their permanent record a grade of "F" for their courses.

If due to extraordinary reasons—beyond the control of the student—a student desires to withdraw from the University after the deadline, the student must petition the Committee on Admissions and Advanced Standing.

Students who are administratively withdrawn for non-payment of fees are prohibited from attending classes.

Transcript of Grades

Student requests for copies of their permanent grade record may be made in writing, on the online request, or with a signed fax request. Normally, a transcript can be issued upon 24 hours notice; however, at the end of a term, at least two weeks' notice should be allowed for grade recording and processing.

The student must send the transcript fee along with the written request or provide credit card information with the fax or online request. Forms may be found at www.nwmissouri.edu/registrar/transcript.htm.

Transcript/Diploma/Enrollment Hold

Failure to meet obligations to Northwest, financial (i.e.: tuition, room, board, telephone, parking, library fines, class materials) or otherwise (i.e.: incomplete admissions file), will be cause for refusal to allow an individual to enroll, receive a diploma, or receive an academic transcript.

Guidelines

1. In financial situations, cases of exceptional circumstances will be considered.
 - a. An exception to a hold on a transcript will be made when (1) a transcript is required by a funding agency in order for funds due the University to be released or (2) when financial assistance personnel have verified that all necessary paperwork has been completed by the student and that a sufficient amount of assistance to cover the student's obligation will be forthcoming.
 - b. Enrollment may be allowed at the discretion of the Bursar when there is reasonable assurance that funding will be forthcoming.
 - c. No exceptions are made to a hold on a diploma.
2. In situations where an individual has not submitted all the required transcripts and/or ACT results, the dean of enrollment management or associate director of admissions may release a hold when there is reasonable assurance that the required materials are forthcoming. A hold may be placed on preregistration as well as general registration and verification of preregistration.
3. In other situations (i.e., disciplinary, etc.) the "holding" department will consider exceptional circumstances.
4. Appeals rest with the appropriate vice president or the Provost.

Degree Audit

The Office of the Registrar provides a degree audit to help students track their academic progress toward completing a degree program. Degree audits show students and advisors in a report format what requirements have been completed and those which still need to be fulfilled for graduation. The student is responsible for knowing and meeting the requirements for a degree. Efforts are made to ensure the accuracy of the degree audit; however, final certification that an undergraduate student has completed all graduation requirements is the responsibility of the Registrar.

Degree audits for all currently-enrolled students, and transfer students accepted to the University are available online through CatPAWS, and selected audits are available in print form. A student may also request a degree audit at any time from the Office of the Registrar.

Appeals Process for Academic Policies

All students will have the right to appeal in person regarding decisions rendered by either the Committee on Admissions and Advanced Standing or the Curriculum and Degree Requirements Committee. The purpose of the Academic Appeals Committee is not to provide a secondary hearing of a case already heard by the Admissions and Advanced Standing Committee or the Curriculum and Degree Requirements Committee, but rather to ensure that students have

been able to present all information pertaining to their case and that proper protocols have been followed. For this reason, students should provide a basis for their appeal. This requires that appellants either submit new information (e.g. documentation from a doctor, counselor, or official) pertaining to their case, or evidence of error or bias on the part of the previous committee. The Academic Appeals Committee will not substitute its judgment for that of the other committee and overturn a previous decision unless such new information, error or bias provides a basis for doing so.

The student must initiate the appeals process by preparing a petition in consultation with his or her academic advisor, or in the absence of the academic advisor, another faculty member. Petition forms are available in the Office of the Registrar. The student must submit the petition to the Registrar, who will then direct the petition to the chair of the Academic Appeals Committee.

Graduation Policies and Requirements

Writing Competency

All students will demonstrate writing competence by successful performance on a writing assessment. Those who take the core writing courses at Northwest (ENGL 10-111 and 10-112, or 10-115) will take the assessment near the end of the sequence. Transfer students who have not completed the core writing courses at Northwest and have not passed an approved assessment at another school will complete the writing assessment at the same time as students taking core courses ENGL 10-112 or 10-115. Information about assessment procedures and retake options may be obtained from the Department of English and Modern Languages office.

State Law Requirement for Degrees or Certificates

Candidates for degrees or teaching certificates must meet state law requirements, Section 170.011 (Rev 1986), of a completed course of instruction in and satisfactory passing of “an examination on the provisions and principles of the constitution of the United States and of the State of Missouri, and in American history and American institutions.” To comply with the law, students may: (1) complete POLS 34-102, or (2) complete the requirement at another collegiate institution with substitution determined by the Office of Admissions. Transfer students who have had a course in American government that did not include a study of the Missouri constitution must successfully complete POLS 34-201 Missouri Politics. Students successfully completing POLS 34-203 State and Local Government at Northwest may have POLS 34-201 Missouri Politics waived. See chairperson of the Department of Humanities and Social Sciences for approval of waiver.

Advanced Standing Requirement

Each department or college may have an advanced standing requirement. Under this policy a department or college may require a student wishing to pursue a major in that department or college to complete certain courses, pass interviews, achieve grade point averages, or succeed in examinations prior to being formally admitted to a major. However, any student under this process and majoring in one discipline or department will be considered eligible to take courses in another department or college without further requirement. Refer to appropriate departmental advanced standing statements.

Negative decisions regarding a student’s advanced standing may be appealed to the dean of the college.

Catalog Requirement

Students are permitted to be graduated by completing the curricular requirements in effect in the catalog in force at the time of their initial enrollment. Students may elect to follow new curricu-

lar requirements of subsequent catalogs but must follow one catalog or the other in its entirety. After 18 months of nonattendance, however, all current catalog requirements will be imposed.

The effective date of non-curricular policy and regulation changes is established by the president of the University who will disseminate this information to the students and faculty before implementation.

Senior Deficiency Statement

Students must request a listing of deficiencies at least two trimesters prior to their graduation in order to plan their final enrollments. Forms are available in the Office of the Registrar or can be submitted from the Registrar's Office web page, www.nwmissouri.edu/registrar/. Any deviation from the deficiency listing must have approval from the department where the major or minor is involved or from the Curriculum and Degree Requirements Committee when General Education or Institutional Requirements are affected. A senior statement is required to be on file for each graduating student.

Application for Degree

Every student is required to submit an application for graduation at least one trimester preceding the trimester in which graduation is planned. Applications are available in the Office of the Registrar or can be submitted at www.nwmissouri.edu/registrar/.

Commencement

Degrees are conferred at the end of each term, and commencement exercises are held each term. The graduation fee is assessed whether or not the student plans to participate in commencement exercises.

If a student is meeting all graduation requirements, with the exception of a summer academic internship experience, and the internship extends past the summer trimester commencement date, the student can petition to the Committee on Admissions and Advanced Standing to participate in the spring commencement ceremony. Such requests must be submitted prior to April 1 of the trimester preceding the summer internship.

Graduation honors for the commencement program will be determined prior to final term grades. (See "Honor Roll and Graduation Honors" section.)

Academic Residence

1. At least 30 semester hours of academic work must be done in residence.
2. The last 10 semester hours of academic work must be done in residence.
3. Not more than one-fourth of the work on any curriculum may be taken by correspondence and/or extension.
4. Credit by examination is not considered to be residence credit.

Students must petition the Committee on Admissions and Advanced Standing for exceptions to the above policies. Petition forms are available in the Office of the Registrar or on the Northwest web page, www.nwmissouri.edu/registrar/.

Senior College Credit (Upper Division)

1. Candidates for the Bachelor of Science, Bachelor of Science in Education, Bachelor of Fine Arts, Bachelor of Music Education, and Bachelor of Science in Nursing degrees must earn at least 40 semester hours of credit in courses numbered 300 or above.
2. Candidates for the Bachelor of Arts degree must earn at least 32 semester hours of credit in courses numbered 300 or above.

3. 12 hours of the major and at least five of the minor must be in courses numbered 300 or above.

Physical Activity/Varsity Athletics Limitations

1. Only four physical activity credits may be counted toward the minimum number of hours required for graduation. Varsity athletics are not included in the physical activity credits.
2. Enrollment in varsity athletics is limited to four credits per sport.

Grade Point Requirement

1. Each applicant for a certificate, diploma, or degree must achieve a grade point average of not less than 2.00 in all academic subjects at Northwest.
2. A grade point average of 2.00 must be maintained in the coursework of both the major and minor fields of study.
3. A cumulative grade point average minimum is required for all certificates, diplomas, or degree programs for the Bachelor of Science in Education degree. All other degrees, certificates, or diplomas require a minimum cumulative grade point average. Please refer to the Professional Education Handbook.

Majors and Minors

For the Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Science, and Bachelor of Science in Education degrees, the student must choose a major and minor, or a comprehensive major, selected from the departments. The following factors should be considered:

1. That all minors can be joined with all majors in all degree programs.
2. Majors may not take a minor in the subject of the major unless the minor is an interdisciplinary minor.
3. Students in professional education programs with majors which require a minor must select minors with the assistance of their academic advisor. The department chairpersons or program coordinators, the advisors, and the Office of Career Services are available to counsel students on this matter.

Second Degree

For each baccalaureate degree beyond the first awarded to a student there is a requirement of 15 semester hours of work in courses numbered above 300. All specific and general requirements for the additional degree must be met but may be included within these 15 hours.

Teacher Certification

The University is accredited by the National Council for Accreditation of Teacher Education for the preparation of elementary and secondary teachers. Programs carry state approval by authority of the Missouri State Board of Education.

Information in regard to obtaining teaching certificates in other states is available in the College of Education and Human Services.

Student Life Policies and Regulations

Student Records

Northwest complies with the Family Educational Rights and Privacy Act which provides guidelines on storage and releasing of student and former student records. Individuals may waive their rights to inspect records at Northwest, but the University may not require such a waiver as a condition to attendance.

Individuals may request a copy of their records, for a copying fee, from the following offices:

- **Academic Records:** Office of the Registrar, Administration Building
- **Advisement Records:** Academic Departments and/or Office of the Registrar
- **Alumni Records:** Office of Development and Alumni Relations, Alumni House
- **Disciplinary Records:** Office of the Vice President of Student Affairs, J.W. Jones Student Union
- **Financial Records:** Bursar/Cashiering Office, Administration Building
- **Financial Assistance Records:** Office of Scholarships and Financial Assistance, Administration Building
- **Housing Records:** Residential Life Office, J.W. Jones Student Union
- **Library Records:** B.D. Owens Library
- **Medical Records:** University Wellness Center
- **Placement Records:** Office of Career Services, Administration Building
- **Security Records:** University Police Department, Support Services Building
- **Student Teaching Records:** Educational Field Experiences Office, Brown Education Hall
- **Teacher Education Records:** Teacher Education Student Services Office, Administration Building

Information remains confidential between the individual and the University, and will not be released to a third party without the written consent of the student. Exceptions to this rule include information released to Northwest officials, officials of other schools where the student is seeking admission, federal or state educational authorities, financial assistance officials in connection with the receipt of financial assistance, state law officials or subpoenaed requests, accrediting organizations and parents of dependent students.

These parties will receive a notice that the information released to them must not be further distributed without the consent of the student.

The following records are **not** available for inspection by a third party: parents' financial records, confidential letters of recommendation written before January 1, 1975, personal records of educators (e.g., instructor's grade book), employee records, and medical or other professional records, unless the individual wishes to have a qualified professional examine his or her record.

Certain information about the currently enrolled student—name, age, address, phone, email address, place and date of birth, major, participation in activities and sports, weight and height of athletes, dates of attendance, degrees and awards received, the most recent educational institution attended, including photographic, video, or electronic images, is considered directory information and thus is releasable to the public. If a student does not want this information released, he or she should contact the Office of the Registrar, Administration Building, within 10 days of the beginning of the term.

Inaccurate records may be challenged through a hearing requested through the Vice President of Student Affairs. The burden of proof that a record is inaccurate lies with the student. An impartial hearing officer will be appointed, to whom the student will have full opportunity to

present his or her case. If desired, a student may submit a written explanation of the content of a record, which will become part of the record.

For any further information on student and former student records and records privacy, contact the Office of the Vice President of Student Affairs or the Office of the Registrar.

University Housing Policy

Research has proven that freshmen experience an advantage, both in grades and in adjustment to college life, by living on campus within the University environment. To capitalize on this advantage, the University requires all first-time freshmen to live in the residence halls, unless they commute from their parents' or legal guardians' home, are married, or are 21 years of age or older. Students may petition the requirement to live on campus by completing the Commuting Form in the acceptance packet. Students whose form is approved will be exempted from this policy.

Student Identification Card (Bearcat Card)

Every student enrolled at Northwest is required to have an identification card (Bearcat Card), to carry it at all times, and to present it when requested by University personnel. The Bearcat Card serves as a meal card for students. In addition the card is used in the library, at sporting events, and in the copy machines and vending machines. The card can also be used as an ATM and debit card worldwide if the user has a US Bank account. All graduate and undergraduate students should report to the ID Office, in the J.W. Jones Union, as soon as they enroll, present their enrollment forms, and receive an ID card. The card is valid as long as the student is enrolled at Northwest. There is a replacement fee if the card is lost or stolen.

Campus Conduct Program

Coordinated by the Vice President of Student Affairs, the Campus Conduct Program is a multi-leveled system of discipline committees designed to hear student grievances and violations of the Student Code of Conduct. For more information, refer to the online *Student Handbook* or contact the Vice President of Student Affairs, (660) 562-1219.

Motor Vehicle Registration

Students are responsible for knowing and observing the parking and traffic policies. All vehicles must be registered with the University Police Department in order to use University parking facilities. Parking areas are designated for use by permit type.

Maps of the campus and copies of the Parking and Traffic Policy are available at the University Police Department, and are also distributed when students register their vehicles at the Student Services Center. Appeals of parking and traffic fines are heard by the Student-Faculty Traffic Committee and may be filed at the University Police Department.

Resources and Services

Student Services Center

Located on the first floor of the Administration Building, the Student Services Center provides visitor and student information, brochures, newsletters and petition forms, as well as other information concerning the University. Check cashing, distribution of refund checks, ticket sales (performances and athletic), parking permits, FAX service, and other services are available. Individuals seeking information about the University may call the Student Services Center at (660) 562-1212.

Mabel Cook Recruitment and Visitors Center

Located at the main entrance to campus, the primary purpose of the Mabel Cook Recruitment and Visitors Center is to provide campus tours and admissions information for prospective students and their families. For more information, please contact the office at (800) 633-1175 or (660) 562-1562.

Office of Admissions

Other admissions functions are carried out by the Office of Admissions processing division in the Administration Building. This Office of Admissions processes all freshman, transfer, returning, dual credit, joint admission and non-degree applications for admission. Questions concerning transfer of credits, transcript evaluations, residency determination, admission procedures and standards may be addressed to this office. Phone (660) 562-1148 with any questions or concerns.

Office of Scholarships and Financial Assistance

Located on the second floor of the Administration Building, the Office of Scholarships and Financial Assistance is responsible for the administration of all federally-funded student financial assistance programs, including the Federal Pell Grant, the Federal Perkins Loan Program, the Federal Work Study Program, the Federal Supplemental Educational Opportunity Grant Program and the Federal Direct Loan Program. The office also provides services to students receiving vocational rehabilitation funds, veterans' benefits, private and institutional scholarships, state assistance programs and other types of financial assistance.

Students receiving vocational funding from the State Department of Rehabilitation or funding from the Veterans' Administration should contact this office for certification and counseling assistance. The Office of Veterans' Affairs, also located in this office, assists veterans and eligible persons in all phases of certification, retention of benefits, receiving payment for tutorial assistance, veterans' work-study, as well as financial and academic advice and counseling.

Students who need assistance in planning and budgeting their college expenses and resources are encouraged to contact this office for a copy of the student financial assistance brochure which describes the various types of assistance available as well as the procedures for applying.

In order to be eligible for federal financial aid, a student must be enrolled in a regular degree program.

Students who are in default on previous federal student loans are not eligible for any type of federal aid until the default status is removed.

Students are responsible for meeting the requirements for academic progress as stipulated in the Requirements for Academic Progress for Financial Assistance Recipients, which is given to each student who receives financial assistance coordinated through this office.

Office of the Registrar

The Office of the Registrar provides student services beginning with the student's first registration for courses, continuing through graduation and beyond. Inquiries concerning registration, academic standards, loan deferments, enrollment certifications, grade records, adding and dropping classes, degree audits, graduation requirements, and transcripts should be directed to this office, located on the second floor of the Administration Building.

Bursar/Cashiering Office

Located on the first floor of the Administration Building, the Bursar/Cashiering Office receives and processes all payments to Northwest. Inquiries concerning student financial accounts, installments, refunds, and automatic applications of financial assistance should be directed to the Bursar/Cashiering Office, (660) 562-1578.

In cases of exceptional circumstances the collections supervisor, in the same office complex, should be contacted for an extension of payment deadline. The number to call is (660) 562-1583. (NOTE: If a delay in financial assistance creates an inability to pay on time, the Office of Scholarships and Financial Assistance should be contacted at (660) 562-1363.)

Advisement Assistance and Orientation

The Advisement Assistance and Orientation Office provides assistance in academic advisement and choosing a major to students who have not declared a major or those needing special assistance for success at Northwest. Services are targeted toward deciding students, non-traditional, probationary, transfer, and students wishing to change majors. In addition, the office conducts faculty training and operates the Attendance Early Alert program, which connects students to University offices and services based on the student's academic or wellness needs. Any student seeking general advisement is welcome to visit the office located on the second floor of the Administration Building.

B.D. Owens Library

B.D. Owens Library is a service-oriented library in a 116,000 square foot facility designed to meet the varied learning and research needs of Northwest students, faculty, and staff. The library collection and services support scholarly research and provide current information that promotes student competencies concerning lifelong learning, critical thinking, communication and research.

The library's website provides on-campus and remote access to thousands of journal titles and eBooks for currently enrolled students and current faculty. The library's robust online catalog returns search displays with resource summaries and availability/location of resources. Course-focused guides and tutorials along with reference and citing assistance are also available. Reference service includes a broad array of delivery methods, including walk-in, by appointment, email and phone. The library's very popular "Help with Research" program provides students, faculty, and staff the opportunity to receive personalized research assistance on a specific, well-defined topic.

The library building houses over 368,000 books, documents and bound periodicals. Nearly 30,000 periodicals are available in electronic format. Approximately 58,000 eBooks are available through the library catalog with additional access to over 24 million items through the

statewide catalog maintained by the Missouri Consortium of Academic Libraries (MOBIUS). MOBIUS items arrive at Owens Library in 2-3 working days. Interlibrary loan service is available for materials not available within the state.

Owens Library is home to several key facilities and services widely used by the University community that complement the library's instructional support mission. On the first floor, campus Information Services maintains and staffs a large computer laboratory. Upper floors house the Electronic Classroom and the Training Room, which serve as instructional and presentation areas with computers at each student work station and a Presentation Lab to enable students to practice giving presentations and recording them for review and critique.

Many vital instructional support service areas are also available on the second floor including The Writing Center, which offers writing across the curriculum tutoring, and the Talent Development Center, which offers free tutoring and academic support across the curriculum. The Center for Informational Technology in Education (CITE), which administers and supports the University's instructional technology needs including online courses, course management software, and faculty professional development, is also housed on the second floor. The Teaching Resources Area on the second floor addresses the needs of the University community for curriculum materials, for educational audio-visual materials (CDs, DVDs, and VHS videos), and the Juvenile book collection.

Throughout the library, areas for private study and reading are available along with spaces and resources that facilitate student group and team project development. Owens Library is fully wireless.

University Wellness Services

University Wellness Services, operating out of the University Wellness Center is the hub for all campus wellness activities and encompasses clinical, counseling, health promotion, public health and emergency response services. While remaining committed to quality outpatient care, Wellness Services focuses on wellness not only as prevention of disease, but as a philosophy of life. This philosophy emphasizes self-responsibility and taking an active role in maintaining one's health with the assumption that true health must consider the individual as an integration of mind, body, and spirit.

Prior to enrollment, students must comply with certain health requirements to protect the health and safety of the Northwest community including:

1. Completion of a Health History Form (required for all students).
2. MMR Immunization. All Northwest students born during or after 1957 must show proof of immunization against Measles, Mumps, and Rubella (MMR). Students who do not show proof of MMR immunization will have a hold placed on registration for classes in the next trimester. The following students are exempted from this requirement:
 - a) Online-only students,
 - b) Students attending one of Northwest's Distance Learning Centers,
 - c) Dual enrollment students.
3. Meningococcal Education and Immunization. Per Missouri State Law, all students who will reside in residence halls must meet or complete the Meningococcal requirement by:
 - a) providing proof that they've received the vaccination after the age of 16;
 - b) receiving the immunization; or
 - c) signing a waiver stating they understand the dangers of meningitis, and have made the decision not to be vaccinated. Students may not move into the residence halls until they have completed this requirement.

Wellness Services strongly recommends that all Northwest students receive the Meningococcal immunization.

4. Tuberculosis Screening is required of all first-time students at Northwest Missouri State University. This screening is found on the health history form that is given to all first-time Northwest students.
5. Tuberculosis Testing (required for first-time students who are foreign-born, students who have spent more than three continuous months outside the United States, and/or have a known exposure to tuberculosis. Details on how to satisfy these requirements can be found at <http://www.nwmissouri.edu/wellness/beforenw.htm>).

Clinic Services – Wellness Services provides clinical health services to full- and part-time students. In the fall and spring trimesters, full-time nursing and physician services are offered between 8 a.m. and 5 p.m. Due to decreased volume demand in the summer, fewer clinic service hours are available. Wellness Services currently files insurance claims for office visits, procedures, lab work, etc. for students that have insurance and accepts insurance reimbursement as full payment for these services. Students that don't have insurance are responsible for procedure and lab costs incurred.

Personal Development and Counseling Services – Wellness Services is committed to the personal development and success of all Northwest students. Personal Development and Counseling Services offers individual, couples and group counseling to students. In addition, the following services are provided to the campus community: workshops, guest lectures, referral services, consultations, training and crisis intervention.

Health Promotion Services – Wellness Services offers a variety of services promoting health and wellness that are designed to help students modify their lifestyles and move toward a higher level of health and wellness. These services include but are not limited to: grant-funded public health initiatives, health and wellness related speakers, awareness weeks, health education activities, and other health promotion events.

Peer Education – Northwest Bearcat Peer Educators are students who have received certification through the Bacchus Network, a national peer education network. Through interactive activities in and out of the classroom, they share the vision of Wellness Services with the campus community. They educate other students through classroom seminars, special programs, and awareness campaigns. Topics Peer Educators address include: alcohol and drugs, wellness, relationships, sexual assault, body image, diversity, stress management, and others. Presentations can be tailored to fit the audience's needs. For more information about becoming a Peer Educator or to schedule a presentation, contact Peer Education at the Wellness Center, (660) 562-1348 or email at peeredu@nwmissouri.edu.

Computing Services

Northwest provides computing services to students, faculty, and staff via the Electronic Campus network of over 7,000 notebook computers and personal computers. Featuring notebook computers for every student, the network is supported by high speed gigabit connections between buildings and high speed switches. Interactive computing and computer-aided instruction is supported by 60 servers, including a large multiprocessor Exchange email server. The local-area networks on campus are linked with a 250mbps connection to national and international wide-area networks via MOREnet and Internet. These services are available to every student, staff member and faculty member. Wide-area computing services include electronic mail via cloud email servers, remote library searches, and remote login access to super computers across the nation, plus locally supported World Wide Web.

Students are assigned an account number which can access many services of the Electronic Campus, free of charge. For example, web servers provide general information on class offerings, student and faculty directories, calendars, scholarship offerings and job openings. Web servers also provide personalized portals and students with a self-enrollment system enabling students to select course sections they desire. Email is a popular way to send classwork to instructors as well as messages to friends. Students can word-process assignments and develop spreadsheets, then have them printed at several locations across campus. There is a small printing fee for the laser and color printers. The library online catalog, text retrieval, and encyclopedia systems are also popular web-based information systems. Smart phone apps are available for most popular information requests. Wireless access is available in most buildings on campus.

Textbook Services

Textbook Services coordinates the textbook usage program, in which a primary textbook is provided for most of the undergraduate courses. Students pay a per credit hour fee for textbook usage. Supplemental and/or additional books/materials may be required and can be purchased at the Bearcat Bookstore. Students pick up their textbooks at the beginning of each trimester and must return the books by 5 p.m. of the last day of finals for the trimester. Late fees are assessed for books that are not picked up or returned on time. Students enrolled in web only courses may borrow their primary textbooks from Textbook Services. The request can be submitted by email to ttobin@nwmissouri.edu and needs to include 919#, course number(s) and address for shipping. Students must pay for shipping charges on borrowed materials. All textbooks, CDs and other course materials borrowed must be returned to Textbook Services, 800 University Drive, Northwest Missouri State University, Maryville, MO 64468 within one week after the final exam is complete. More information can be found on the Northwest web page under Textbook Services. Students may contact Textbook Services by emailing textbookservices@nwmissouri.edu if they have specific questions.

Assist and Student Athlete Success Programs

Located on the second floor of the B.D. Owens Library, Northwest's Assist and Student Athlete Success Programs provide at-risk freshmen and varsity student-athletes with services which help them better understand the purposes of higher education, aid in the transition from high school to college, promote standards of academic excellence, assist students in creating and maintaining the life-long learning strategies that minimize anxiety and promote the development of positive attitudes, and provide guidance and recommendations for using institutional resources and services. A special feature of the Student Athlete Success Program is its focus on persistence to graduation for Northwest's varsity student-athletes. Additional information is available at www.nwmissouri.edu/studentssuccess.

Talent Development Center

The Talent Development Center (TDC), located on the second floor of the B.D. Owens Library, offers comprehensive learning assistance to the University community. Serving over 3,000 students a year through scheduled face-to-face tutoring sessions and group study, the TDC provides free learning assistance in most rigorous subject areas in the general education program, as well as individualized assistance for highly-motivated students. Additional information is available at www.nwmissouri.edu/studentssuccess/.

Students with Disabilities

Northwest is committed to providing quality support services to all students. Once a student has been admitted to Northwest, it is the student's responsibility to request accommodations through a member of the Learning Assistance Providers/Services (LAP/S) Committee and to provide disability-related documentation. Additional information is available at www.nwmissouri.edu/titlexequity/accessibility.

Institutional Assessment

The Assessment Office is responsible for a variety of activities required by Northwest for strategic academic program improvement and to provide the citizens of Missouri with information about student learning. Projects include administering satisfaction and engagement surveys, scheduling and administering general education tests and coordinating major field subject matter examinations selected by the academic departments. The office also functions as a local administration site for a number of state and national testing companies offering examinations such as ACT, C-Base, GRE, Praxis Series, CLEP, MAT and GED.

Institutional and Strategic Research

The Institutional and Strategic Research Office assists academic departments and service units with identification and measurement of key performance metrics, designs and administers mission-related surveys, develops data collection and reporting processes, maintains a dashboard/information management system and provides data analysis to support the research and strategic decisions made at various levels of the institution. The office is also responsible for constructing and providing data collections requested by media and research organizations as well as those required by local, state and federal education bodies and accreditation entities.

Northwest Writing Center

Located in Owens Library (Room 251), the Northwest Writing Center offers tutoring to students wanting to become better writers. Any undergraduate or graduate student, staff or faculty member may visit the center or call (660)562-1480 to reserve an appointment. Walk-in appointments are also welcome. Graduate Assistants and Peer Tutors will assist with any kind of writing task: essays, reports, research papers, letters and other assignments. While the Writing Center is not a professional editing service designed to proofread papers, tutors will gladly guide writers through prewriting, revising and editing strategies designed to develop a writer's skills. The Writing Center also provides small group tutoring and standing appointments. Finally, conversation partners are available for students wishing to further develop their speaking skills.

University Mathematics Laboratory

The Mathematics Laboratory, located in Garrett-Strong 2930, provides limited tutorial help for most lower-division mathematics courses. Lab assistants are available several hours per day, and they help students on a walk-in basis. The lab also has a collection of reference materials designed for students desiring special information or assistance.

Student Support Services

Student Support Services is a federally-funded program designed to help its student members learn how to use the variety of Northwest resources to achieve and develop the professional skills necessary for successful employment. Program personnel help students understand their readiness for academic success, learn specific ways to improve their chances of success in college and develop appropriate expectations about college. Comprehensive services include academic, financial assistance, and career counseling. Students must apply for membership and should call the director, (660) 562-1862, to discuss opportunities available through Student Support Services. The office is located on the third floor of the Administration Building.

Office of Career Services

Career Services provides opportunities for each Northwest student and graduate to develop a clear career objective, obtain relevant experience and learn the skills necessary to conduct a successful, professional internship/job search. This mission is met through offering major and career counseling, assisting with networking, and hosting "career" events.

Career Services provides career counseling for students exploring career options, job search assistance to graduating students and alumni who are seeking full-time employment, preparation for graduate or professional school, and coordination of internships. At Northwest, internships offer students the chance to enhance classroom knowledge with career-related work experience. This powerful addition to classroom learning allows them to gain practical, useful experience; test suitability for a specific career; network with professionals in the student's field; and prepare for the competitive marketplace. Information about job and internship opportunities are available in a searchable, online database via the Career Services website called "Hire A Bearcat." Other services include the following: TypeFocus, an electronic interest assessment/interest inventory; a resource library; educational directories; classroom presentations; job search correspondence; comprehensive informational website; on-campus interviews and University post-graduation statistics.

Students may complete a personal profile and upload a resume into "Hire A Bearcat." This allows students access to employer contact information, job/internship postings and on-campus interview opportunities. Services are free to current undergraduate and graduate students extending three months past graduation. Alumni may activate their status for a small fee. (See "Fee and Costs" section in this catalog or on the Northwest website.) Career Services is located on the first floor of the Administration Building.

University Police Department

Located in the Support Services Building on the east side of campus, the University Police Department, staffed with commissioned officers, enforces state, local and University regulations to protect the welfare of the University community. The department operates 24 hours a day, every day of the year in order to assist in campus safety, fire safety, crime prevention and investigation and security on campus. The department also oversees vehicle registration and the enforcement of University parking regulations.

Bearcat Bookstore

The Bearcat Bookstore, a Barnes & Noble college bookstore, is located on the second floor of the J.W. Jones Student Union and is your on-campus source for Bearcat clothing and gifts, greeting cards, instructional materials and supplies, hardback and paperback books and many other items. Students have the option of charging items from the bookstore to their student accounts. Store hours during fall and spring trimesters are Monday-Thursday, 8 a.m.-5 p.m.; Friday, 8 a.m.-4:30 p.m.; closed Saturdays and Sundays except for home football games or other campus-wide events. Summer trimester hours are Monday-Thursday, 9 a.m.-4 p.m. The bookstore can also be found online.

Student Media

The student media, located in Wells Hall, includes broadcast, print and online facilities. The studios of KZLX-LP, KXCV/KRNW-FM, and KNWT-TV are located on the second floor of Wells Hall. KZLX-LP is the award-winning campus radio station operated by and for Northwest students. The station offers on-the-air experience necessary for entering a career in radio broadcasting. Included are opportunities to develop skills in sales, production, management, programming, news and sports, and promotions. The station provides music and news for the campus, Maryville and surrounding area.

Additionally, students can further develop skills in announcing, feature production, programming, development and news on KXCV/KRNW-FM. These stations provide the public radio mainstays

of in-depth news, and music in a broadcast area ranging from Omaha, Neb., to Kirksville, Mo., and from Des Moines, Iowa, to Kansas City. The stations are members of National Public Radio (NPR) and American Public Radio and produce programming broadcasts on both networks.

KNWT-TV serves both the Northwest campus and the city of Maryville. Students learn the basic use of television equipment, production, direction, and station operations, while producing a wide variety of television programming. Student-produced programming consists of newscasts (produced in conjunction with the student newspaper and converged news website), sports programs, talk shows, and music videos. Students have the opportunity to build skills in front of and behind the cameras.

Student publications is located on the lower level of Wells Hall and includes *The Northwest Missourian* weekly newspaper, the *Tower* yearbook and *Framework Interactive* online magazine. Student publications offer students practical experience for a journalism/communication career. All publications are governed by a student-operated editorial board. Northwest is one of the few universities/colleges in the country to have all three publications recognized as All-American award winners by the Associated Collegiate Press (ACP). *The Northwest Missourian* and *Tower* yearbooks have been recognized for excellence and awarded Hall of Fame status by ACP.

The Northwest Missourian is a campus and community news forum. Students learn news writing, sports writing, feature writing, editorial writing, photography, advertising, graphic and design skills while working on the newspaper. An electronic version is available at www.nwmissourinews.com. *The Northwest Missourian* is recognized as a Pacemaker publication (top 1 percent in the nation) by the Associated Collegiate Press. It has been honored as one of the top six newspapers in the country by the Columbia Scholastic Press Association. The *Northwest Missourian* was inducted into the ACP Hall of Fame in 2000.

Framework Interactive is an electronic arts and entertainment magazine. This professional magazine can be found online at www.fwinteractive.com.

The *Tower* yearbook is consistently honored as one of the top six yearbooks in the country. *Tower* was inducted into ACP's Hall of Fame in 1994 and is recognized as a Pacemaker publication by ACP and a Gold Crown winner by CSPA. The publication also includes a DVD with each publication. Northwest was the first public university in the country to produce a CD-ROM supplement to the yearbook and now a DVD supplement.

Percival DeLuce Memorial Collection

The Percival DeLuce Memorial Collection contains drawings, paintings, and prints by Percival DeLuce (1847-1914) and his contemporaries, as well as DeLuce family papers, diaries, and a portion of the family library. The collection also includes heirloom furniture which belonged to the family, including pieces from Duncan Phyfe and from the Napoleonic era, housed in permanent exhibition rooms. Some pieces are shown in rotation in the gallery. Located in the Olive DeLuce Fine Arts Building, the collection is a valuable resource for scholarship as well as an exhibit for the general public.

Missouri Small Business and Technology Development Center (SBTDC)

The Missouri Small Business and Technology Development Centers help businesses in every stage, from concept to startup and from existing to growth and invention. The Northwest Missouri State University SBTDC is a partnership program with the U.S. Small Business Administration (SBA) and the University of Missouri Extension. The SBTDC is one of over 30 centers in Missouri and one of over 1,000 SBTDCs in the United States. The Northwest SBTDC serves 17 counties in northwest Missouri with offices in Maryville, St. Joseph and Chillicothe.

The SBTDC provides confidential one-on-one counseling for small business owners, managers and prospective owners. Counseling services are provided on an individual basis to meet the needs of the specific company or business owner. Typical areas covered are startup processes, business planning and feasibility, financing/funding, marketing, and human resources to mention a few. The objective of this counseling is to provide a healthy small business community and to foster economic development, new business startups, expansion, new/retained jobs and sales growth.

In addition to the services listed above, the SBTDC works with Missouri Procurement Technical Assistance Centers (MO-PTAC) whose mission is to assist businesses in obtaining federal, state and local government contracts for products and services.

The SBTDC is also part of the Center for Innovation and Entrepreneurship (CIE), a mixed use incubator on the Northwest Missouri State University campus. The Center for Innovation and Entrepreneurship assists technology firms wishing to commercialize their innovation receive consultation and specialized services. One of these services is MoFAST, Missouri's federal and state technology program. Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) specialized staff can assist companies with commercialized planning (Phases I, II, and III), agency evaluation and identification, proposal preparation, and post-award planning.

Intercultural and International Center (IIC)

The Intercultural and International Center is located in the J.W. Jones Student Union. It houses four distinct offices from both the Student Affairs and Academic Affairs Divisions. The IIC educates and supports the Northwest community to be actively engaged and interculturally competent citizens in our global society. Promoting active learning, developing critical thinking skills and instilling stewardship leads students to academic success. (660) 562-1367

Student Affairs

Intercultural Affairs Office

Volunteer, Service Learning and Civic Engagement Office (Student Affairs)

Academic Affairs

International Affairs and English as a Second Language

Study Abroad (Academic Affairs)

Each office in the IIC is committed to student success and is uniquely positioned to provide valuable services to students, faculty, staff, and stakeholders in order to support this success.

Office of Intercultural Affairs

The Office of Intercultural Affairs fosters an educational environment in which students, faculty, and staff from diverse backgrounds and orientations can come together to share, learn, grow, and enjoy the rich experiences and contributions each has to offer. The office provides assistance to individuals, groups, departments, and other surrounding communities on issues of cultural and ethnic diversity specifically through educational programming, intercultural training, cultural enrichment activities, and counseling. The director of intercultural affairs supports multicultural student organizations to link with all Northwest student organizations in order to enhance campus activities and to create an enriched college environment that is characteristic of our global community.

International Affairs and the English as a Second Language (ESL) Program Office

The International Affairs Office offers immigration advisement and counseling for international degree-seeking, ESL, and exchange students. International Affairs provides leadership for international recruitment, retention support and policy creation to ensure academic success through

graduation for international students. In conjunction with academic offices, the director consults in areas such as curriculum development and international education. It also collaborates with other IIC units to provide intercultural training and positive campus climate creation and support.

The English as a Second Language Program (ESL) offers intensive English courses to non-native speakers of English to improve their language skills, primarily for academic reasons. There are five, eight-week long sessions per year beginning in January, Spring Block 2, June, August and Fall Block 2. The program offers small classes that are designed to prepare students to enter a full-time course of study at Northwest.

Study Abroad Office

The Study Abroad Office assists students in identifying the study abroad program best suited to meet their academic and cultural interests. Studying abroad is one of many academic options that Northwest students from all academic areas are invited to experience. Whether a faculty-led short-term program, a summer program, a trimester, or academic year, students have the opportunity to earn Northwest credit abroad, at the same time they are exposed to a new educational system. Students broaden their horizons by traveling to an international location to study with local citizens and/or international students to experience global living. Study Abroad advisors link students with academic advisors, financial aid counselors, and other student service providers to plan a rewarding interaction and educational experience.

Office of Volunteer, Service Learning and Civic Engagement

The office of Volunteer, Service Learning and Civic engagement is responsible for providing community engagement opportunities, projects, and support to all Northwest students, faculty and staff as well as the coordination of Alternative Spring Break programs (ASB). The Volunteer office supports volunteer events, fundraisers and ASB trips, with the help of student groups such as Alternative Spring Break, Greeks, athletes, and all other Northwest organizations.

Center for Information Technology in Education (CITE)

The Center for Information Technology in Education plays an integral part in Northwest's effort to enhance student learning through the use of technology. Beyond CITE's primary focus of supporting the integration of technology into on-campus courses, it is also extensively involved in the creation and development of web-based and blended courses and programs. The goal is to enhance student opportunities for learning by providing them high quality courses that can meet the time and space flexibility requirements many of them face in today's continuous learning environment.

Online Articulation Agreements

Northwest Missouri State University has entered into several articulation agreements with community colleges in Missouri, Colorado, Iowa, Kansas, Nebraska, North Carolina and Oklahoma. These agreements express a shared commitment to increasing the opportunity for students to gain access to and success in higher education. By clarifying transfer policies and procedures which assure articulation between programs, the institutions involved seek to assist students in making a seamless transfer from the associate in applied science degree to the baccalaureate degree. A current listing of schools and agreements, may be found at www.nwmissouri.edu/academics/online.

The Bachelor of Science in Business Management and the Bachelor of Science in Marketing degree programs may be completed at Northwest either by attending traditional campus-based classes or by participating in Northwest's web-based online degree program. Any student from one of these community colleges with an A.A.S. degree in the designated program is guaranteed

that Northwest will accept designated freshman and sophomore business administration credit hours, general education credits required for the A.A.S. degree, plus any freshman and sophomore general education hours required by Northwest beyond the A.A.S. degree. This will apply to students maintaining continuous enrollment or matriculating into Northwest within one year from their last registration date with the community college. Students must complete at least 124 credit hours and satisfy all major requirements in order to receive a Bachelor of Science degree in either Business Management or Marketing from Northwest.

Northwest Missouri Educational Consortium (NMEC)

Northwest has been offering Distance Learning courses through online technology for well over ten years. However, over that same period, many courses were also offered by Northwest through Distance Learning via Interactive Television (ITV) technology under the auspices of the Northwest Missouri Educational Consortium (NMEC).

ITV courses utilize videoconferencing equipment which allows people at different sites to see and hear one another simultaneously. This allows offsite students the ability to interact with their professor, and other class members, in real time.

By combining ITV and online technologies, “blended” classes have been created which give students the best of both worlds - some aspects of the class can be done by the student whenever or wherever they like online, but the class also meets via ITV so students can interact with their professor, the material and other classmates.

Most ITV classes are offered at Northwest’s Outreach Centers in Kansas City and St. Joseph, but other ITV sites utilized include: North Central Missouri College in Trenton; North Central Career Center in Bethany, Brookfield Area Career Center, Grand River Technical School in Chillicothe and Northwest Technical School in Maryville.

Through the NMEC, Northwest also receives ITV classes from other higher education institutions, allowing students the ability to have the opportunity to take courses which will supplement their learning experiences.

Military Science (Army ROTC)

Northwest has a cross-enrollment agreement with the Department of Military Science at Missouri Western State University in St. Joseph. Northwest students can enroll in Army ROTC for Northwest credit and take the courses either at Northwest or at Missouri Western State University. Any student can take military science courses for elective credit. Eligible students can contract with the program to pursue a commission as a second lieutenant in the active U.S. Army, U.S. Army Reserve, or Army National Guard. The Military Science program offers several two-, three-, and four-year scholarships that pay for full tuition, fees, and books. The Military Science Battalion office located at Missouri Western State University can be reached toll free at (800) 647-2881 and at Northwest Missouri State University at (660) 562-1799. The Department of Humanities and Social Sciences houses the Northwest faculty liaison to the Military Science program. Contact the Northwest faculty liaison at (660) 562-1672 for information on Military Science programs and scholarships.

Northwest Kansas City Center at Liberty

The Northwest Kansas City Center is located at 8 Victory Lane in Liberty, Mo. The University occupies the top two floors of Blue Jay Tower Plaza of the Liberty Public School District. The Center has regular office hours Monday through Thursday from 9 a.m.-6 p.m. and Fridays are by appointment only. Classes and events may be held during other hours if necessary. For more information, contact the Northwest Kansas City Center at (816)736-6600 or visit www.nwmissouri.edu/kc.

Northwest St. Joseph Center

The Northwest St. Joseph Center is located in the historic Green Acres Building, 3500 N. Village Dr., Suite 100 S, St. Joseph, Mo. The center has regular office hours Monday through Thursday from 9 a.m.-6 p.m. and Fridays are by appointment only. Classes and events may be held during alternate hours as requested. For more information contact the Northwest St. Joseph Center at (816)364-5000 or visit www.nwmissouri.edu/.

UNIVERSITY REQUIREMENTS

Pre-Professional Programs

Northwest offers pre-professional courses of study which encompass many careers. In most instances, these courses have been compiled in conjunction with specific requirements of professional schools. Many professional schools require specific procedures in regard to entrance tests, application deadlines and interviews. Thus, it is mandatory that students have a specific pre-professional advisor who is versed in the necessary requirements for admission to the professional school.

In many professions, no specific undergraduate major must be followed and the student may major in any area of interest. Therefore, students should have both a pre-professional and a major advisor.

Pre-Profession	Advisor	Academic Area
Audiology & Speech Pathology	Lori Durbin	Communication
Chiropractic	Jeffry Thornsberry	Biology
Dental Hygiene	Karen Schaffer	Biology
Dentistry	Karen Schaffer	Biology
Engineering	John Shaw	Physics
Forestry	David Easterla	Biology
Law	Daniel Smith	Political Science
Clinical Laboratory Sciences	Gretchen Thornsberry	Biology
Medicine	Jeffry Thornsberry	Biology
	Natalia Omelchenko	Biology
Mortuary Science	Karen Schaffer	Biology
Nursing	Karen Schaffer	Biology
Occupational Therapy	Natalia Omelchenko	Biology
Optometry	Karen Schaffer	Biology
Osteopathic & Allopathic Medicine	Jeffry Thornsberry	Biology
Pharmacy	Jeffry Thornsberry	Biology
Physical Therapy	Natalia Omelchenko	Biology
Professional Zoology	Peter Adam	Biology
Radiology	Karen Schaffer	Biology
Respiratory Therapy	Jeffry Thornsberry	Biology
Veterinary Medicine	Gregg Dieringer	Biology
	Callie Walker	Agriculture

General Education Requirements

The General Education Rationale Statement

General education is the curricular foundation at Northwest Missouri State University. It encourages students to acquire and use the intellectual tools, knowledge, and creative capabilities necessary to study the world as it is, as it has been understood, and as it might be imagined. It also furnishes them with skills that enable them to deepen their understanding and to communicate it to others. Through general education, Northwest equips students for success in their specialized areas of study and for fulfilled lives as educated persons, as active citizens, and as effective contributors to their own prosperity and to the general welfare.

Knowledge is ever changing; therefore general education must alert students to the connections and the potential for interaction among all branches of knowing, ordering, and imagining. General education should inform students that the world is understood in different ways and should provide them with the means to come to terms, intelligently and humanely, with diversity. As a result of their general education, students should acquire appropriate investigative, interpretative, and communicative competencies.

The General Education Portion of Degree Requirements

In order to complete the bachelor's degree, students must take the general education requirements for their specific degree, plus the institutional requirements for their specific degree, plus major and/or minor requirements as specified by the department, plus electives as needed to total a minimum of 124 semester hours.

It is important for students to work closely with their academic advisors when selecting courses, as not all courses fulfill requirements for all degrees. Students who change their majors, choose double majors or additional certification, or who do not choose courses carefully may need more than 124 semester hours to complete a degree program.

General Education Requirements

General Education courses are required for the Bachelor of Arts, the Bachelor of Fine Arts, the Bachelor of Music Education, the Bachelor of Science, the Bachelor of Science in Education, the Bachelor of Science in Clinical Laboratory Sciences, and the Bachelor of Science in Nursing Completion Program.

Required courses for the Bachelor of Technology may be chosen from the General Education Requirements. See pages 77-78 for specific information on this degree.

Any courses taken to fulfill the General Education Requirements cannot also fulfill the Institutional Requirements or Major/Minor requirements, unless specifically permitted in this catalog.

It is recommended that students carefully sequence courses from the General Education Requirements during their freshman and sophomore years.

GENERAL EDUCATION REQUIREMENTS

FRESHMAN SEMINAR (pages 82, 253, 318) 1 hour

WRITTEN COMMUNICATION 6 hours

Required Courses:

Any student with ACT English score of 19 or above

ENGL 10-111 Composition I: Academic Literacies (page 95) 3 hours

ENGL 10-112 Composition II: Writing as Engagement (page 96) . . . 3 hours

For students with ACT English score of 27 or above

ENGL 10-115 Accelerated Composition (page 96) 3 hours

ENGL ACT credit upon successful completion of ENGL 10-115,

except for students with previous English composition credit 3 hours

Students who have an ACT English score of 27 or above may elect to take ENGL 10-111 and ENGL 10-112. Students with credit for ENGL 10-111 and an ACT English score of 27 or above may elect to take ENGL 10-115 for three hours credit rather than ENGL 10-112. **No student may receive more than six hours of credit for the freshman composition requirement.**

NOTE: ENGL 10-110 Introduction to College Writing is a prerequisite for students who do not meet placement criteria for ENGL 10-111.

ORAL COMMUNICATION 3 hours

Required Course:

COM 29-102 Fundamentals of Oral Communication (page 303) 3 hours

MATHEMATICS: Advisement necessary for correct selection 3 hours

Required: One of the following courses:

MATH 17-110 Finite Mathematics (page 182) 4 hours

MATH 17-114 General Statistics I (page 184) 3 hours

MATH 17-115 Concepts of Mathematics (page 182) 3 hours

MATH 17-117 Precalculus (page 182) 4 hours

MATH 17-118 College Algebra (page 182) 3 hours

MATH 17-120 Calculus I (page 182) 4 hours

MATH 17-171 Fundamentals of Mathematics (page 183) 3 hours

NOTE: MATH 17-090/091 Math Skills is a prerequisite for students who do not meet placement criteria for the Mathematics choices listed above.

POLITICAL SCIENCE 3 hours

Required Course:

POLS 34-102 Introduction to American

Government & Politics (page 162) 3 hours

OR

POLS 34-201 Missouri Politics (page 162) See note below 1 hour

NOTE: POLS 34-201 is the required course for students who have credit for an American Government course which did not include a study of the Missouri Constitution. (Students successfully completing POLS 34-203 State and Local Government at Northwest may have POLS 34-201 Missouri Politics waived. See chairperson of the Department of Humanities and Social Sciences for approval of this waiver.)

HISTORY 3 hours

Required Course:

HIST 33-155 America—A Historical Survey (page 158) 3 hours

LIFE AND PHYSICAL SCIENCES 8 hours

Required: One course from each area.

Life Sciences

AGRI 03-130 Plant Science (page 267) 4 hours

BIOL 04-102/103 General Biology/Lab (page 225) 4 hours

BIOL 04-112/113 General Botany/Lab (page 226) 4 hours

BIOL 04-114/115 General Zoology/Lab (page 226) 4 hours

Physical Sciences

CHEM 24-112/113 General Chemistry/Lab (page 231) 4 hours

CHEM 24-114/115 General Chemistry I/Lab (page 231) 4 hours

GEOL 27-110/111 General Geology/Lab (page 234) 4 hours

GEOL 27-114/115 General Earth Science/Lab (page 234) 4 hours

PHYS 25-110/111 General Physics I/Lab (page 243) 4 hours

PHYS 25-112/113 General Physics II/Lab (page 243) 4 hours

PHYS 25-120/121 Fundamentals of Classical Physics I/Lab (page 243) . 5 hours

PHSC 40-102/103 The Physical Sciences /Lab (page 242) 4 hours

PHSC 40-122/123 Descriptive Astronomy/Lab (page 243) 4 hours

HUMANITIES AND FINE ARTS 9 hours

Required: One course from each area.

Literature

ENGL 10-220 Introduction to Literature (page 93) 3 hours

Humanities/Philosophy

COM 29-235 Introduction to Classical Rhetoric (page 303) 3 hours

HUM 26-102 Western Civilization I: The Ancient World

to 1500 (page 155) 3 hours

HUM 26-103 Western Civilization II: 1500 to the Present (page 155) . . . 3 hours

HUM 26-104 The Humanities, The Eastern World (page 155) 3 hours

PHIL 39-171 Introduction to Philosophy (page 161) 3 hours

PHIL 39-274, 275, 276 Introduction to Ethics (page 161) 3 hours

POLS 34-105 The African World (page 162) 3 hours

Fine Arts

ART 13-102 Art Appreciation (page 111) 3 hours

ART 13-109 Survey of Art I: Prehistory through

Medieval Art (page 113) 3 hours

ART 13-111 Survey of Art II: Renaissance to the Present (page 113) . . 3 hours

MUS 19-201 The Enjoyment of Music (page 123) 3 hours

MUS 19-202 Jazz Appreciation (page 123) 3 hours

MUS 19-222 American Popular Music (page 123) 3 hours

THEA 43-101 Theatre Appreciation (page 136) 3 hours

SOCIAL AND BEHAVIORAL SCIENCES6 hours

Required: One course from each area.

Education degrees require PSYC 08-303 Educational Psychology.

Social Sciences

AGRI 03-102 Introductory Agricultural Economics (page 265) 3 hours

ECON 52-130 Survey of Economics (page 282) 3 hours

ECON 52-150 General Economics I (page 282) 3 hours

GEOG 32-101 Introduction to Geography (page 156) 3 hours

SOC 35-101 General Sociology (page 331) 3 hours

SOC 35-108 General Anthropology (page 333) 3 hours

Behavioral Sciences

PSYC 08-103 General Psychology (page 328) 3 hours

PSYC 08-303 Educational Psychology (page 329) 3 hours

TOTAL GENERAL EDUCATION REQUIREMENTS**42 HOURS**

Institutional Requirements

The Institutional Requirements Rationale Statement

Preparing students to enter a world of constant change entails preparing them for a global multicultural world. Changes in the cultural and international profile of the world have been constant and continue to impact the consciousness of us all, even in isolated rural areas of the world. In today's world, it is rare to be involved in business or leisure activities that do not involve diversity of class, race, ethnicity, gender, sexual orientation, exceptionalism, religion, language, and age. Helping students to understand the importance of recognizing and respecting differences in behaviors, values, opinions, and points of view across these dimensions will greatly enrich their lives as they enter an environment of change and diversity. Technology, also, is constantly evolving. In fact, changes occur at such a fast pace that skills acquired only months ago can quickly become outdated. Thus, in order to prepare students to be autonomous learners, students should understand cutting edge technologies; how technology shapes and forms us as individuals, as communities, and as a world; and how technology enables us to continue to improve and evolve.

The Institutional Requirements Portion of Degree Requirements

In order to complete the bachelor's degree, students must take the general education requirements for their specific degree, plus institutional requirements for their specific degree, plus major and/or minor requirements as specified by the department, plus electives as needed to total a minimum of 124 semester hours.

It is important for students to work closely with their academic advisors when selecting courses, as not all courses fulfill requirements for all degrees. Students who change their majors, choose double majors or additional certification, or who do not choose courses carefully may need more than 124 semester hours to complete a degree program.

Institutional Requirements

Institutional Requirements courses are required for the existing degrees: Bachelor of Arts, the Bachelor of Fine Arts, the Bachelor of Music Education, the Bachelor of Science, the Bachelor of Science in Education, the Bachelor of Technology, the Bachelor of Science in Clinical Laboratory Sciences, and the Bachelor of Science in Nursing Completion Program.

Any course taken to fulfill the Institutional Requirements cannot also fulfill the General Education Requirements or Major/Minor requirements, unless specifically permitted in this catalog. Language courses meeting the Multicultural/Diversity competency requirement may also be counted toward the B.A. degree Language Requirement.

It is recommended that students carefully sequence courses from the Institutional Requirements during their freshman and sophomore years.

Institutional Requirements

Required: one course from each area

MULTICULTURAL/DIVERSITY COMPETENCY 3 hours

COM 29-225 Intercultural Communication (page 303)	3 hours
EDUC 61-252 Pluralism in a Multicultural Society (page 365)	3 hours
ENGL 10-224 Multiethnic Literature of the U.S. (page 93)	3 hours
ENGL 10-226 Modern and Contemporary World Literature (page 93)	3 hours
GEOG 32-102 People and Cultures of the World (page 156)	3 hours
HUM 26-162 Comparative Religions (page 155)	3 hours
LANG 14-131 French: Communication and Culture I (page 98)	3 hours
LANG 14-132 French: Communication and Culture II (page 98)	3 hours
LANG 14-141 Spanish: Communication and Culture I (page 99)	3 hours
LANG 14-142 Spanish: Communication and Culture II (page 99)	3 hours
LANG 14-151 Introduction to American Sign Language and Deaf Culture (page 100)	3 hours
MCOM 20-221 Ethnographic Film Study (page 306)	3 hours
MUS 19-280 World Music (page 123)	3 hours
REC 45-211 Leisure and Society (page 350)	3 hours

INFORMATION TECHNOLOGY COMPETENCY 3 hours

CSIS 44-130 Computers and Information Technology (page 185)	3 hours
EDCI 62-130 Educational Computing and Technology (page 367)	3 hours
EDUC 61-145 Information and Educational Technology (page 364)	3 hours
GEOL 27-130 Information Technology and Science (page 234)	3 hours
HUM 26-105 Information Technology and Culture (page 155)	3 hours
PHSC 40-106 Computational Methods in Science (page 243)	3 hours

Undergraduate Degrees

Bachelor of Arts

The curriculum leading to the Bachelor of Arts degree emphasizes the fine arts, languages, literature, history, and the related social studies, and is often chosen as a pre-professional curriculum by those students who desire a general education, or for entrance into the world of law, the ministry or other professions.

The number of hours in the major, minor, and elective categories will vary depending on the major and minor selected. The Bachelor of Arts degree requires a minimum of 32 semester hours in courses numbered above 300.

Approved majors for the Bachelor of Arts degree are listed in the departments.

B.A. Degree Requirements	Semester Hours
General Education Requirements (See pages 66-68)	42
Institutional Requirements (See pages 68-69)	6
Specific Requirement	
*One Modern Language	9
Major or Major/Minor Requirements	54-60
Electives and Other Departmental Requirements	7-13
TOTAL MINIMUM ACADEMIC	124

*Please see the "Language Requirement" statement on page 84 of this catalog.

Bachelor of Fine Arts

The Bachelor of Fine Arts degree with a Major in Art is offered as a program of study emphasizing professional preparation in the studio areas of art. Within the 72 semester hours required for the major, the student must select a specialization (from ceramics, drawing, painting, photography, printmaking, sculpture, or graphic design).

For the B.F.A. degree, a minimum of 40 semester hours must be completed in courses numbered above 300.

B.F.A. Degree Requirements	Semester Hours
General Education Requirements (See pages 66-68)	42
Institutional Requirements (See pages 68-69)	6
Comprehensive Major in Art	72
Electives and Other Departmental Requirements	4
TOTAL MINIMUM ACADEMIC	124

Bachelor of Music Education

Completion of this curriculum, other University requirements, and minimum overall grade point average qualifies a student to receive a Bachelor of Music Education degree. Please reference the Professional Education Handbook.

The Bachelor of Music Education degree requires a minimum of 40 semester hours in courses numbered above 300. A minimum total of 124 academic hours are required for this degree.

All degrees in education are subject to state requirements which may change at any time due to action of the State Board of Education.

The Bachelor of Music Education degree is available with these majors: Instrumental Music K-12, Vocal Music K-12.

B.M.E. Degree Requirements	Semester Hours
General Education Requirements (See pages 66-68)	42
Institutional Requirements (See pages 68-69)	6
Major Requirements (see Discipline of Music section of catalog)	58-60
Professional Education Requirements	24
Degree Requirement	3
TOTAL MINIMUM ACADEMIC	124

Bachelor of Science

The curriculum leading to the Bachelor of Science degree emphasizes mathematics and the natural sciences and offers a pre-professional program for mathematicians, physicists, biologists, physicians, nurses, psychologists, and business administrators.

The number of hours in the major, minor, and elective categories will vary depending on the major and minor selected. Forty semester hours of courses numbered above 300 are required.

B.S. Degree Requirements	Semester Hours
General Education Requirements (See pages 66-68)	42
Institutional Requirements (See pages 68-69)	6
Major or Major/Minor Requirements	55-60
Electives and Other Departmental Requirements	16-21
TOTAL MINIMUM ACADEMIC	124

Bachelor of Science in Education

Completion of this curriculum, other University requirements, and minimum overall grade point average qualifies the student to receive a Bachelor of Science in Education degree. Please reference the Professional Education Handbook.

The Bachelor of Science in Education degree requires a minimum of 40 semester hours in courses numbered above 300. A minimum total of 124 academic hours are required for this degree.

All degrees in education are subject to state requirements which may change at any time due to action of the State Board of Education.

Specific requirements within, or in addition to, the General Education and Institutional requirements, must be taken for teacher certification.

Students pursuing a Bachelor of Science in Education degree may follow one of the five following programs. Listed below each program are areas of certification which may be followed under that particular program. Please refer to the page numbers listed for specific general education requirements. Degree requirements for each program are shown in the matrix on page 73.

Program

Elementary (page 356)

- Art (Certifies Grades K-9)
- Elementary (Certifies Grades 1-6)
- Early Childhood (Certifies Birth - Grade 3)
- Early Childhood Special Education (Certifies Birth - Grade 3)
- Physical Education (Certifies Grades K-9)
- Spanish (Certifies Grades K-9)

Middle School (page 359)

- Agriculture (Certifies Grades 5-9)
- Business Education (Certifies Grades 5-9)
- Speech/Theatre (Certifies Grades 5-9)
- Family Life Education (Certifies Grades 5-9)
- Language Arts (Certifies Grades 5-9)
- Mathematics (Certifies Grades 5-9)
- Science (Certifies Grades 5-9)
- Social Science (Certifies Grades 5-9)

Special Education (page 360)

- Cross Categorical (Certifies Grades K-12)

Secondary (page 362)

- Agriculture (Certifies Grades 9-12)
- Art (Certifies Grades 9-12)
- Business (Certifies Grades 9-12)
- Driver Education (Certifies Grades 9-12)
- English (Certifies Grades 9-12)
- Health (Certifies Grades 9-12)
- Mathematics (Certifies Grades 9-12)
- Science: Biology, Chemistry, or Earth Science
(Three separate programs) (Certifies Grades 9-12)
- Social Science (Certifies Grades 9-12)
- Speech/Theatre (Certifies Grades 9-12)
- Unified Science: Biology, Chemistry, or Earth Science
(Three separate programs) (Certifies Grades 9-12)

Elementary/Secondary (page 363)

- Art (Certifies Grades K-12)
- Physical Education (Certifies Grades K-12)
- Spanish (Certifies Grades K-12)

TOTAL MINIMUM ACADEMIC..... 124

Information regarding admittance to teacher education, advanced standing requirements, directed teaching, and certification is located within the College of Education and Human Services section of this catalog on pages 314-318.

Bachelor of Science in Education Degree Requirements		Elementary	Middle School	Special Education	Secondary	Elementary/ Secondary
Foundations for Teaching	PSYC 08-303	●	●	●	●	●
	PSYC 08-312	◆		■		
	PSYC 08-317		●			
	PSYC 08-322			■	●	●
	PSYC 08-333	☆		■		
	EDUC 61-461	●	●	●	●	●
	EDUC 61-462				●	●
	EDUC 61-570		●			
	EDCI 62-301	●		●		
	EDCI 62-371	●	●	●	●	●
Teaching Methods	EDCI 62-511		●			
	EDUC 61-520		●	✕	●	●
	EDUC 61-521				●	●
	EDCI 62-216	●		●		
	EDCI 62-320	●				
	EDCI 62-353		●	▲	●	●
	EDCI 62-356	●	●	●		
	EDCI 62-380	●		●		
	EDCI 62-410	●		●		
	EDCI 62-420	●				
	EDCI 62-430		●			
	ART 13-380	●				
	MUS 19-380	●				
	MATH 17-471	●		●		
	HPER 22-238	●		●		
SCED 28-380	●		●			
Subject Area Methods		●	●	●	●	
Clinical Experiences	EDCI 62-211	●		I		
	EDCI 62-407	●		●		
	EDCI 62-456	●		●		
	EDCI 62-444			●		
	EDCI 62-591	●	●			
	EDUC 61-260 or HPER 22-260*			I	●	●
	EDUC 61-262		●	I		
	EDUC 61-360 or HPER 22-360*			I	●	●
	EDUC 61-362		●	I		
	EDUC 61-470					●
	EDUC 61-471	●				
	EDUC 61-472				●	
	EDUC 61-474		●			
	EDUC 61-481			●		
	EDUC 61-482			●		
Degree Require.	Specific Requirement	★	★	★	▶	▶

KEY

- required
- ◆ or 08-333
- ☆ or 08-312
- 08-333 or 312 and 322
- ▲ or 62-553
- ✕ 62-540
- I 62-211 or
61-260 and 360
or 61-262 and 362
- ★ 14-100 level course
- ▶ 61-569 or 14-100 level
course
- * PE Majors Only

In addition, General Education, Institutional and Major or Major/Minor Requirements must be fulfilled.

Bachelor of Science in Clinical Laboratory Sciences

In conjunction with approved hospitals and medical centers.

The curriculum leading to the Bachelor of Science in Clinical Laboratory Sciences degree emphasizes biology and chemistry. Minimum academic prerequisites are established by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) and are taken on the Northwest campus during the first three years along with other courses required by the University. The fourth year (senior year) is a structured educational program in an affiliated clinical laboratory. The clinical program is accredited through NAACLS. Upon satisfactory completion of the clinical program, a minimum of 30 hours of credit are granted and the student is awarded a B.S. in Clinical Laboratory Sciences degree. Acceptance into an affiliated program is competitive and will be determined by the quality of academic work completed by the student during the first three years of study. Admission to the clinical program is decided entirely by the hospitals. Acceptance into the University program does not guarantee acceptance of the student by an affiliated clinical program.

Students who already have a bachelor's degree and who wish to enter the field may do so by applying directly to the hospital having an approved program. Applicants who have completed minimum requirements seven or more years before application must update microbiology and biochemistry. If a B.S. in Clinical Laboratory Sciences is desired, then University requirements for the degree must also be fulfilled.

Complete application deadlines vary with the clinical program. Programs should be contacted during the Spring semester prior to the year you want to start. As an example, application deadlines can vary from July 1st to October 15th. Applications are processed through the program director/education coordinator of the clinical program.

Selection is done by each clinical program. Criteria include state of health, academic performance, and personal characteristics. Usually, a 2.5 minimum grade point average is required.

Enrollment is limited by the class size of each clinical program. Costs vary with each clinical program. Upon graduation, students are eligible to take a national certification examination. Passing the examination is not a condition for receiving the B. S. in Clinical Laboratory Sciences degree. Financial assistance varies with each clinical program. The student should contact each program and the Office of Scholarships and Financial Assistance.

B.S. in Clinical Laboratory Sciences

Degree Requirements	Semester Hours
General Education Requirements (See pages 66-68)	42
Institutional Requirements (See pages 68-69)	6
Science	46
Electives and Other Departmental Requirements	6
Clinical Laboratory Sciences Courses at Approved Teaching Hospital or Clinic*	30
TOTAL MINIMUM ACADEMIC	124

*Some clinical programs do have early acceptance policies, and one can usually apply to these programs during the sophomore year. Early acceptance will guarantee the student a position after all pre-clinical coursework is completed provided all other criteria are satisfied.

Hospitals and officials in association with the Clinical Laboratory Sciences degree:

Des Moines, Iowa

Mercy College of Health Sciences Clinical Laboratory Science Program
 Kyla Dippold, MS, MLS (ASCP), Program Chair and Assistant Professor

Kansas City, Missouri

St. Luke's Hospital of Kansas City - Clinical Laboratory Science Program
 Jane Rachel, MA, MLS (ASCP), Program Director

North Kansas City, Missouri

North Kansas City Hospital - School of Clinical Laboratory Science
 Marisa K. James MA, MLS (ASCP), Program Director

Bachelor of Science in Clinical Laboratory Sciences

Required Courses	Semester Hours
CHEM 24-114/115 General Chemistry I and Laboratory	4
BIOL 04-102/103 General Biology and Laboratory	4
BIOL 04-140 General Microbiology	4
BIOL 04-310 Cell Biology (4) OR	
BIOL 04-440 Molecular Genetics (3) OR	
MATH 17-114 General Statistics (3)	3-4
BIOL 04-438 Human Physiology	4
BIOL 04-350 Genetics	3
BIOL 04-444 Immunology	4
Total Hours	26-27
Clinical Laboratory Sciences	30
In conjunction with approved hospitals and medical centers.	
Collateral Courses	
CHEM 24-116/117 General Chemistry II and Laboratory	5
CHEM 24-322/323 Quantitative Analysis and Laboratory	5
CHEM 24-342/343 Organic Chemistry I and Laboratory	5
CHEM 24-362/363 Elementary Biochemistry and Laboratory	4
Directed General Education Courses	
The following courses are to be taken to fulfill General Education requirements:	
MATH 17-118 College Algebra	3
BIOL 04-114/115 General Zoology and Laboratory	4
PHYS 25-112/113 General Physics II and Laboratory	4
General Education Requirements (less directed General Education courses)	31
Institutional Requirements	6
Elective	1
TOTAL MINIMUM ACADEMIC	124

Bachelor of Science in Nursing Completion Program

This curriculum allows active nurses to complete a Bachelor of Science in Nursing degree. As a liberal arts degree, the program includes the General Education requirements and Institutional requirements, as well as upper-division nursing courses. Successful completion of the program results in the conferral of the Bachelor of Science in Nursing degree.

Admission to the R.N.-to-B.S.N. Completion Program requires a minimum GPA of 2.5 (in all courses) and a current R.N. license.

The curriculum below reflects the total course requirements. As such, students transferring into the program may already have credit for a number of courses. Students interested in course equivalencies are referred to the Northwest Admissions Office web page on Transfer Equivalencies and/or Articulation Agreements (www.nwmissouri.edu/admissions/transfer). In addition, the degree requires a minimum total of 124 academic semester hours, including at least 40 hours in courses numbered above 300. Thirty hours must be taken at Northwest. Last hours of residency are waived.

B.S.N. Degree Requirements	Semester Hours
General Education Requirements (See pages 66-68)	
Note: the BSN specifies certain courses within this group	42
Institutional Requirements (See pages 68-69)	6
Nursing Program Requirements	50
Program Electives	3
Other Coursework	23-24
TOTAL MINIMUM ACADEMIC	124

Bachelor of Technology

The curriculum leading to the Bachelor of Technology degree provides for the transfer of vocational or technical coursework taken as part of a one or two year technical certificate, Associate of Applied Science or an eligible technical Associate of Science degree program from a regionally-accredited college. The curriculum is designed to provide the additional general and specific education necessary for technicians with vocational or 'non-college transfer' certificate/degrees to earn a bachelors degree.

The Bachelor of Technology degree requires a minimum of 24 semester hours in courses numbered above 300. A minimum of 30 semester hours must be completed in residence, with the last 10 hours of academic work completed at Northwest. A minimum total of 124 earned academic hours and a minimum overall and Northwest grade point average of 2.0 are required to qualify for the degree.

A program of study for candidates who have completed a one-year certificate program will be developed with the following framework:

Requirements	Semester Hours
General Education Requirements (see pages 66-68)	30
Institutional Requirements (see pages 68-69)	6
Emphasis	39
Transferred or Directed Electives	49
Total Minimum Academic	124

A program of study for candidates who have completed a two-year certificate program, Associate of Applied Science degree, or eligible technical Associate of Science degree will be developed with the following framework:

Requirements	Semester Hours
General Education Requirements (see pages 66-68)	30
Institutional Requirements (see pages 68-69)	6
Emphasis	24
Transferred or Directed Electives	64
Total Minimum Academic	124

B.T. Eligibility Requirements:

Only students who have earned approved technical certificates or degrees are eligible for admission into the Bachelor of Technology program:

- One-year technical certificate from a community/junior college
- Two-year technical certificate from a community/junior college
- Associate of Applied Science degree
- Associate of Science degree (eligible technical programs only)

General Education Requirements:

All candidates for the Bachelor of Technology degree will complete 30 hours of general education studies which must include:

ENGL 10-111 Composition I: Academic Literacies(see note below) (3 hours)

COM 29-102 Fundamentals of Oral Communication (3 hours)

HIST 33-133 America: A Historical Survey (3 hours)

POLS 34-102 Introduction to American Government & Politics (3 hours) OR

POLS 34-201 Missouri Politics (see note below) (1 hour)

Additional specific general education requirements set forth by the emphasis department

After satisfying the above specified general education requirements, the student will complete additional general education courses, from those listed on pages 66-68, to total the required 30 hours.

Note: ENGL 10-110 Introduction to College Writing is a prerequisite for students who do not meet placement criteria for ENGL 10-111.

Note: POLS 34-201 Missouri Politics is the required course for students who have credit for an American Government course which did not include a study of the Missouri Constitution. (Students successfully completing POLS 34-203 State and Local Government at Northwest may have POLS 34-201 Missouri Politics waived. See chairperson of the Department of Humanities and Social Sciences for approval of this waiver.)

Institutional Requirements:

Students must complete six hours of institutional requirements including three hours from the multicultural/diversity competency and three hours from the information technology competency.

Bachelor of Technology Emphasis:

Bachelor of Technology students who have earned a one-year certificate will complete a minimum of 39 hours of coursework at Northwest in their chosen emphasis area. Bachelor of Technology students who have earned a two-year certificate, Associate of Applied Science degree or eligible technical Associate of Science degree will complete a minimum of 24 hours of coursework at Northwest in the chosen emphasis area. Specific coursework requirements with an emphasis are determined by the emphasis department and may be obtained from the B.T. Advisors listed below.

Directed Electives:

Bachelor of Technology students will choose general electives to reach the required 124 total hours from those courses outlined by the emphasis department.

B.T. Advisors:

Agriculture—Jamie Patton

Computer Science—Carol Spradling

Child Care Administration, Food Service, Merchandising—Lauren Leach-Steffens

Geographical Information Systems—Patricia Drews

Geography—Theodore Goudge

Management Information Systems—Nancy Zelif

Marketing/Management—Chi Lo Lim

Business Technology—Judy Clark

Academic Structure

COLLEGE OF ARTS AND SCIENCES

- Department of English and Modern Languages
- Department of Fine and Performing Arts
- Department of Humanities and Social Sciences
- Department of Mathematics, Computer Science and Information Systems
- Department of Military Science
- Department of Natural Sciences
- Honors Program

BOOTH COLLEGE OF BUSINESS AND PROFESSIONAL STUDIES

- Department of Agricultural Sciences
- Department of Business
- Department of Communication and Mass Media

COLLEGE OF EDUCATION AND HUMAN SERVICES

- Department of Behavioral Sciences
- Department of Health and Human Services
- Department of Professional Education

The College of Arts and Sciences

Dr. Charles A. McAdams, Dean

- Department of English and Modern Languages
- Department of Fine and Performing Arts
- Department of Humanities and Social Sciences
- Department of Mathematics, Computer Science and Information Systems
- Department of Military Science
- Department of Natural Sciences
- Honors Program

College of Arts and Sciences

Dean: Charles A. McAdams

The College of Arts and Sciences includes the Departments of English and Modern Languages; Fine and Performing Arts; Humanities and Social Sciences; Mathematics, Computer Science and Information Systems; Military Science; Natural Sciences; and the Honors Program.

The College of Arts and Sciences provides students basic communication skills, problem solving and critical thinking skills; a foundation in liberal arts, science and mathematics; individual professional preparation in selected fields; pre-professional education; and cultural enrichment. The college offers a wide spectrum of undergraduate majors, minors and cooperative programs with other units of the University. Additionally, many individualized programs are available to professionally-oriented students. Graduates are readily accepted into graduate and professional schools or placed in positions compatible with their field of study.

Programs in the College of Arts and Sciences provide a rich collegiate experience and the technical and intellectual skills necessary for professional competence. The traditional classroom setting is complemented by laboratory classes and field experiences, enabling the student to put into immediate practice the concepts and understandings gained. Through these processes, students have opportunities to grasp the value of individual integrity, respect for others' ideas, sensitivity to cultural diversity and to recognize the potential for personal growth.

General education and service courses offered by the college assure an understanding of the role of the scientific process and problem solving in daily living, and awakens students to the values of their own cultural heritage and that of others. These courses assist students in learning to apply and expand current knowledge thereby broadening the base of educational experiences to make students better contributors to society and assist them in leading fuller more rewarding lives. Students learn as individuals and as members of teams to communicate ideas effectively, apply emerging technologies, deal with abstractions, develop analytical skills, synthesize ideas, evaluate current actions against historical perspectives, develop discriminating aesthetic judgments and give form to visions of their imaginations.

INTERNATIONAL STUDY / 80

Study Abroad Coordinator: Jeaneth Puriel

International student exchange, study abroad and internship programs support the array of academic programs at Northwest. Whether a faculty-led short term program, a summer program, a trimester or academic year, students have the opportunity to earn Northwest credit abroad, at the same time they are exposed to a new educational system. Usually taken in the sophomore or junior year, students broaden their horizons by traveling to an international location to study with local citizens and/or international students to experience global living.

Bilateral, direct and consortium agreements are in place and continue to be updated to satisfy the need of students. Study Abroad programs include Australearn, Asialearn, Eurolearn, International Student Exchange Program (ISEP), Magellan Exchange, Mexico Exchange, Missouri-London Program, Asia Program, and faculty-led short term programs.

Course Descriptions

College of Arts and Sciences / 71

101 Freshman Seminar (1 hour)

Freshman Seminar is designed to introduce students to Northwest. Topics of exploration will include adjustment to University life, skills necessary to make the most of the University experience, General Education requirements, academic programs and advisement, career exploration, campus and community resources, taking advantage of cultural and extracurricular events, and assuming responsibility for one's own University experience. (F)

301 British Life and Culture (3 hours)

The student will survey British cultural, social, and political life through a series of lectures (by British experts) and field trips. This course is available only to those in the Missouri London Program. (F, S)

International Study / 80

299 International Study-Study Abroad ("Country") (3-15 credit hours)

Students studying abroad in a Northwest program enroll in this course for the period of their stay. This maintains the student's enrollment during the period of study abroad program and upon return facilitates the translation of coursework taken abroad into Northwest credit.

Department of English and Modern Languages

Chairperson: Michael Hobbs

Faculty: Kori Binnette, Richard Black, Stancy Bond, Wayne Chandler, Andre Davis, Karen Detrixhe, Eric Dickey, Steven Frogge, John Gallaher, Robin Gallaher, Tom Hardee, Brenda Lewis, Mindee Lieske, Jeffrey Loomis, Francisco Martinez, Nancy Mayer, Ildiko Olasz, Beth Richards, Luke Rolfes, Marcy Roush, Brenda Ryan, Jenny Rytting, Richard Sonnenmoser, Kenton Wilcox

Statement of Mission

Northwest Missouri State University is a learning-centered community of scholars offering undergraduate and selected graduate programs. The University is committed to preparing broadly educated and engaged citizens for a world of constant change, applying information technology to improve learning processes, and promoting continuous improvement to enhance performance in all its activities. Northwest seeks to expand access to learning and promote research designed to address the needs of our students and stakeholders.

DEGREE PROGRAMS

The Department of English and Modern Languages offers seven majors, three undergraduate degree programs and five minors.

The 30-hour Bachelor of Arts in English provides a course balance of advanced writing and literature that is excellent preparation for the study of law, business and medicine; for careers in teaching, publishing, writing, advertising and journalism; and for management and other positions requiring interpretive, diagnostic and analytic problem-solving abilities.

The 36-hour Bachelor of Science in English provides extensive writing experience and familiarity with editing and research skills, in response to the proliferation of desktop and small publishing companies, technical writing centers and in-house magazines or journals. This major provides preparation for careers especially in the fields of publishing and technical writing as well as for the study of law, business and medicine.

The 39-hour Bachelor of Science in Education in English and the 54-hour Comprehensive Bachelor of Science in Education in English both provide extensive writing experience, familiarity with the full chronological range of American and British literature, knowledge of traditional and modern grammars, rhetorical theory and history of the English language. Either major, when completed with the requirements of the B.S.Ed. Secondary Program, meets Missouri secondary school English teaching certification standards.

Bachelor of Arts and Bachelor of Science degrees are available in Spanish. These require 37 hours of study in the discipline. A minor or collateral coursework is required for these majors.

The Bachelor of Science in Education degree in Spanish (34 hours) provides preparation for the teaching of the language, and must be completed under the requirements for the B.S.Ed. degree, Elementary/Secondary Program, which meets the Missouri teacher certification standards for the teaching of the target language in grades K-12. A strong literature preparation is encouraged in order for success on the state examination.

The 24-hour Minor in Writing complements any major whose study is enhanced by improved written expression. The minor includes Mass Communication electives and a range of advanced-study opportunities in creative writing, technical writing, popular media and language.

The 24-hour Minor in English enhances students' analytic and communicative skills and prepares them for those career fields named above.

The 30-hour Minor in English is an attractive choice for students majoring in another teaching area such as foreign languages, social science, speech, art or music. This minor offers a balance of writing and literature courses similar to the Bachelor of Arts in English and, when completed with the requirements of the B.S.Ed. degree, Secondary Program, meets Missouri secondary school English teaching certification standards.

A minor in Spanish is required to complete 24 hours of study in Languages and to follow a prescribed series of courses. The minor taken under either the B.S.Ed. degree, Elementary/Secondary or Elementary Programs meets Missouri teacher certification degree requirements for a K-9 Spanish endorsement.

A minor in Deaf Studies is available to students majoring in another area. This minor requires 23 hours of study in American Sign Language as well as special education.

An Individualized Language minor (27 hours) allows students to study any language (other than English) through an immersion program outside of the United States. The program of study must be approved by the Department of English and Modern Languages and the Study Abroad Office in advance.

Test-Out Policy

Students may challenge their placement in ENGL 10-110 Introduction to College Writing by passing a writing test. Students should contact the department for additional details. Credit may be granted for AP or IB exams. Please see pages 14-16 for the specific policy.

Test-out is also available for LANG 14-131, 14-132, 14-141, 14-142, 14-151, 14-251 or 14-252. Students should consult with the Languages faculty regarding appropriate test-out level. See the department secretary for further details. Languages credit may be granted for AP, CLEP or IB exams, please see pages 14-16 for the specific policy.

Language Requirement

Students should follow the course sequences and listed prerequisites for language courses. Permission to take a course out of sequence to satisfy the "B.A. Specific Requirement" must be approved in advance by petition to the chair of the department. Contact the department for a petition form.

The nine hours of Modern Language required to graduate with a Bachelor of Arts degree may also be used to satisfy the total required hours for a major or minor in languages. Language 14-141 and 14-142 are prerequisite courses; these may be counted toward the Spanish B.A. major, but not for the Spanish B.S., Spanish B.S.Ed., or Spanish minor.

Language courses meeting the Multicultural/Diversity Competency requirement may also be counted toward the B.A. degree Language Requirement.

Portfolio Requirement

Successful completion of all modern language degrees requires the presentation of an academic and professional portfolio during the student's senior year. Immediately upon declaring a major, the student must request a portfolio packet from his/her advisor.

Language Majors

In order to qualify for advanced standing in language, students must (1) not be on academic probation or suspension and (2) have completed six hours of 200-level courses or the equivalent in a language.

English / 10

Core Requirements for Majors in English

	Semester Hours
ENGL 10-233 American Literature: Beginnings to 1865	3
ENGL 10-234 American Literature: 1865 to the Present	3
ENGL 10-245 English Literature: <i>Beowulf</i> through the 18th Century	3
ENGL 10-246 English Literature: Romanticism to the Present	3
*ENGL 10-305 The Literary Critic's Craft	2
ENGL 10-372 Introduction to Shakespeare	3
*ENGL 10-405 Senior Seminar	1
Total Hours	18

*B.S. in English students will take ENGL 10-410 Professional Portfolio Preparation instead of ENGL 10-305 and ENGL 10-405.

MAJORS

Major in English, 30 hours: B.A.—Minor Required

CIP: 230101

Required Courses	Semester Hours
English Core Requirements	18
One course from:	3
ENGL 10-311 Advanced Composition	
ENGL 10-312 Creative Writing: Creative Nonfiction	
ENGL 10-313 Creative Writing: Fiction	
ENGL 10-314 Creative Writing: Poetry	
ENGL 10-315 Writing for the Professions	
Approved electives to total 30 hours	9

Major in English, 36 hours: B.S.—Minor Required

CIP: 230101

Required Courses	Semester Hours
English Core Requirements	18
ENGL 10-315 Writing for the Professions	3
One course from:	3
ENGL 10-304 Rhetorical Writing	
ENGL 10-311 Advanced Composition	
ENGL 10-420 Publication Skills	

ENGL 10-430 Writing for the Online Age
 ENGL 10-495 Internship in Writing and Research

Approved electives to total 36 hours 12

**Major in English, 39 hours: B.S.Ed.–Minor Required
 (Certifies Grades 9-12)**

CIP: 131305

Required Courses	Semester Hours
*English Core Requirements	18
ENGL 10-322 Introduction to the Teaching of Writing	3
ENGL 10-404 Schoolhouse Grammars and Pedagogy	3
ENGL 10-501 Writing, Language, and Pedagogy	3
ENGL 10-590 Young Adult Literature	3
ENGL 10-210 Introduction to Creative Writing OR ENGL 10-311 Advanced Composition	3
Approved literature courses numbered 300 or above	6

*Students pursuing this degree may take either all four survey courses listed under English Core Requirements (ENGL 10-233, 10-234, 10-245, 10-246) or may take three of those survey courses and one of either ENGL 10-224 Multiethnic Literature of the United States or ENGL 10-226 Modern and Contemporary World Literature.

ENGL 10-580 Methods in Secondary School English must be completed as part of the professional education requirements.

This major, when completed under the B.S.Ed. Secondary Program, meets Missouri secondary school English teaching certification standards.

**Comprehensive Major in English Education, 54 hours:
 B.S.Ed.–No Minor Required (Certifies Grades 9-12)**

CIP: 131305

Required Courses	Semester Hours
English Core Requirements	18
ENGL 10-210 Introduction to Creative Writing	3
*ENGL 10-224 Multiethnic Literature of the United States	3
ENGL 10-311 Advanced Composition	3
ENGL 10-322 Introduction to the Teaching of Writing	3
ENGL 10-404 Schoolhouse Grammars and Pedagogy	3
ENGL 10-501 Writing, Language, and Pedagogy	3
ENGL 10-590 Young Adult Literature	3
Approved literature courses numbered 300 or above	6
Approved English electives to total 54 hours	9

ENGL 10-580 Methods in Secondary School English must be completed as part of the professional education requirements.

This major, when completed under the B.S.Ed. degree, Secondary Program, meets Missouri secondary school English teaching certification standards.

*B.S.Ed. in English students may not use ENGL 10-224 to fulfill an Institutional Requirement.

MINORS

Minor in English, 24 hours

CIP: 230101

Required Courses	Semester Hours
ENGL 10-233 American Literature: Beginnings to 1865	3
ENGL 10-234 American Literature: 1865 to the Present	3
ENGL 10-245 English Literature: <i>Beowulf</i> through the 18th Century	3
ENGL 10-246 English Literature: Romantics to the Present	3
One course from:	3
ENGL 10-311 Advanced Composition	
ENGL 10-312 Creative Writing: Creative Nonfiction	
ENGL 10-313 Creative Writing: Fiction	
ENGL 10-314 Creative Writing: Poetry	
ENGL 10-315 Writing for the Professions	

Approved electives (must include 6 hours of upper-level English) to total 24 hours

Writing Minor in English, 24 hours

CIP: 230501

Required Courses	Semester Hours
ENGL 10-210 Introduction to Creative Writing	3
ENGL 10-311 Advanced Composition	3
ENGL 10-315 Writing for the Professions	3
Approved Electives from the following:	15
Any two English Department literature courses for a total of 6 hours	
ENGL 10-304 Rhetorical Writing (3)	
ENGL 10-312 Creative Writing: Nonfiction (3)	
ENGL 10-313 Creative Writing: Fictions (3)	
ENGL 10-314 Creative Writing: Poetry (3)	
ENGL 10-322 Introduction to the Teaching of Writing (3)	
ENGL 10-380 Practicum in Teaching Writing (1)	
ENGL 10-403 Studies in Language (3)	
ENGL 10-414 Structure and Theory of Creative Writing (3)	
ENGL 10-419 Directed Writing (1-4)	
ENGL 10-430 Writing for the Online Age (3)	
ENGL 10-495 Internship in Writing and Research (3)	
ENGL 10-501 Writing, Language, and Pedagogy (3)	
ENGL 10-512 Publication Skills (3)	
ENGL 10-560 Advanced Creative Writing (3)	
MCOM 20-227 Reporting (3)	
MCOM 20-327 Advanced Reporting (3)	
MCOM 20-358 Feature Writing (3)	

Language Arts Concentrations for Middle School Major Certifies Grades 5-9 when completed with the Middle School Major

CIP: 131305

Required Courses	Semester Hours
ENGL 10-322 Introduction to the Teaching of Writing	3
ENGL 10-404 Schoolhouse Grammars and Pedagogy	3
ENGL 10-590 Young Adult Literature	3
COM 29-325 Listening Behaviors and Skills	3
THEA 43-460 Creative Dramatics	3

21 Hour Concentration

(Meets requirements of Major in Middle School)

Required Courses	15
*Two courses from electives	6

*See advisor for list of approved electives.

Minor in English, 30 hours: Certifiable—See Professional Education Requirements

CIP: 131305

Required Courses	Semester Hours
ENGL 10-210 Introduction to Creative Writing	3
*ENGL 10-233 American Literature: Beginnings to 1865	3
ENGL 10-234 American Literature: 1865 to the Present	3
ENGL 10-245 English Literature: <i>Beowulf</i> through the 18th Century	3
ENGL 10-246 English Literature: Romantics to the Present	3
ENGL 10-311 Advanced Composition	3
ENGL 10-404 Schoolhouse Grammars and Pedagogy	3
ENGL 10-501 Writing, Language, and Pedagogy	3
ENGL 10-590 Young Adult Literature	3

Approved electives to total 30 hours

*Students pursuing this minor may either take all four of these survey courses (ENGL 10-233, 10-234, 10-245, 10-246) or may take three of these survey courses and one of either ENGL 10-224 Multiethnic Literature of the United States or ENGL 10-226 Modern and Contemporary World Literature.

ENGL 10-580 Methods in Secondary School English must be completed as part of the professional education requirements.

This minor, when completed under the B.S.Ed. Secondary or Elementary/Secondary Programs, meets Missouri teacher certification standards for grades 9-12.

Languages / 14

MAJOR

Major in Spanish, 37 hours: B.A.–Minor Required or Collateral Field Listed Below

CIP: 160905

Required Core	Semester Hours
*LANG 14-242 Intermediate Spanish for Communication and Culture I (Appropriate for most students with four or more years of high school Spanish.)	3
LANG 14-243 Intermediate Spanish for Communication and Culture II	3
LANG 14-244 Beginning Conversation in Spanish (May be taken concurrently with LANG 14-242 or 243.)	3
LANG 14-342 Advanced Spanish	3
LANG 14-344 Advanced Conversation in Spanish	3
LANG 14-345 Advanced Spanish Composition	3
**LANG 14-347 Study Abroad for Spanish or French	3
LANG 14-485 Senior Seminar	1

Advanced Electives 9-15

(Minimum of 9 hours from the following to be taken on the Northwest campus or from Northwest faculty. Courses may be taken concurrently.)

- LANG 14-347 Study Abroad for Spanish or French (1-4)
- LANG 14-348 Spanish History and Culture (3)
- LANG 14-400 Special Offerings (1-4)
- LANG 14-401 Special Topics (1-3)
- LANG 14-446 Practicum in Spanish Studies (1-3)
- LANG 14-447 Latin American Civilization (3)
- LANG 14-448 Survey of Spanish Language Literature (3)
- LANG 14-449 Independent Study in Spanish (1-2)
- LANG 14-460 Advanced Studies in Modern Language (3)
- LANG 14-470 Internship in Languages (1-3)
- LANG 14-500 Special Offerings (1-4)

*LANG 14-141 and 14-142 are prerequisite courses. These may count toward the major.

**Participation in an approved Study Abroad experience or in an approved internship (14-470) will also satisfy this requirement.

Collateral Field in Intercultural Enrichment (if no minor selected)	24
ENGL 10-311 Advanced Composition (3)	
ENGL 10-224 Multiethnic Literature of the United States (3)	
*LANG 14-347 Study Abroad for Spanish or French (6)	
GEOG 32-445 Geography of Latin America (3)	
HIST 33-375 History of Latin America (3)	
POLS 34-421 International Conflict Resolution (3)	
MKTG 55-438 International Business (3)	

*Faculty-led trips in other departments, Study Abroad may be counted with departmental approval; upper-level Spanish courses may be substituted for students unable to participate in experiences requiring travel.

Major in Spanish, 37 hours: B.S.–Minor Required or Collateral Field Listed Below

CIP: 160905

Required Core	Semester Hours
*LANG 14-242 Intermediate Spanish for Communication and Culture I (Appropriate for most students with four or more years of high school Spanish.)	3
LANG 14-243 Intermediate Spanish for Communication and Culture II	3
LANG 14-244 Beginning Conversation in Spanish (May be taken concurrently with LANG 14-242 or 243.)	3
LANG 14-342 Advanced Spanish	3
LANG 14-344 Advanced Conversation in Spanish	3
LANG 14-345 Advanced Spanish Composition	3
**LANG 14-347 Study Abroad for Spanish or French	3
LANG 14-485 Senior Seminar	1
Advanced Electives	15

(Minimum of 15 hours from the following; at least 12 hours are to be taken on the Northwest campus or from Northwest faculty. Courses may be taken concurrently.)

LANG 14-347 Study Abroad for Spanish or French (1-4)

LANG 14-348 Spanish History and Culture (3)

LANG 14-400 Special Offerings (1-4)

LANG 14-401 Special Topics (1-3)

LANG 14-446 Practicum in Spanish Studies (1-3)

LANG 14-447 Latin American Civilization (3)

LANG 14-448 Survey of Spanish Language Literature (3)

LANG 14-449 Independent Study in Spanish (1-2)

LANG 14-460 Advanced Studies in Modern Language (3)

LANG 14-470 Internship in Languages (1-3)

LANG 14-500 Special Offerings (1-4)

*LANG 14-141 and 14-142 are prerequisite courses. These do not count toward the major.

**Participation in an approved Study Abroad experience or in an approved internship (14-470) will also satisfy this requirement.

Collateral Field in Intercultural Enrichment (if no minor selected)	24
ENGL 10-311 Advanced Composition (3)	
ENGL 10-224 Multiethnic Literature of the United States (3)	
*LANG 14-347 Study Abroad for Spanish or French (6)	
GEOG 32-445 Geography of Latin America (3)	
HIST 33-375 History of Latin America (3)	
POLS 34-421 International Conflict Resolution (3)	
MKTG 55-438 International Business (3)	

*Faculty-led trips in other departments, Study Abroad may be counted with departmental approval; upper-level Spanish courses may be substituted for students unable to participate in experiences requiring travel.

**Major in Spanish, 34 hours: B.S.Ed.,
(Certifies Grades K-12)–Minor Required**

CIP: 131330

Required Core	Semester Hours
*LANG 14-242 Intermediate Spanish for Communication and Culture I (Appropriate for most students with four or more years of high school Spanish.)	3
LANG 14-243 Intermediate Spanish for Communication and Culture II	3
LANG 14-244 Beginning Conversation in Spanish (May be taken concurrently with Lang 14-242 or 243.)	3
LANG 14-342 Advanced Spanish	3
LANG 14-344 Advanced Conversation in Spanish	3
LANG 14-345 Advanced Spanish Composition	3
**LANG 14-347 Study Abroad for Spanish or French	3
LANG 14-485 Senior Seminar	1
Required Course	
LANG 14-448 Survey of Spanish Language Literature	3
Advanced Electives	9
(Minimum of 9 hours from the following; at least 6 hours are to be taken on the Northwest campus or from Northwest faculty. Courses may be taken concurrently.)	
LANG 14-347 Study Abroad for Spanish or French (1-4)	
LANG 14-348 Spanish History and Culture (3)	
LANG 14-400 Special Offerings (1-4)	
LANG 14-401 Special Topics (1-3)	
LANG 14-446 Practicum in Spanish Studies (1-3)	
LANG 14-447 Latin American Civilization (3)	
LANG 14-449 Independent Study in Spanish (1-2)	
LANG 14-460 Advanced Studies in Modern Language (3)	
LANG 14-470 Internship in Languages (1-3)	
LANG 14-500 Special Offerings (1-4)	

Students must take LANG 14-480 Methods in Teaching Modern Language as part of their professional education requirements.

*LANG 14-141 and 14-142 are prerequisite courses. These do not count toward the major.

**Participation in an approved Study Abroad experience or in an approved internship (14-470) will also satisfy this requirement.

MINORS

Minor in Deaf Studies, 24 hours

CIP: 161601

Required Courses	Semester Hours
LANG 14-151 Introduction to American Sign Language and Deaf Culture	3
LANG 14-251 American Sign Language I	3
LANG 14-252 American Sign Language II	3
LANG 14-351 American Sign Language III	3
LANG 14-451 American Sign Language IV	3
*COM 29-336 Nonverbal Communication	3
COM 29-553 Language, Speech and Hearing of the Exceptional Child and Adult OR FCS 15-526 Independent Living for Special Populations	3
EDCI 62-371 Introduction to Special Education	3

*May be taken concurrently with ASL III.

Minor in Spanish, 24 hours

CIP: 160905

Certifies Grades K-9 when completed on an education degree. See Professional Education Requirements.

Required Courses	Semester Hours
*LANG 14-242 Intermediate Spanish for Communication and Culture I (Appropriate for most students with four or more years of high school Spanish.)	3
LANG 14-243 Intermediate Spanish for Communication and Culture II	3
**LANG 14-244 Beginning Conversation in Spanish	3
LANG 14-342 Advanced Spanish	3
LANG 14-344 Advanced Conversation in Spanish	3
LANG 14-345 Advanced Spanish Composition	3
**May be taken concurrently with LANG 14-242 or 243.	
Advanced Electives	6
(Minimum of 6 hours from the following, to be taken on the Northwest campus or from Northwest faculty. These courses may be taken concurrently.)	
LANG 14-347 Study Abroad for Spanish or French (1-4)	
LANG 14-348 Spanish History and Culture (3)	
LANG 14-400 Special Offerings (1-4)	
LANG 14-401 Special Topics (1-3)	
LANG 14-446 Practicum in Spanish Studies (1-3)	
LANG 14-447 Latin American Civilization (3)	
LANG 14-448 Survey of Spanish Language Literature (3)	
LANG 14-449 Independent Study in Spanish (1-2)	
LANG 14-460 Advanced Studies in Modern Language (3)	
LANG 14-500 Special Offerings (1-4)	

Students must take LANG 14-480 Methods in Teaching Modern Language as part of their professional education requirements.

*LANG 14-141 and 14-142 are prerequisite courses. These do not count toward the minor.

Minor in Individualized Language Program, 27 hours

CIP: 160101

Students may participate in a language immersion program at an approved foreign higher education institution and count up to 24 semester-equivalent credit hours toward this minor. Partner institutions and courses of study must be approved in advance by the Study Abroad Office and the Department of English and Modern Languages. Coursework must be taught in a target language other than English, and may not be in the student's native language.

At least 24 credit hours of coursework must be in a single non-English target language.

At least 3 credit hours of coursework must be completed through Northwest, either in the target language or in English-language delivered courses related to the target language (e.g., history, culture).

Course Descriptions

English / 10

200 Special Offerings (1-4 hours)

Courses that are offered on only one occasion or variable issue-oriented courses that have the content described in the title. Students may repeat this course with a change in topic. Credit and prerequisites as announced.

300 Special Offerings (1-4 hours)

Courses that are offered on only one occasion or variable issue-oriented courses that have the content described in the title. Students may repeat this course with a change in topic. Credit and prerequisites as announced.

400 Special Offerings (1-4 hours)

Courses that are offered on only one occasion or variable issue-oriented courses that have the content described in the title. Students may repeat this course with a change in topic. Credit and prerequisites as announced.

GRAMMAR AND LINGUISTICS

403 Studies in Language (3 hours)

Studies of issues related to linguistics, with emphasis on English-language applications beyond traditional or schoolhouse grammar. Specific subject matter of course will change each trimester. Possible topics include "Ambiguity and Poetics," "English and Politics," "History and Science of Lexicography," "Issues in Translation," "Language Acquisition," "Philosophies of Language," and so forth. Students may repeat the course with a change in topic. (F)

404 Schoolhouse Grammars and Pedagogy (3 hours)

Examination of traditional schoolhouse grammars as they are indicative of the issues facing students in today's secondary classrooms. Includes a rigorous study of the literature surrounding the teaching of grammar in K-12 schools and an exploration of effective pedagogical approaches to the teaching of grammars in secondary schools. (S)

409 Directed Reading in Linguistics (1-3 hours)

Tutorial for individual student projects. Instructor's permission required. Students may repeat this course with a change in topic. (F, S)

501 Writing, Language, and Pedagogy (3 hours)

A study of the history of English, language theory and writing theory. The specific subject matter and emphasis will change each trimester. Possible topics include "The History of English," "Noah Webster and the American Language," "Dialects and Diversity," "Applied Studies in Modern Grammar," and "Theories of Teaching Composition." Students may repeat the course with a change in topic. (F, S)

LITERATURE

220 Introduction to Literature (3 hours)

A general introduction to literature organized around central themes in our global society. Selected themes will vary, but each course offering will include (1) literature from various genres, (2) literature from three centuries and (3) readings from at least three of four distinct cultural categories. Humanities credit. (F, S)

224 Multiethnic Literature of the United States (3 hours)

Focuses on the literature of African Americans, Native Americans, Chicanos/Chicanas and Asian Americans. Includes close critical reading of a variety of texts as well as attention to the cultural contexts from which the literature derives. Students may not use this course to fulfill both a major requirement and an Institutional Requirement. (F)

226 Modern and Contemporary World Literature (3 hours)

Although paying some attention to parallel themes in the "world" literature of post-1900 Europe, the course focuses on non-Western literature of the twentieth century and later. It includes close critical reading of a variety of genres as well as attention to the cultural contexts from which the literature derives. Students may not use this course to fulfill both a major requirement and an Institutional Requirement. (S)

233 American Literature: Beginnings to 1865 (3 hours)

Development of American literature from the early Colonial period to the mid-19th century. Readings include Edwards, Hawthorne, Poe, Melville, Emerson, Thoreau, Dickinson and Whitman. (F, S)

234 American Literature: 1865 to the Present (3 hours)

Development of American literature from the end of the Civil War to the present. Readings include Twain, Norris, Crane, Hemingway, Faulkner, Wright, Momaday, Frost, Eliot, Stevens, Hughes and Brooks. (F, S)

245 English Literature: Beowulf through the 18th Century (3 hours)

A study of selected English literary masterpieces and their backgrounds from the Anglo-Saxons through Boswell's biography of Samuel Johnson. Readings include Chaucer, More, Spenser, Marlowe, Shakespeare, Donne, Milton, Pope, Swift and Boswell. (F, S)

246 English Literature: Romantics to the Present (3 hours)

English literature from the Romantics to the present, including works by Wordsworth, Byron, Keats, Shelley, Browning, Tennyson, Wilde, Hardy, Yeats, Woolf, Joyce, Lawrence, Lessing, Eliot and Auden. (F, S)

305 The Literary Critic's Craft (2 hours)

A course examining the practice of literary criticism over time and especially in the past century. This course shows such criticism being used in reflection on major texts during what have been on-going debates about the literature scholar's discipline. (F)

325 Special Studies (3 hours)

An intensive study of a literary theme, a genre or an approach to writing, language or literature. The subject matter or emphasis will change each trimester. Students may repeat this course with a change in topic. (F, S)

331 The Bible and Literature (3 hours)

Study of Bible stories as key narratives of Middle Eastern and Western culture, both in their original Biblical contexts and in adapted versions prepared by literary writers of many later eras. Tales from both Old and New Testaments are featured, along with adaptations of them by later poets, playwrights, and novelists.

343 Survey of Women's Literature (3 hours)

A study of women's literature in all genres from the Middle Ages to the present. Readings may include Kempe, Lanyer, Behn, Wollstonecraft, Chopin, Gilman, Woolf, Lessing, Atwood, Kingston, Silko and Walker. (S, alt. years)

372 Introduction to Shakespeare (3 hours)

An introduction to Shakespeare's most popular and/or important plays and poems, including the sonnets, *Romeo and Juliet*, *The Taming of the Shrew* and such works as *The Tempest*, *Hamlet*, *Macbeth*, *A Midsummer Night's Dream*, *Richard III* and *Venus and Adonis*. (F, alt. S)

428 Directed Reading in Literature (1-6 hours)

Tutorial for individual student projects. Instructor's permission required. Students may repeat this course with a change in topic. (F, S)

462 Advanced British Literature (3 hours)

This course may focus on any period or aspect of British literature. The class might focus on a particular author (e.g. "Where Angels Fear to Tread: E.M. Forester," "The World of J.R.R. Tolkien"); a group of writers (e.g. "The Bloomsbury Group," "The Sons' of Ben Jonson"); the literature of a specific period, genre or place (e.g. "Irish Modernism," "Medieval Drama"); or a specific theme (e.g. "Victorian Stunners," "Virginia Woolf's Feminism"). Students may repeat the course with a change in topic.

463 Advanced American Literature (3 hours)

This course may focus on any period or aspect of American literature. The class might focus on a particular author (e.g. "Leaves and/or Grass: Walt Whitman," "The Awakening of Kate Chopin"), a group of writers (e.g. "African American Writers between the Wars," "American Modernist Poets"); the literature of a specific period, genre or place (e.g. "Twenty-First Century American Fiction," "American Nature Writing") or a specific theme (e.g. "Gender & Memoir," "Sense & Sentiment in Nineteenth-Century Women's Literature"). Students may repeat the course with a change in topic.

464 Advanced World Literature (3 hours)

This course may focus on any period or aspect of World literature. The class might focus on a particular author (e.g. Tolstoy, Chinua Achebe), a group of writers or a genre (e.g. "Trans-Atlantic Romanticists," "Contemporary World Drama"); the literature of a specific period or place (e.g. "Classical Epic Poetry," "South American Magic Realism"); or a specific theme (e.g. "Poetry in Translation: Issues & Answers," "Post Colonial Literature"). Students may repeat the course with a change in topic.

520 Studies in Early British Literature (3 hours)

A study of genres, figures and/or issues from British literature of the Medieval and Renaissance periods. Specific subject matter and emphasis of course will change each trimester. Possible topics include "Middle English literature," which would include Medieval writers such as Chaucer, Margery Kempe and Sir Thomas Malory; "Renaissance Drama," examining the works of authors such as Christopher Marlowe, Elizabeth Cary and Shakespeare; or intensive focus on the works of a specific writer such as the Pearl Poet, Edmund Spenser or John Milton. Students may repeat the course with a change in topic.

530 Studies in British Literature, 18th Century-Present (3 hours)

A study of genres, figures and/or issues from British literature of the past 300 years. Specific subject matter will change each trimester. Possible topics include "Literature of the Romantic Movement," examining works of authors such as Emily Bronte, William Wordsworth, Mary Shelley and Lord Byron; "The Victorian Age," featuring writers such as Charles Dickens, Elizabeth Barrett Browning and Rudyard Kipling; or "Twentieth-Century British Fiction," including writers such as Joseph Conrad, Virginia Woolf, James Joyce and Anthony Burgess. Students may repeat the course with a change in topic.

540 Studies in Multiculturalism and World Literature (3 hours)

An intensive study of world or multicultural literature. Specific subject matter will change each trimester. Possible topics might include "Literature of the Harlem Renaissance," with works by authors such as Hughes, Toomer, McKay, Hurston and Bontemps; "The Development of the Modern Novel," examining novels by authors such as Petronius, Boccaccio, Cervantes, Voltaire, Austen, Dostoevsky, Woolf, Beckett, Robbe-Grillet, Morrison, or Achebe; or "Anglophone Literature: Fiction of the Post-Colonial World," including works by Rushdie, Naipaul, Gordimer, Lessing, Coetzee, White, Atwood and Munro. Students may repeat the course with a change in topic.

550 Studies in American Literature (3 hours)

An intensive study of topics in American literature. Specific subject matter will change each trimester. Sample topics: "American Romanticism," with such authors as Emerson, Thoreau, Fuller, Whitman and

Dickinson; "The Small Town in American Literature," with works by Hawthorne, Twain, Anderson, Lewis, Gaines, Lee, King, Morrison and Faulker; "American Modernism and Long Poem," examining the long works of Whitman, Eliot, Williams, H.D. Stevens, Heaney and Dove. Students may repeat the course with a change in topic.

PEDAGOGY

322 Introduction to the Teaching of Writing (3 hours)

Strategies for effective teaching of writing, with some background on writing research and theory. (S)

380 Practicum in Teaching Writing Skills (1 hour)

Laboratory practice in teaching developmental writing skills and tutoring in a small-group setting. (F)

580 Methods in Secondary School English (3 hours)

Study and practice in strategies for effective teaching of the English language arts in secondary schools. Includes materials, methods, planning, assessment and evaluation, current issues and trends in teaching the English and language arts. (F)

590 Young Adult Literature (3 hours)

A study of literature for grades 7 through 12 and the ways that literature can be taught in the classroom. The course teaches students to judge young adult literature by accepted and respected critical standards and to understand what makes the literature suitable for students. (S)

WRITING

101 English as a Foreign Language (3 hours)

For the individual needs of students whose native language is not English. Meets five times per week. Does not fulfill the ENGL 10-110 or 111 requirement.

110 Introduction to College Writing (3 hours + 2 lab hours)

A college-level composition course designed to develop skills in prewriting, drafting, editing and rewriting. Required of students with ACT English scores of 18 or below. (F, S)

111 Composition I: Academic Literacies (3 hours)

Study and practice in reading and writing texts towards development of college-level academic

literacies. Students will engage through writing and reading in knowledge-based inquiry and sustained critical thinking for the purpose of better understanding the subject or issue. Concepts taught will include academic rhetoric and argumentation, research and documentation. Prerequisite: A grade of "C" or better in ENGL 10-110, an ACT English subscore of 19-26, or successful placement challenge. (F, S)

112 Composition II: Writing as Engagement (3 hours)

Study and practice of writing as a form of engagement in public and personal contexts. Builds on skills practiced in Composition I (academic rhetoric, argumentation research, and documentation) while broadening the contexts in which these skills are used. Students will complete an extensive writing project which may incorporate various forms of writing and other media. Prerequisites: ENGL 10-111.

115 Accelerated Composition (3 hours)

Combines the course material of ENGL 10-111: Composition I: Academic Literacies and ENGL 10-112: Composition II: Writing as Engagement into one semester. Skills covered will include those required for academic literacies, such as academic rhetoric, argumentation, and research, as well as those applicable to writing and reading beyond the university. Students will complete an extensive writing project which may incorporate various genres and media as well as primary and secondary research. For further information, see the course descriptions for ENGL 10-111 and 112. Satisfactory completion of this course fulfills all six hours of the University's General Education requirements for Written Communication. Three, GPA bearing, credit hours will be applied for ENGL 10-115. Three non-GPA bearing, credit hours will be applied as credit for the required ACT score. Prerequisite: ACT English score of 27 or above. (F, S)

210 Introduction to Creative Writing (3 hours)

A multi-genre introduction to creative writing. Emphasis is on producing and responding to creative work in various genres including poetry, fiction and creative nonfiction. Prerequisite: ENGL 10-112 or 115.

304 Rhetorical Writing (3 hours)

Application of the principles and theories of rhetoric to original writing, with special attention given to writings that can potentially produce genuine results in personal, institutional, cultural or political contexts. (Alt. years)

311 Advanced Composition (3 hours)

Advanced study of writing, especially techniques of rhetoric, argumentation and research. Prerequisite: ENGL 10-112 or 115.

312 Creative Writing:

Creative Nonfiction (3 hours)

Composition of original creative nonfiction. Students have the opportunity to study published works, write original works, critique the works of others and consult with the professor about their works on a regular basis. Prerequisite: ENGL 10-112 or 115. (Alt. years)

313 Creative Writing: Fiction (3 hours)

Composition of original short stories or other forms of prose fiction. Students have the opportunity to study published works, write original works, critique the works of others and consult with the professor about their works on a regular basis. Prerequisite: ENGL 10-112 or 115. (F)

314 Creative Writing: Poetry (3 hours)

Composition of original poetry and study of poetic forms and techniques. Students have the opportunity to study published works, write original works, critique the works of others and consult with the professor about their works on a regular basis. Prerequisite: ENGL 10-112 or 115. (S)

315 Writing for the Professions (3 hours)

Instruction and practice in the practical application of effective writing strategies for government, business and industry, including but not limited to reports, memos, causal analyses, mechanism descriptions, definitions, persuasive letters and feasibility studies. Prerequisite: ENGL 10-112 or 10-115 or permission of instructor.

405 Senior Seminar (1 hour)

A capstone course. Besides preparing a professional résumé and participating in a mock interview, the student will, through presentation of a research project at a public forum, synthesize various elements of critical thinking, reflect on major texts and demonstrate research abilities in the discipline. (F)

410 Professional Portfolio Preparation (3 hours)

A capstone class for B.S. in English students, focused on preparing a professional portfolio to facilitate application for jobs in writing, editing and publishing. Prerequisite: Senior standing or permission of instructor.

414 The Structure and Theory of Creative Writing (3 hours)

An intermediate creative writing course that investigates the history and formative statements of creative writing through reading, writing, and discussion. Readings include theoretical essays regarding the purpose and role of the writer in society, the rhetoric of structure and major statements on the art. The specific contents of the course changes each time the course is offered. Course topics might include "Poetic Forms," "Prose Poetry," "Critical Reading for Creative Writers," "Writing the Natural World," "Micro Fiction," "Lyric Essays," "Personal Reportage" and "Memoir." Students may repeat the course with a change in topic. Prerequisite: the relevant 300-level creative writing class or instructor permission.

419 Directed Writing (1-4 hours)

Independent work in creative or expository writing. Instructor's permission required. Students may repeat this course with a change in topic. (F, S)

430 Writing for the Online Age (3 hours)

Addresses the changing environments and situations facing writers due to the ever-increasing presence of computer and internet technology. Emphasizes planning and creating documents in a number of technology-rich situations. The specific content of the course will vary each trimester, with possible topics such as "Internet Rhetoric," "Writing With New Media," "Literature, Hypertext and Other Media Influences," or "Technology and Collaborative Writing." While students may be required to learn the basics of webpage construction through an HTML editor, this is not a course in coding or graphical design except as far as these subjects intersect with writing. Students may repeat the course with change of topic. Prerequisite: ENGL 10-112 or 115.

495 Internship in Writing and Research (1-8 hours)

Internships (paid and unpaid) will be offered as available or as located by students. Internships require a written proposal at the time of registration and permission of the instructor and department chair. Fifty work hours are required for each hour of academic credit. A maximum of three credit hours may be applied to the major or minor. Course may be repeated for a maximum of 11 hours for additional experience. Prerequisites: Junior standing and three hours of writing courses at the 300 level or above.

512 Publication Skills (3 hours)

Course covers major skills required in publishing. As well as providing an overview of the publishing industry, it prepares students for work in areas of technical writing, magazine editing and freelance copyediting. The specific content of the course will vary each trimester, with possible topics such as "Design, Layout and Typography," "Principles and Practice of Editing," or "Proposals, Reports and Contracts." Students may repeat the course with a change in topic.

560 Advanced Creative Writing (3 hours)

An advanced course in the study and writing of original poetry, fiction, or creative non-fiction. Specific subject matter changes each trimester. Topics may include "The Art of the Short Story," which studies a variety of short stories from various time periods and cultures, with a focus on writing short stories; "Form in Contemporary Poetry," which studies traditional forms such as the sonnet and sestina; study and practice of techniques such as meter, rhyme, alliteration etc.; reading a variety of traditional and contemporary formal poets; and writing formal poetry. Other topics could include "Exploring the Prose Poem," "Who Lives There: Building a Cast of Characters," "Essentials of Poetry" and "Essentials of Fiction." Students may repeat the course with a change in topic. Prerequisite: a 300- or 400-level creative writing class or consent of instructor.

Languages / 14

200 Special Offerings (1-4 hours)

Courses which are offered on only one occasion or variable issue-oriented courses which have the content described in the title. Credit and prerequisites as announced. Repeatable with topics changing.

400 Special Offerings (1-4 hours)

Courses which are offered on only one occasion or variable issue-oriented courses which have the content described in the title. Credit and prerequisites as announced. Repeatable with topics changing.

401 Special Topics (1-3 hours)

Provides concentrated study in special areas within languages. Topics vary trimester to trimester. Prerequisites as announced. Repeatable with topics changing. (SS)

460 Advanced Studies in Modern Languages (3 hours)

Study of special topics chosen by the instructor. Subject matter may vary. Students may repeat

the course once for credit with different topics. Intended for students who have completed the major core in a foreign language. Prerequisite: Advanced standing.

470 Internship in Languages (1-3 hours)

Allows students to gain practical experience by participating in on-site work with various types of predominantly non-English speaking organizations. Prerequisites: LANG 14-243 and 14-244 or equivalent, and permission of instructor. Repeatable for new experience. (F, S, SS)

480 Methods of Teaching A Modern Language (3 hours)

Study and practice in techniques for effective teaching of foreign languages. Includes study of theories, methodologies, assessments, and current trends in teaching foreign languages in schools. (F)

485 Senior Seminar for Modern Language Majors (1 hour)

Intended for seniors who have finished the major or who are taking the last course of their major. Each student will prepare a paper or portfolio in an area of the language field related to his or her future employment or lifetime interests, which will be presented to other majors for discussion and exchange of ideas. Prerequisite: Must meet the current departmental cut score(s) on the current standardized general education test(s) (contact the department office for specific information), and have permission of the department chairperson and have successfully completed at least one 400-level course. (F, S)

500 Special Offerings (1-4 hours)

Courses which are offered on only one occasion or variable issue-oriented courses which have the content described in the title. Credit and prerequisites as announced. Repeatable with topics changing.

582 International Heroes: France, Spain and England (3 hours)

Literary selections in French, Spanish, and English will trace the development of the histories and legends of Sir Lancelot, Roland, and El Cid in and out of their home countries, from the 12 through the 17th centuries. French and Spanish majors will read the appropriate selections in their original languages; other readings will be in English. Non-language majors will read in English translations. For graduate or undergraduate credit. Graduate credit will require an additional research paper. Prerequisite: LANG 14-448 or 400 level literature course in appropriate language.

CHINESE

121 Chinese: Communication and Culture I (3 hours)

Initiates awareness of Chinese cultures along with the ability to understand simple conversation in Chinese and to communicate basic needs and activities. Intended for students with no previous study of Chinese. (F)

122 Chinese: Communication and Culture II (3 hours)

Develops comprehension and communication skills, including the ability to discuss opinions and past events, and introduces students to Chinese life and culture. Prerequisite: LANG 14-121 or equivalent. (S)

221 Intermediate Chinese for Communication and Culture I (3 hours)

Broadens and strengthens the student's knowledge of Chinese through reading, composition, and conversation, and also expands knowledge of the structure of the Chinese language. Prerequisite: LANG 14-122 or equivalent. (F)

222 Intermediate Chinese for Communication and Culture II (3 hours)

Broadens and strengthens the student's knowledge of Chinese through reading, composition, and conversation, and also expands knowledge of the structure of the Chinese language. Prerequisite: LANG 14-221 or equivalent. (S)

FRENCH

131 French: Communication and Culture I (3 hours)

Initiates awareness of Francophone cultures along with the ability to understand simple conversation in French and to communicate basic needs and describe activities. Intended for students with no previous study of French. Does not count toward minor in French. (F)

132 French: Communication and Culture II (3 hours)

Develops comprehension and communication skills, including the ability to discuss opinions and past events, and introduces students to French life and culture. Prerequisite: LANG 14-131 or equivalent in high school French. (S)

232 Intermediate French for Communication and Culture I (3 hours)

Intermediate level course focusing on the language

and culture of France and the Francophone world. Further development of contemporary conversational vocabulary in French along with activities designed for practical applications. Readings broaden the student's vocabulary and syntax usage. Prerequisite: LANG 14-132 or equivalent. (F)

233 Intermediate French for Communication and Culture II (3 hours)

Intermediate level course focusing on the language and culture of France and the Francophone world. Further development of contemporary conversational vocabulary in French, along with activities designed for practical applications. Readings broaden the student's vocabulary and syntax usage. Prerequisite: LANG 14-232 or equivalent. (S)

439 Independent Study in French (1-2 hours)

Offered by special arrangement and petition approved by the language faculty. May be repeated for a maximum of six semester hours with topics changing. (F, S)

SPANISH

141 Spanish: Communication and Culture I (3 hours)

Initiates awareness of Hispanic cultures along with the ability to understand simple conversation in Spanish and to communicate basic needs and activities. Intended for students with no previous study of Spanish. Does not count towards major or minor in Spanish. (F, S, SS)

142 Spanish: Communication and Culture II (3 hours)

Develops comprehension and communication skills, including the ability to discuss opinions and past events, and introduces students to various countries in Spanish America. Does not count towards major or minor in Spanish. Prerequisite: LANG 14-141 or equivalent in high school Spanish. (F, S)

242 Intermediate Spanish for Communication and Culture I (3 hours)

Broadens and strengthens the student's knowledge of Spanish through reading, composition, and conversation, and also expands knowledge of the structure of the Spanish language. Prerequisite: LANG 14-142 or equivalent. (F, S)

243 Intermediate Spanish for Communication and Culture II (3 hours)

Broadens and strengthens the student's knowl-

edge of Spanish through reading, composition, and conversation, and also expands knowledge of the structure of the Spanish language. Prerequisite: LANG 14-242 or equivalent. (F, S)

244 Beginning Conversation in Spanish (3 hours)

Beginning-practice in conversation, with emphasis on practical vocabulary and developing fluency and ease of expression. Prerequisite: LANG 14-242 or 243 or equivalent. (F, S)

342 Advanced Spanish (3 hours)

Practice in correct idiomatic and effective written communication, from the business letter to the essay. Prerequisite: LANG 14-243 or equivalent. (F)

344 Advanced Conversation in Spanish (3 hours)

This course provides an intensive advanced practice in speaking Spanish in order to increase students' fluency and self-confidence. Students will learn the appropriate uses of Spanish street idioms, as well as a wide range of topics of conversation, from the superficial discussion to the most profound philosophical or scientific themes. The topics are actual issues that have an impact on our daily lives. Prerequisite: LANG 14-243 and 14-244 or equivalent. (S)

345 Advanced Spanish Composition (3 hours)

Practice in correct idiomatic and effective oral and written communication including descriptive, narrative, informative, and argumentative essay. Prerequisite: LANG 14-342 or equivalent. (S)

347 Study Abroad for Spanish or French (1-4 hours)

Designed for coursework taught in Spanish or French, taken outside of the U.S. Prerequisite: LANG 14-243 AND 244 (Spanish) or equivalent, 14-233 (French) or equivalent. Repeatable for new experience. (SS)

348 Spanish History and Culture (3 hours)

The history and culture of Spain as a background to national identity. Course is taught in Spanish. Prerequisite: LANG 14-243. (F)

446 Practicum in Spanish (1-3 hours)

An experience which will offer students the opportunity to gain practical experience in the field by working in a setting closely related to their chosen career field, preferably in a foreign country. May be used for elementary Spanish teaching practicum

as a supervised teaching experience. Repeatable for further mastery. (F, S)

**447 Latin American Civilization
(3 hours)**

Practice in correct idiomatic and effective oral and written communication including descriptive, narrative, informative, and argumentative essay. Prerequisite: LANG 14-243 or equivalent. (F, alt. years)

**448 Survey of Spanish Language
Literature (3 hours)**

This course offers a general overview of major literary works and movements in both Spain and Latin America from the outset of the Colonial period to the present. It includes a discussion of the important historical, cultural, social and ideological issues that underlie each movement. The genres to be studied include poetry, short story, drama, and essay. Prerequisite: LANG 14-243 or equivalent. (F, alt. years)

**449 Independent Study in Spanish
(1-2 hours)**

Offered by special arrangement and petition approved by the language faculty. May be repeated for a maximum of six semester hours with topics changing. (F, S)

**541 Independent Study in Spanish
(1-4 hours)**

Provides individualized, in-depth study in the area of Spanish. Study will be conducted in Spanish and will be designed to meet the needs of the student(s). May be repeated up to 4 credits with topics changing. Credit and prerequisites as announced.

SIGN LANGUAGE

**151 Introduction to American Sign
Language and Deaf Culture (3 hours)**

This course introduces awareness of the deaf culture along with the ability to understand simple conversations with an emphasis on the signing space and use of non-manual components. This includes an introduction to the manual alphabet, fingerspelling, numbers, culturally appropriate behaviors, and exposes students to basic ASL vocabulary and grammar. (F, S, SS)

**251 American Sign Language I
(3 hours)**

A continuation of ASL 151, this course develops more rudimentary competency in receptive and expressive skills and allows recognition and dem-

onstration of American Sign Language grammatical structure and rules. Students will continue to learn about the deaf culture and the deaf community. This class is taught primarily in ASL. Prerequisites: LANG 14-151 or permission of instructor. (F, S, SS)

**252 American Sign Language II
(3 hours)**

Students will develop advanced competence of complex ASL grammatical features including vocabulary building. Integrates and refines expressive and receptive skills in ASL. Encourages more creative use of non-manual markers, expression, classifiers, body language/postures, and signing space. This course is taught in ASL. Prerequisites: LANG 14-251 or permission of instructor. (F, S)

**256 American Sign Language
Practicum (1 hour)**

This course allows students to gain practical experience by participating in teaching children American Sign Language while under the supervision of the instructor. This course will provide an introduction into curriculum planning, creating, and integrating developmentally appropriate activities and materials when working with children in educational settings.

**351 American Sign Language III
(3 hours)**

This course will provide students the opportunity to develop competence in their ability to communicate about a variety of topics with the deaf community. Students will distinguish between English to ASL and ASL to English. Students will model appropriate language and cultural behaviors in a variety of situations. Discussions, activities, and multi-media components will also reinforce the student's receptive and expressive skills. This course is taught entirely in ASL with limited to no use of voice. Prerequisites: LANG 14-252 or permission of instructor. (S)

**451 American Sign Language IV
(3 hours)**

Emphasizes advanced linguistic aspects of ASL and encourages contact with the deaf community. Students will translate written text into ASL and improve their ability to make formal presentations in ASL. Develops vocabulary, grammatical knowledge, and conversational competence with a total immersion approach. Broadens and strengthens the student's knowledge, fluency, and competence in American Sign Language through interpreting, transliterating, voice to sign and sign to voice. Students will develop proficient conversational

storytelling skills. This course is taught entirely in ASL with no voice. Prerequisites: LANG 14-351 or permission of instructor. (F)

459 Independent Study in American Sign Language (1-2 hours)

Offered by special arrangement and petition approved by the language faculty. May be repeated for a maximum of six semester hours with topics changing. (F, S)

RUSSIAN

161 Russian: Communication and Culture I (3 hours)

Initiates the awareness of Russian cultures along with the ability to understand simple conversation in Russian and to communicate basic needs and activities. Intended for students with no previous study of Russian. (F)

162 Russian: Communication and Culture II (3 hours)

Develops comprehension and communication skills, including the ability to discuss opinions and past events, and introduces students to Russian life and culture. Prerequisite: LANG 14-161 or equivalent. (S)

261 Intermediate Russian for Communication and Culture I (3 hours)

Broadens and strengthens the student's knowledge of Russian through reading, composition, and conversation, and also expands knowledge of the structure of the Russian language. Prerequisite: LANG 14-162 or equivalent. (F)

STUDY ABROAD

191 Modern Language Communication and Culture I (1-4 hours)

Designed for credit in the study of a language other than English, French, or Spanish. Initiates awareness of non-English speaking cultures along with the ability to understand simple conversation and to communicate basic needs and describe activities. Intended for students with no previous study of the language. Does not count toward a language major or minor. Course may be repeated for further mastery.

192 Modern Language Communication and Culture II (1-4 hours)

Designed for credit in the study of a language other than English, French, or Spanish. Develops comprehension and communication skills, including

the ability to discuss opinions and past events, and introduces students to non-English speaking life and culture. Does not count toward a language major or minor. Course may be repeated for further mastery.

290 Intermediate Communication and Cultures in Modern Languages I (1-4 hours)

Designed for credit in the study of a language other than English, French, or Spanish. Intermediate level, credited experiences from other higher education institutions may be equated to this course number. Does not count toward a language major or minor. Course may be repeated for further mastery.

390 Advanced Communication and Cultures in Modern Languages (1-4 hours)

Designed primarily for credit in the study of a language other than English, French, or Spanish. Advanced level, credited experiences from other higher education institutions may be equated to this course number. Credit under this course number may be used as advanced electives in a language major or minor. Course may be repeated for further mastery.

490 Advanced Studies in Culture and History in Modern Languages (1-4 hours)

Designed primarily for credit in the study of a language other than English, French, or Spanish. Advanced level, credited experiences focusing on culture and/or history from other higher education institutions may be equated to this course number. Credit under this course number may be used as advanced electives in a language major or minor. Course may be repeated for further mastery.

491 Advanced Technical Topics in Modern Languages (1-4 hours)

Designed primarily for credit in the study of a language other than English, French, or Spanish. Advanced level, credited experiences focusing on topics requiring technical vocabulary from other higher education institutions may be equated to this course number. Credit under this course number may be used as advanced electives in a language major or minor. Course may be repeated for further mastery.

492 Advanced Literary Topics in Modern Languages (1-4 hours)

Designed primarily for credit in the study of a language other than English, French, or Spanish.

Advanced level, credited experiences focusing on literary topics from other higher education institutions may be equated to this course number. Credit under this course number may be used as advanced electives in a language major or minor. Course may be repeated for further mastery.

582 International Heroes: France, Spain and England (3 hours)

Literary selections in French, Spanish, and English will trace the development of the histories and

legends of Sir Lancelot, Roland, and El Cid in and out their home countries, from the 12th through the 17th centuries. French and Spanish majors will read the appropriate selections in their original languages; other readings will be in English. Non-language majors will read in English translations. For graduate or undergraduate credit. Graduate credit will require an additional research paper. Prerequisite: LANG 14-448 or 400-level literature course in appropriate language.

Department of Fine and Performing Arts

Chairperson: David Oehler

Faculty: Charles Badami, Martha Breckenridge, Rebecca Dunnell, Christopher Gibson, Christopher Graves, Patrick Immel, Ernest Kramer, Laura Kukkee, Philip Laber, Brian Lanier, Armin Mühsam, Anthony Olson, Douglas Overmier, Amanda Petefish-Schrag, Kendall Prinz, Sheila Phillips, William Richardson, Theo Ross, Pamela Shannon, Kim Spradling, Stephen Town, Shawn Wake, Craig Warner, Glenn Williams

Statement of Mission

Northwest Missouri State University is a learning-centered community of scholars offering undergraduate and selected graduate programs. The University is committed to preparing broadly educated and engaged citizens for a world of constant change, applying information technology to improve learning processes, and promoting continuous improvement to enhance performance in all its activities. Northwest seeks to expand access to learning and promote research designed to address the needs of our students and stakeholders.

Degree Programs

The Department of Fine and Performing Arts offers eleven majors, six minors and one area of endorsement.

Preamble

The Department of Fine and Performing Arts is comprised of the disciplines of Art, Music, and Theatre. While these disciplines share many common objectives and values, the programs of study require different policies for study in the various majors. For that reason the policies, descriptions, requirements, and offerings are presented by discipline so that all materials related to Art are together, followed by all materials related to Music, followed by all materials related to Theatre.

Art / 13

Statement of Purpose for Art

The four degree programs of the Discipline of Art provide students with the skills needed to accomplish the tasks of their professions and to awaken them to that intellectual level of existence which will cause them to lead fuller, more rewarding lives regardless of the professional area they enter.

Study in these programs offers students the opportunity to learn to communicate ideas effectively, to develop analytical skills, to synthesize ideas, to evaluate implications of present actions against historical perspective, and to develop discriminating aesthetic judgments.

The Discipline of Art has among its quality objectives: (a) to provide an environment conducive to learning and creative production, (b) to develop an understanding and sensitivity to the visual arts of the past and present, (c) to prepare students for careers in the visual arts including the teaching of art, (d) to furnish the students with sufficient mastery of technical skills to allow for future independent development and creative production, and (e) to prepare students for advanced study in the visual arts.

In addition to the academic programs, the Exhibitions Program and Visiting Artists Series assist in broadening the learning experiences of all students. The exhibitions are shown in the Gallery of the Olive DeLuce Fine Arts Building and are drawn from national as well as regional sources. The Visiting Artists Series brings outstanding artists and art historians to the department where they conduct workshops, give demonstrations, hold discussions, and give slide presentations and lectures that are open to all persons in the University and regional community.

DEGREE PROGRAMS IN ART

The Bachelor of Fine Arts with a Comprehensive Major in Art is a program emphasizing professional preparation within the studio areas. This major allows students to take over half of their total degree requirements in art and to experience various studio areas in addition to their specializations.

Specializations are to be selected from ceramics, drawing, painting, photography, printmaking, sculpture or graphic design and involve advanced study in both a class format and individualized work.

The comprehensive specialization in graphic design provides introductory and advanced study in graphic design, drawing, painting, electronic media, and photography and the opportunity to select from these areas for additional advanced work. The student may take electives outside art in such fields as marketing and mass communication.

The Bachelor of Science in Education, Elementary/Secondary Program with a Comprehensive Major in Art Education is designed to prepare students to teach art at all levels, kindergarten through grade twelve, and to supervise art in the elementary school. For this degree, students are allowed to take almost one-half of their total degree requirements in art and to have a broad experience within the studio areas. This major program exceeds the minimum Missouri teacher certification standards in art and certifies grades K-12.

The Bachelor of Arts with a Comprehensive Major in Art is a program that is distinctive for its flexibility and combines the major requirements, which constitute almost one-half of the total degree requirements, with a rich and varied selection of general studies.

The Bachelor of Science with a Comprehensive Major in Interactive Digital Media (IDM) and a concentration in Visual Imaging (VI) is a program that will allow students to possess cross-disciplinary knowledge and skills in areas that deal with visual aesthetic understanding and communication, integrated with technological knowledge. Students in the Visual Imaging concentration of the IDM major will understand the fundamental concepts of design, comprehend how visual compositions convey content and meaning, and create computer generated images and animations for digital output.

The Minor in Art (24 hours) provides students majoring in any other department with opportunities to pursue studio and/or art history courses.

The Minor in Elementary Art Education is provided for students pursuing the elementary preparation program who also desire certification for teaching art in the elementary school, junior high,

or middle school. This minor is also available to students, in majors other than art, seeking the B.S.Ed. with the Elementary/Secondary Program (certifies grades K-12); this program exceeds the minimum Missouri teacher certification standards in art K-9.

The Minor in Secondary Art Education is provided for students pursuing secondary preparation programs who also desire certification for teaching art in the junior high, middle school, or high school. This minor is also available to students, in majors other than art, seeking the B.S.Ed. with the Elementary/Secondary Program (certifies grades K-12); this program meets the minimum Missouri teacher certification standards in art 7-12.

DEPARTMENT POLICIES FOR ART

Students should acquire a copy of the Art Student Handbook or IDM Student Handbook for a complete list of department policies and other important information.

All work produced in fulfillment of course requirements is considered the property of the Department of Fine and Performing Arts for exhibition purposes until the student's graduation or withdrawal from the University.

Attendance at programs in the Visiting Artists Series is required of all students enrolled in art classes regardless of their major areas of study.

Advanced Placement (AP), Dual Enrollment Transfer Credit and Credit by Examination

The Department of Fine and Performing Arts does not accept Advanced Placement, International Baccalaureate or Dual Enrollment credit for any of its Art degree programs, majors or minors. Credit by examination through the department is not available for any course in Art. The Discipline of Art faculty decides upon credit for courses transferred from another institution on a course-by-course basis.

Advanced Standing Requirement: Art Majors

No art major may be enrolled in and pursue advanced art courses (numbered 300 and above with the exception of ART 13-321, 333 and 395) until Art Advanced Standing has been granted. Art minors must complete the appropriate art core sequence prior to being enrolled in and pursuing advanced art courses.

Students seeking a major in art are expected to demonstrate a capacity to integrate, from the art core courses: principles of an acquired formal language, processes of seeing and perception of content. Through visual, written and verbal evidence, students must show understandings of conceptual purposes behind directed work in the art core courses and sufficient commitment to expand their knowledge in order to successfully pursue advanced study.

To achieve art advanced standing a student (1) must have no grade lower than "C" in ART 13-120, 191, 192, complete ART 13-161 or ART 13-150 and have a grade point of at least 2.00 in the overall art core courses, with no more than 6-9 hours left to complete in the art core; (2) must demonstrate her/his readiness for advanced art courses by satisfactorily responding to written and/or oral questions as informed by the current art reading list; (3) must have completed ART 13-109 Survey of Art I and 13-111 Survey of Art II; (4) must present a portfolio of work from art core courses which demonstrates to the art faculty the student's readiness to pursue advanced art courses; (5) must have attended no fewer than 70% of visiting artist lectures; and (6) must have completed the general education required classes listed for Art Advanced Standing with a GPA of at least 2.00.

Students beginning the second trimester of their sophomore year and/or beginning their last art core courses must apply for Art Advanced Standing. Transfer art majors seeking to enroll in advanced art courses must meet the same requirements as native students. A student not granted Art Advanced Standing may appeal the decision through a written petition to the dean of the College of Arts and Sciences.

Advanced Standing Requirement: Interactive Digital Media Majors

No interactive digital media (IDM) major with a visual imaging concentration (VI) may be enrolled in and pursue advanced program courses (numbered 300 and above, with the exception of ART 13-321, 333, and 395) until IDM Advanced Standing has been granted.

Students seeking a major in interactive digital media with a visual imaging concentration are expected to demonstrate a capacity to integrate from the IDM-VI Advanced Standing Core courses: principles of an acquired formal language, processes of seeing and perception of content. Through visual, written and verbal evidence, students must show understandings of conceptual purposes behind directed work in the IDM Visual Imaging core courses and sufficient commitment to expand knowledge in order to successfully pursue advanced study.

To achieve IDM-VI advanced standing a student (1) must have no grade lower than a “C” in the IDM-VI Advanced Standing Core courses; (2) must have completed the general education required classes listed for IDM-VI Advanced Standing with a GPA of at least 2.00; and (3) must have attended no fewer than 70% of visiting artist lectures.

Advanced Standing Core–Interactive Digital Media-Visual Imaging:

ART 13-120 Drawing	3
ART 13-191 Introduction to Design	3
ART 13-207 Digital Photography	3
ART 13-221 Life Drawing	3
ART 13-240 Painting	3
ART 13-292 Introduction to Creative Electronic Imaging	3
ART 13-294 Letter Forms and Graphic Design	3

Total Hours 21

Students who have completed the requirements outlined in the paragraph above must apply for IDM-VI Advanced Standing. Transfer IDM majors seeking to enroll in the advanced program courses must meet the same requirements as native students. A student who is not granted IDM-VI Advanced Standing may appeal the decision through a written petition to the dean of the College of Arts and Sciences.

Advisement of Transfer Art and Interactive Digital Media Majors

All transfer students transferring credit for an art or interactive digital media-visual imaging concentration degree at Northwest must contact the Department of Fine and Performing Arts chairperson to arrange a portfolio review in the first week of the first trimester of enrollment. A review may be held prior to the first trimester of enrollment by arranging for a special appointment with the Department of Fine and Performing Arts chairperson. The purpose of this review is to provide an opportunity for advisement, appropriate to the background of the student, in meeting requirements for Advanced Standing and to determine which transfer credits will be accepted to meet Department Core Requirements and/or electives. Enrollment in advanced courses (numbered 300 and above) is not allowed until Advanced Standing has been obtained. The required portfolio review is not equivalent to an Advanced Standing review (see above for Advanced Standing requirements).

Senior Comprehensive Review

A senior comprehensive review must be successfully completed by all art majors and before a senior exhibit may be installed. Senior review requires an attendance of 70% or more of visiting artist lectures.

Senior Exhibition

All art majors are required to present an exhibition of their work that is acceptable to the art faculty. Candidates for the B.A. or B.S.Ed. degree can meet this requirement by successfully participating in a group exhibition in their senior year. Candidates for the B.F.A. degree can satisfy this requirement only through the completion of ART 13-403 Senior Exhibition. Senior exhibitions are held during the fall and spring trimesters only.

Core Requirements for Majors in Art	Semester Hours
ART 13-120 Drawing	3
ART 13-150 Jewelry and Metalsmithing OR	
ART 13-161 Ceramics	3
ART 13-191 Introduction to Design	3
ART 13-192 Three-Dimensional Design	3
ART 13-221 Life Drawing	3
ART 13-240 Painting	3
ART 13-270 Sculpture	3
ART 13-280 Visual Art Concepts	3
*ART 13-333 Printmaking	3
ART 13-402 Senior Seminar	1
Total Hours	28

*Students seeking a graphic design specialization must take ART 13-294 Letter Forms and Graphic Design prior to Advanced Standing and ART 13-333 Printmaking at a later time.

MAJORS

Comprehensive Major in Art, 72 hours: B.F.A.—No Minor Required

CIP: 500702

Required Courses	Semester Hours
Art Major Core Requirements	28
ART 13-201 Creative Photography	3
ART 13-321 Advanced Drawing	3
ART 13-403 Senior Exhibition	1

Studio Specialization Requirements:

A minimum of 12 hours in one studio area at or above the 300 level.

At least 10 hours in supporting electives of 300 level or above.

Art History Requirements: ART 13-109 Survey of Art I

and ART 13-111 Survey of Art II plus three of the following courses

(9 hours): ART 13-311, 313, 315, 316, 317 and 318

Graphic Design Requirements:

ART 13-292, 294, 394, 396, 398, 492, 497

Art History Requirements: ART 13-109 Survey of Art I and ART 13-111 Survey of Art II plus one of the following courses (3 hours): ART 13-311, 313, 315, 316, 317 and 318

Approved electives as needed to total 72 hours in the major
(ART 13-180, 380, 382, 389, 480 are not approved art electives for this degree.)

Recommended General Education Course

HUM 26-102 Western Civilization I: The Ancient World to 1500 (3)

Recommended Institutional Requirement

CSIS 44-130 Computers and Information Technology (3)

**Comprehensive Major in Art Education, 55 hours: B.S.Ed.–
No Minor Required**

CIP: 131302

Required Courses	Semester Hours
Art Major Core Requirements	28
ART 13-180 Principles of Art Education	3
ART 13-280 Visual Art Concepts	3
ART 13-292 Introduction to Creative Electronic Imaging	3
ART 13-382 Methods in Elementary Art	3
ART 13-395 Design with Fibers	3
ART 13-111 Survey of Art II: Renaissance to the Present	3
Advanced Art History choice	3
Approved art electives as needed to total 55 hours in the major	6
ART 13-480 must be completed as part of the Professional Education requirements.	

This major, when completed under the B.S.Ed. degree, Elementary/Secondary Program, meets Missouri teacher certification requirements which certifies grades K-12.

Comprehensive Major in Art, 54 hours: B.A.–No Minor Required

CIP: 500702

Required Courses	Semester Hours
Art Major Core Requirements	28
Art History: ART 13-109 Survey of Art I and ART 13-111 Survey of Art II plus three of the following courses (9 hours): ART 13-311, 313, 315, 316, 317, and 318	15
Approved art electives as needed to total 54 hours in art	

**Comprehensive Major in Interactive Digital Media, 61 hours:
B.S.–No Minor Required**

CIP: 110801

Visual Imaging Concentration

This is an interdisciplinary major in conjunction with the Department of Fine and Performing Arts, the Department of Mathematics, Computer Science and Information Systems, and the Department of Communication and Mass Media. Three concentrations are available for this major: Computer Science Programming (Mathematics, Computer Science and Information Systems), New Media (Communication and Mass Media), and Visual Imaging (Fine and Performing Arts).

Required Core Courses	Semester Hours
ART 13-191 Introduction to Design	3
ART 13-207 Digital Photography	3
ART 13-292 Introduction to Creative Electronic Imaging	3
ART 13-294 Letter Forms and Graphic Design	3
MCOM 20-120 Introduction to Mass Media	3
MCOM 20-243 Media Design I	3
MCOM 20-303 Introduction to Web Publishing	3
MCOM 20-314 Communication Law and Ethics	3
CSIS 44-143 Script Programming I	3
CSIS 44-333 Multimedia and Web Development	3
CSIS 44-335 Script Programming II	3
MKTG 55-330 Principles of Marketing	3
Total Core Requirements	36

Visual Imaging Concentration Required Courses

ART 13-120 Drawing	3
ART 13-221 Life Drawing	3
ART 13-240 Painting	3
ART 13-394 Advanced Creative Electronic Imaging*	3
ART 13-396 Advanced Graphic Design*	3
ART 13-398 Computer Assisted Graphic Design*	3
ART 13-415 Interactive Digital Media Seminar*	1
ART 13-497 Creative Digital Animation*	3
ART 13-592 Graphic Design Internship*	3

Total Concentration Hours 25

*Must have completed all Advanced Standing Requirements prior to enrolling in advanced courses (300-level and above).

Concentration in New Media – see the Department of Communication and Mass Media

Concentration in Computer Science Programming – see the Department of Mathematics, Computer Science and Information Systems

MINORS

Minor in Art, 24 hours

CIP: 500701

Required Courses	Semester Hours
ART 13-120 Drawing	3
ART 13-191 Introduction to Design OR ART 13-192 Three-Dimensional Design	3
ART 13-109 Survey of Art I OR ART 13-111 Survey of Art II	3
Art History: choice of courses (300-level)	3
Art History or Studio choices by advisement	12

Minor in Elementary Art Education, 24 hours: B.S.Ed.–Certifiable– See Professional Education Requirements

CIP: 131302

Required Courses	Semester Hours
ART 13-120 Drawing	3
ART 13-161 Ceramics	3
ART 13-180 Principles of Art Education	3
ART 13-191 Introduction to Design	3
ART 13-192 Three-Dimensional Design	3
ART 13-240 Painting	3
ART 13-382 Methods in Elementary Art	3
ART 13-395 Design with Fibers	3
Art electives approved by the minor advisor as needed to total 24 hours in art selected from either printmaking or photography.	

Students may elect to take either ART 13-109 Survey of Art I or 13-111 Survey of Art II to satisfy the Art History requirement of the Minor in Elementary Art Education. If ART 13-109 Survey of Art I or 13-111 Survey of Art II is not taken to meet General Education requirements, either course must be added for the completion of this minor. This minor, if completed under the B.S.Ed. degree, meets Missouri teacher certification requirements in art K-9.

Minor in Secondary Art Education, 30 hours: B.S.Ed.–Certifiable– See Professional Education Requirements

CIP: 131302

Required Courses	Semester Hours
ART 13-110 Survey of Art	3
ART 13-120 Drawing	3
ART 13-161 Ceramics	3
ART 13-180 Principles of Art Education	3
ART 13-191 Introduction to Design	3
ART 13-192 Three-Dimensional Design	3
ART 13-201 Creative Photography OR ART 13-333 Printmaking	3
ART 13-240 Painting	3
ART 13-395 Design with Fibers	3
ART 13-480 Methods in Secondary School Art	2
Art electives approved by the minor advisor as needed to total 30 hours in art.	

Students may elect to take either ART 13-109 Survey of Art I or 13-111 Survey of Art II to satisfy the Art History requirement of the Minor in Secondary Art Education. If ART 13-109 Survey of Art I or 13-111 Survey of Art II is not taken to meet General Education requirements, either course must be added for the completion of this minor. This minor, if completed under the B.S.Ed. degree, meets Missouri teacher certification requirements in art 7-12.

Minor in Interactive Digital Media, 24 hours

CIP: 110801

This is an interdisciplinary minor in conjunction with the Department of Fine and Performing Arts, the Department of Mathematics, Computer Science and Information Systems, and the Department of Communication and Mass Media. This minor requires CSIS 44-130 Computers and Information Technology as a prerequisite course as required by course descriptions.

Required Courses	Semester Hours
ART 13-191 Introduction to Design	3
ART 13-292 Introduction to Creative Electronic Imaging	3
MCOM 20-243 Media Design I	3
MCOM 20-303 Introduction to Web Publishing	3
CSIS 44-143 Script Programming I	3
CSIS 44-333 Multimedia and Web Development	3
Choose 6 hours from electives:	6
ART 13-120 Drawing (3)	
ART 13-207 Digital Photography (3)	
MCOM 20-334 Multimedia Production (3)	
CSIS 44-141 Computer Programming I (3)	
CSIS 44-335 Script Programming II (3)	
Total Minor Requirements	24

Course Descriptions

Art / 13

102 Art Appreciation (3 hours)

A study of the elements and principles of art as well as forms of expression in works from the major periods of Western art. Although the works will be studied in the context of history, the course is not a chronological survey. Not a studio course. Not for art majors. (F, S, SS)

200 Special Offerings (1-4 hours)

Courses which are offered on only one occasion or variable issue-oriented courses which have the content described in the title. Credit and prerequisites as announced. Repeatable for additional experience, new material and progression of study.

299 Individual Problems in Studio (2 hours)

Individual direction using previously learned skills and techniques. Prerequisite: Permission of instructor. Repeatable once for additional experience, new material and progression of study. (F, S)

316 International Studies in Art History (3 hours)

A course involving international travel emphasizing an art historic and personal reflection to the art, architecture, and culture of selected foreign countries. Course length is approximately one month. This course is an approved art history elective for art majors. Prerequisite: ART 13-110 (Alt. summers)

399 International Studies in Studio (3 hours)

A course involving international travel emphasizing a studio artist's response to the art, architecture, and culture of selected foreign countries. Course length is approximately one month. Students may enroll twice in the same session for a maximum of six credits. (Advanced standing not required for undergraduate students requesting upper division credit providing course prerequisites have been met.) Prerequisites: ART 13-110 and 13-221 or 13-201 or 13-333. (Alt. summers)

400 Special Offerings (1-4 hours)

Courses which are offered on only one occasion or variable issue-oriented courses which have the content described in the title. Credit and prerequisites as announced. Repeatable for additional experience, new material and progression of study.

402 Senior Seminar (1 hour)

A seminar dealing with issues encountered by the art educator and artist. Exhibition techniques, preparation of résumés, preparation of letters seeking interviews, preparation of portfolios, and interview techniques will be stressed. Prerequisite: Permission of department chairperson. (F)

403 Senior Exhibition (1 hour)

An exhibition to include works produced expressly for the exhibition and outstanding works previously done. Prerequisite: ART 13-402. (F, S)

415 Interactive Digital Media Seminar (1 hour)

A seminar dealing in issues faced by multimedia professionals and preparation for advanced study. Major emphasis will be placed on the development of a professional portfolio, résumé writing and interviews for the field of multimedia. Prerequisites: Junior or senior standing by advisement. (F)

500 Special Offerings (1-4 hours)

Courses which are offered on only one occasion or variable issue-oriented courses which have the content described in the title. Credit and prerequisites as announced. Repeatable for additional experience, new material and progression of study.

ART EDUCATION**180 Principles of Art Education (3 hours)**

The examination of theories, concepts, and principles of art education within the context of the history of art education. The impact of philosophies of art, art education, and general education, relevant psychological and sociological research, current issues and trends in the field, and the nature of art are investigated as they apply to art education. (F)

280 Visual Art Concepts (3 hours)

The course is an examination of philosophies, theories, concepts, and principles of art. Investigation of visual art aesthetics and critical inquiry (art criticism) will be undertaken to develop the student's knowledge and comprehension of these fields. (S)

380 Art in the Elementary School (2 hours)

An orientation in current concepts of art education teaching strategies and learning processes and procedures for the elementary classroom. Concepts of art education are presented with experiences to explore appropriate methods and materials. Art majors cannot receive credit for this course. Prerequisite: ART 13-102 or MUS 19-201, 202 or 222. (F, S)

382 Methods in Elementary Art (3 hours)

The teacher's role in directing art experiences in the elementary art classroom. Consideration is given to the student developing strategies for implementing art activities for the individual, class, and total school art program. Prerequisite: ART 13-180. (S)

386 Papermaking (3 hours)

Processes and techniques for creating two-dimensional and three-dimensional forms using handmade paper. Prerequisite: Advanced standing for art majors. (S)

389 Individual Study in Art Education (2 hours)

Individual investigations in art education. Prerequisites: ART 13-180 and permission of instructor. Repeatable once for additional experience, new material and progression of study. (S)

395 Design With Fibers (3 hours)

Two- and three-dimensional design for fiber techniques with emphasis placed on the design process. (F)

480 Methods in Secondary School Art (2 hours)

Specific methods used in teaching art and in curriculum planning for secondary school levels. Prerequisites: ART 13-180, 280, 382 and admission into the Professional Education Program. (F)

495 Advanced Fibers (3 hours)

Two- and three-dimensional design for advanced fiber techniques with emphasis placed on the design process and aesthetic quality. Prerequisite: ART 13-395. (F, S)

582 Organization and Supervision of the Art Program (2 hours)

The organization of the total art program within the framework of the educational structure of the school; the functions, role and responsibilities of the supervisor, coordinator and/or single art teacher. Model programs in several school classifications will be examined. Prerequisites: ART 13-180, 382 and 480. (SS, alt. years)

584 Art Activities in the Elementary School (2 hours)

Activities which develop personal sensitivity and refined consciousness with an emphasis on an active philosophy for creative growth which stresses the importance of art as a personal language. Prerequisite: ART 13-382. (SS, alt. years)

588 Art in the Senior High School (2 hours)

Studies designed to present the secondary art teacher with an expanded conceptual and practical framework for implementing curricular concerns in studio, art appreciation, art history and art criticism. Prerequisite: ART 13-480. (SS, alt. years)

ART HISTORY

109 Survey of Art I: Prehistory through Medieval Art (3 hours)

A survey of painting, sculpture, architecture, and the decorative arts from cave art through the Gothic Period in Europe, in addition to early Islamic, African, Asian, Oceanic art and that of the Americas in their chronology.

111 Survey of Art II: Renaissance to the Present (3 hours)

A survey of painting, sculpture, architecture, and the decorative arts from the Renaissance Period to the present in Europe and America, and includes later Islamic, African, Asian, Oceanic art and that of the Americas in their chronology.

311 Ancient and Medieval Art (3 hours)

The history of architecture, painting, sculpture, and related arts in Egyptian, Aegean, Greek and Roman civilizations, as well as the Early Christian, Byzantine, Romanesque and Gothic periods. Prerequisite: ART 13-109 and 111. (F, odd years)

313 Renaissance and Baroque Art (3 hours)

The history of architecture, painting, sculpture and related arts in Europe from the last of the 14th century through the 18th century. Prerequisite: ART 13-109 and 111. (S, odd years)

315 Nineteenth and Early Twentieth Century Art (3 hours)

A study of the major visual arts in Europe from the latter 18th century to the second decade of the 20th century. Prerequisite: ART 13-109 and 111. (S, even years)

317 Twentieth Century Art (3 hours)

The development of trends and influences in painting, sculpture, photography, and architecture from the mid-19th Century to the present day. The course will discuss artists and stylistic movements from Realism and Impressionism through contemporary art. Prerequisites: ART 13-109, 111 and 315. (F, even years)

318 Far Eastern Art (3 hours)

A study of the dominant visual arts of the Far East covering the major cultures and emphasizing the arts of China and Japan. Prerequisite: ART 13-109 and 111. (F, even years)

411 Special Topics in Art (1-4 hours)

Provides concentrated study in special topics within art history. Topics vary trimester to trimester. Prerequisite: ART 13-109 and 111.

CERAMICS

161 Ceramics (3 hours)

An introduction to studio pottery through comprehensive experience with clay preparation, basic forming, decorating, glazing methods, and kiln firing procedures at low temperatures. Basic studio work principles and individual design are stressed. (F, S)

261 Wheel Throwing and Functional Form (3 hours)

An intermediate level course in ceramics. Emphasis on the fundamentals of working on the potter's wheel and developing understanding of functional ceramic forms. Continued study of the physical properties of ceramic materials. Prerequisite: ART 13-161. (S)

360 Advanced Ceramics (3 hours)

Continued explorations in materials, processes and studio practice in ceramics. Assigned clay and glaze research as well as research into experimental uses of ceramic materials. Focused studio practice and development are stressed. Prerequisites: ART 13-161, 192, 261, advanced standing and permission of instructor. (S)

369 Ceramics Studio (2-6 hours)

Further cultivation of each student's approach to materials and processes in ceramics. Mature, disciplined studio practice and focused development of a unique and resolved body of work are stressed. Prerequisites: ART 13-360 and permission of instructor. Repeatable, up to 15 credit hours, for additional experience, new material and progression of study. (F, S)

569 Ceramics Processes (2-6 hours)

Advanced studio work providing students the opportunity to further develop work in ceramics. Study in all phases of studio practice. Repeatable, up to 6 credit hours, for additional experience, new material and progression of study. Prerequisite: Permission of instructor. (F, S)

DRAWING

120 Drawing (3 hours)

An introduction to and the application of basic principles of art in drawing using a variety of media, techniques and subjects. (F, S)

221 Life Drawing (3 hours)

Application of the fundamentals of drawing to develop an understanding of creative composition using the human figure. Prerequisite: ART 13-120 (art majors must complete with at least a grade of "C"). (F, S)

321 Advanced Drawing (3 hours)

A continued study of the human figure, other subjects and composition. More emphasis given to independent decision making. Prerequisite: ART 13-221. (S, SS)

429 Drawing Studio (2-6 hours)

Advanced exploration of drawing media, techniques, and concepts from representation to abstraction. Prerequisites: ART 13-321, advanced standing and permission of instructor. Repeatable, up to 15 credit hours, for additional experience, new material and progression of study. Art majors must complete with at least a grade of "C". (F, S)

529 Drawing Processes (2-6 hours)

Advanced studio work providing students with opportunities for extended studies in various media and directions. Repeatable, up to 6 credit hours, for additional experience, new material and progression of study. Prerequisite: Permission of instructor. (F, S)

GRAPHIC DESIGN**191 Introduction to Design (3 hours)**

Introduction to two-dimensional design elements and principles, including design objectives, concepts, processes and skills through varied class projects and lecture/demonstration material. (F, S)

292 Introduction to Creative Electronic Imaging (3 hours)

An introduction to electronic media for creative imaging using computers, scanners, and digital photography. Appropriate hardware and software exploration for fine art purposes. Prerequisites: ART 13-120 and 191 (IDM majors may take concurrently with ART 13-191 and are not required to have ART 13-120 as a prerequisite; art majors must complete prerequisites with at least a grade of "C"). (F, S)

294 Letter Forms and Graphic Design (3 hours)

Type, letter forms and their creative use in visual communications, including the development of comprehensive advertising layouts in black and

white. Prerequisite: ART 13-191 (art majors must complete prerequisite with at least a grade of "C"). (F, S)

394 Advanced Creative Electronic Imaging (3 hours)

Course covers advanced visual perception principles and computer procedures for creative digital imagery as it applies to interactive and design applications. Prerequisites: ART 13-292 and advanced standing. (F)

396 Advanced Graphic Design (3 hours)

The creative design of color comprehensive layouts using drawing, lettering, and type. Professional procedures and standards of quality are emphasized. Prerequisites: ART 13-120, 294 and advanced standing. (F)

398 Computer Assisted Graphic Design (3 hours)

Graphic arts and design course for technical print and related media plus advanced interactive media graphics. Equal emphasis on creative problem solving and technical software application. Primary software applications involve desktop publishing and related production software. Prerequisites: ART 13-120 and 396. (S)

491 Interactive Design (2 hours)

Interactive art/design theory with practical application of time-based motion and static graphics for CD-ROM or web graphics. Prerequisite: ART 13-394 or permission of instructor. Prerequisite: ART 13-394 (S)

492 Advertising Design (3 hours)

Principles of graphic design applied to various commercial visual communications, i.e., magazine and newspaper display, packaging, billboards, posters, book covers, etc. Prerequisites: ART 13-221, 396, 398 and advanced standing. (S, even years)

493 Interactive Portfolio (1 hour)

Interactive design application of time-based motion and static graphics for CD-ROM portfolios or web portfolios. Prerequisite: ART 13-191, 13-292, 13-394, 13-491. (S)

497 Creative Digital Animation (3 hours)

Principles and procedures of creative digital animation. Prerequisite: ART 13-394. (S)

499 Design Studio (2-6 hours)

Exploration of two- and three-dimensional graphic design processes using a variety of non-traditional materials. Prerequisite: ART 13-396 and permission of instructor. Repeatable, up to 15 credit hours, for additional experience, new material and progression of study. (F, S)

592 Graphic Design Internship (2-6 hours)

To provide the student with an opportunity to work within a business context, so that the student can gain professional experience that would otherwise not be obtained in regular coursework. Prerequisite: Must be junior/senior level graphic design specialization with 3.00 GPA in graphic design or IDM-VI major. Repeatable, up to 6 credit hours, for additional experience, new material and progression of study. (F, S, SS)

599 Design Processes (2-6 hours)

Advanced professional level work in various techniques and directions in graphic design and/or fiber arts. Repeatable, up to 6 credit hours, for additional experience, new material and progression of study. Prerequisite: ART 13-499 (graphic design) or 13-495 (fiber arts), and permission of instructor. (F, S)

PAINTING**240 Painting (3 hours)**

A continued study of elements and principles of composition and color perception; synthesis of drawing and painting through work from traditional genre with concern for materials and methods in the use of the oil medium. Prerequisites: ART 13-120 and 191 (art majors must complete prerequisites with at least a grade of "C"). (F, S)

340 Advanced Painting (3 hours)

Emphasis on life study and exposure to alternative forms and media combined with an introduction to the conceptual side of painting. Prerequisites: ART 13-221, 240 and advanced standing. (F, S)

343 Watercolor Painting (3 hours)

An introduction to both transparent and opaque watercolor with emphasis on their unique qualities and expressive potential. Prerequisites: ART 13-240 and advanced standing. (F)

449 Painting Studio (2-6 hours)

Advanced exploration of painting media, techniques and concepts, from representation to abstraction. Prerequisites: ART 13-340, advanced standing,

and permission of instructor. Repeatable, up to 15 credit hours, for additional experience, new material and progression of study. Art majors must complete with at least a grade of "C". (F, S)

549 Painting Processes (2-6 hours)

Advanced studio work providing students with opportunities for extended study in various media, and directions. Repeatable, up to 6 credit hours, for additional experience, new material and progression of study. Prerequisite: Permission of instructor. (F, S)

PHOTOGRAPHY**201 Creative Photography (3 hours)**

An introduction to the history of photography and basic darkroom and camera procedures through the exploration of in-darkroom photography. Photography as a creative art and expressive medium will be stressed. (F, S)

207 Digital Photography (3 hours)

An introductory creative photography course for students interested in digital media, and for students in the interactive digital media major. Students will explore contemporary applications of visual space and plastic form through the medium of electronic photography. Not for art majors. (F, S, SS)

303 Advanced Creative Photography (3 hours)

A continuation of Art 13-201. Each student will direct work toward developing a personal expressive approach to photography. The study of contemporary photographers and criticism will be stressed. Studio lighting, Photoshop, digitally scanning film, and making digital prints is introduced. Prerequisites: ART 13-201 and advanced standing. (F, S)

305 Advanced Digital Photography (3 hours)

An exploratory continuation of creative photography with an emphasis on advanced digital photography, software, and printing applications. Photography as an art and expressive medium will be stressed. Prerequisites: ART 13-303 or 13-207 and advanced standing. (S)

309 Photography Studio (2-6 hours)

Directed study and exploration of black and white, color, non-traditional and/or digital photography. Prerequisites: ART 13-303 and permission of instructor. Repeatable, up to 15 credit hours, for additional experience, new material and progression of study. (F, S)

509 Photography Processes (2-6 hours)

Advanced directed studies in various techniques in black and white or digital photography. Repeatable, up to 6 credit hours, for additional experience, new material and progression of study. Prerequisite: Permission of instructor. (F, S)

PRINTMAKING**333 Printmaking (3 hours)**

An introduction to traditional and contemporary pursuits of intaglio printmaking including color monotype, etching and engraving processes. Prerequisites: ART 13-120 and 221. (F, S)

439 Printmaking Studio (2-6 hours)

Directed study in traditional or experimental techniques in selected media. Prerequisites: ART 13-333, advanced standing and permission of instructor. Repeatable, up to 15 credit hours, for additional experience, new material and progression of study. (F)

539 Printmaking Processes (2-6 hours)

Advanced directed studies in various print media, techniques and directions. Repeatable, up to 6 credit hours, for additional experience, new material and progression of study. Prerequisite: Permission of instructor. (F)

SCULPTURE/THREE-DIMENSIONAL DESIGN**150 Jewelry and Metalsmithing (3 hours)**

This course is designed as an introduction to the language and techniques of jewelry and metalsmithing. During the course, students will focus on techniques and design concepts that deal primarily with the process of small-scale metal fabrication. Emphasis will be placed on jewelry and metalsmithing as an art form, not a means for production. (F)

192 Three-Dimensional Design (3 hours)

An introduction to the fundamentals of three-dimensional design explored through assigned problems and a variety of construction methods. Prerequisites: ART 13-120 and 191 (completed with at least a grade of "C" for art majors). (F, S)

270 Sculpture (3 hours)

An introduction to the basic concepts and techniques utilized in the production of sculpture, including additive/subtractive methods, welding, and site installation. Prerequisite: ART 13-192 (completed with at least a grade of "C" for art majors). (F, S)

470 Advanced Sculpture (3 hours)

An introduction to concepts and techniques beyond those explored in Art 13-270. Emphasis will be on the execution of ideas and development of the student's artistic direction. Prerequisites: ART 13-270 and advanced standing. (S)

479 Sculpture Studio (2-6 hours)

Designed to allow students to focus more comprehensively on a particular direction or technique utilized in the production of sculpture. Discussions and assigned research on contemporary modes in sculpture. Prerequisites: ART 13-470 and permission of instructor. Repeatable, for up to 15 credit hours, for additional experience, new material and progression of study. (F, S)

579 Sculpture Processes (2-6 hours)

Advanced studio work facilitated through discussions on contemporary concepts in sculpture, directed research and group critiques. Emphasis on student's understanding of the content of his/her work and where that fits into the continuum of sculpture. Repeatable, up to 6 credit hours, for additional experience, new material and progression of study. Prerequisite: Permission of instructor. (F, S)

Music / 19**Accreditation of Music Degrees**

Since 1969, Northwest Missouri State University has been a member of the National Association of Schools of Music. Both the B.M.E. and the B.A. degree are accredited by NASM. This accreditation insures that our programs are of the highest quality and that the curriculum conforms to national standards of excellence.

Statement of Purpose for Music

The Discipline of Music serves the University in three basic areas: general music education foundation for all students, individual professional preparation for selected fields and cultural enrichment for both campus and community.

Study in these programs provides majors with the skills needed to become highly successful in their chosen professions. The Discipline of Music is especially committed to excellence in public school music; in addition to an inclusive major in music, comprehensive programs are also available in vocal music education and instrumental music education. These programs provide instruction in private study, music theory/literature and methodology applicable to teaching at the elementary and secondary levels.

Recognizing its obligation to enhance the quality of life for the citizens of the four-state area, the Department of Fine and Performing Arts assists music supervisors in keeping current in their fields of expertise, offering courses for advanced study and special topics seminars that help them advance the cause of public school music in their communities.

Objectives

The music curriculum has been designed to assist all participating students in maximizing potential. Toward this end, the primary objectives of the undergraduate programs are (1) to further performance ability in at least one musical medium, (2) to provide future teachers with the knowledge and skills necessary to become successful as professional educators in instrumental and/or vocal music, and (3) to provide students with a wide range of educational/musical experiences which will encourage continued personal and professional growth.

DEGREE PROGRAMS IN MUSIC

The Bachelor of Arts with a Comprehensive Major in Music (41 hours) is designed to provide the student with a broad liberal arts education, as well as more specialized work in an applied area of voice, keyboard or a particular instrument.

The Bachelor of Music in Education, Elementary/Secondary Program, with a comprehensive major in either Instrumental Music Education (60 hours) or Vocal Music Education (58 hours), prepares students to teach instrumental or vocal music at all levels, K-12. These major programs exceed the minimum Missouri teacher certification standards in instrumental music K-12 or in vocal music K-12.

A 24-hour Minor in Music is available to students with a major in another academic discipline.

Test-Out Policy for Music

Credit by examination through the department is available for the following courses only: MUS 19-171 (Beginning Sight Singing and Ear Training), MUS 19-172 (Intermediate Sight Singing and Ear Training), MUS 19-173 (Theory of Music), MUS 19-174 (Theory of Music), MUS 19-271 (Advanced Sight Singing and Ear Training I) and MUS 19-272 (Advanced Sight Singing and Ear Training II).

For policies and procedures see the "Departmental Test-Out" section of this catalog. Advanced Placement (AP) credit is available for MUS 19-173 (Theory of Music) and MUS 19-201 (Enjoyment of Music) with a score of "4" on the appropriate test.

Upper-Level Standing in Applied Study for Music

The Upper-Level Qualifying Examination in applied study may be attempted after a minimum of four semester hours of study (not including dual credit) in the lower level (courses numbered below 300) of applied instruction. If approved for upper-level standing by the appropriate faculty committee, the student must then enroll in upper-level applied study. Transfer students wishing to enroll in private study at the upper level must meet the same requirements as students who began studies at Northwest. Transfer students will be tested for upper-level standing during the first week of their initial trimester.

DEPARTMENTAL POLICIES FOR MUSIC

Applied Jury Exam: All students enrolled in applied music are required to participate in the applied jury exam each trimester of applied study except for the trimester in which their senior recital is actually presented. These examinations are administered by the music faculty on specific dates during the week of final examinations.

Concert/Recital Attendance: All music majors and minors are required to attend concerts and recitals as specified by the music faculty at the beginning of each fall and spring trimester. Non-music majors and minors may be required to attend concerts and/or recitals as directed by course instructors.

Ensemble Participation: Majors in the B.M.E. program are required to satisfactorily participate in Marching Band, Symphonic Band, Wind Symphony, University Chorale or Orchestra according to their major applied area (and/or area of added endorsement) each fall and spring trimester of full-time enrollment, except for the trimester of student teaching. Majors in the B.A. degree and minors are required to satisfactorily participate in either Marching Band, Symphonic Band, Wind Symphony, University Chorale or Orchestra according to their major applied area each fall or spring trimester of full-time enrollment. Students may enroll in ensemble courses for activity OR academic credit in order to fulfill this requirement. NOTE: Courses taken for activity credit do not count toward GPA.

Performance Audition: For all levels of applied study, students must have the permission of the instructor and/or faculty within the area of study. Any student who has not been heard by the faculty at scholarship auditions must perform an audition for faculty members before the drop/add period closes in the fall to determine acceptance to applied study. Students unable to demonstrate sufficient performance skills will be admitted on a trial basis.

Entrance Examination for Music Theory: All students who intend to begin the theory sequence at Northwest must successfully pass the entrance examination prior to enrolling in theory courses. The purpose of the examination is to ensure that each student possesses a significant level of competence in music before entering the theory sequence.

Placement Examination in Theory and Ear-Training for Transfer Students: All students who desire to transfer theory and/or ear-training credit from another institution must take a Placement Examination in Music Theory and Ear-Training at the appropriate level. The purpose of this examination is to ensure proper placement in the theory/ear-training sequence and equate previous theory/ear-training courses to those offered at Northwest. Students may be required to retake or audit appropriate Northwest music theory/ear-training courses to remedy any deficiencies.

Entrance Examination In Keyboard: All students who intend to study keyboard at Northwest must take a placement exam prior to enrolling in any level of applied piano class, applied

piano, applied organ or applied harpsichord. The purpose of the examination is to assess the ability level of each student and to appropriately place that student.

Courses at 500-level: Unless excused by the department chairperson, students must have senior standing before being permitted to enroll in 500-level music courses.

Keyboard Proficiency: Majors in the B.M.E. degree are required to satisfactorily pass a piano proficiency examination to the satisfaction of the piano faculty. Piano majors are exempt from this policy. The examination must be taken no later than the end of the student's third trimester of piano study. Transfer students with three trimesters of piano study are required to take the examination during their first trimester of enrollment at Northwest. The examination is administered only during the fall and spring trimesters of each academic year for students enrolled in keyboard study. Fulfillment of this requirement is a prerequisite to enrollment in MUS 19-482 (Methods in Secondary School Instrumental Music), MUS 19-484 (Methods in Secondary School Vocal Music) and EDUC 61-470 (Directed Teaching in Elementary and Secondary School).

In order to pass the piano proficiency examination at Northwest, students must be able to: (1) perform one prepared piece of comparable difficulty to a movement from a Clementi Sonatine, (2) sight read one composition of intermediate difficulty, (3) supply an accompaniment to a given melody with marked chording, and (4) supply an accompaniment to a given melody without marked chording. Special note: A requirement for taking the keyboard proficiency exam is enrollment in keyboard study for credit (and have a passing grade in the course) or successfully auditing of class piano (i.e. have a minimum of 65% attendance).

Senior Recital: All majors, regardless of degree, are required to present a senior recital to the satisfaction of the music faculty. Such a recital will be presented only upon the approval of the student's senior recital hearing committee. The student must be enrolled in MUS 19-499 (Senior Recital) and in applied music with the student's major instructor during the trimester of the recital. The senior recital may not be attempted sooner than the third trimester of the upper level of applied study.

Students must adhere to departmental standards/policies concerning scheduling, format, additional performers and printed materials relative to the Senior Recital. These standards/policies are specified in the music student handbook, which may be obtained in the office of the Department of Fine and Performing Arts and online at www.nwmissouri.edu/finearts/music.

Sight Singing/Ear Training Proficiency: All majors are required to pass a sight singing/ear training proficiency examination to the satisfaction of the music theory faculty. This examination must be taken by the end of the student's fourth trimester of ear training. The examination is given to all transfer students who have completed at least four trimesters of ear training study at another institution. Students who do not pass this examination must successfully audit (i.e. minimum of 65% attendance) either MUS 19-271 (Advanced Sight Singing and Ear Training I) or MUS 19-272 (Advanced Sight Singing and Ear Training II) before attempting to pass the proficiency examination again. The examinations are administered only during the fall and spring trimesters of each academic year for students enrolled in MUS 19-271 or 19-272. This requirement is a prerequisite to enrollment in EDUC 61-470 (Directed Teaching in Elementary and Secondary School).

Student Recital: Each music major, regardless of degree program, is required to perform in his/her major applied area in a student recital each trimester of applied study, with the exception of the initial trimester of such applied study. Other students enrolled in applied music may also be required by the applied instructor to perform in a student recital.

Bachelor of Music Education (B.M.E.) (K-12 Certification)

The purpose of the B.M.E. degree is to provide music teacher training. Those who complete this degree are normally granted a certificate to teach in Missouri. All degrees in education are subject to state requirements which may change at any time due to action of the State Board of Education. Care should be exercised in choosing courses to assure a minimum of 40 semester hours of senior college work in courses numbered above 300. Completion of this curriculum, other University requirements, and an overall grade point average of 2.50 on a 4.00 scale qualifies a student to receive a Bachelor of Music Education degree. The Bachelor of Music Education degree is available with these majors: Instrumental Music K-12, Vocal Music K-12. Candidates must complete the following requirements:

B.M.E. Degree Requirements	Semester Hours
General Education Requirements (See pages 66-68)	42
Directed General Education Requirement (must achieve grade of "C" or better in each)	
COM 29-102 Fundamentals of Oral Communications	
PSYC 08-303 Educational Psychology	
Institutional Requirements (See pages 68-69)	6
Information Technology Competency	
Multicultural Diversity Competency	
Degree Requirement	3
EDUC 61-569 Multiculturalism in Education (3) OR	
LANG 14-100 Level "Communication and Culture" Modern Languages course*	
*Includes LANG 14-151 Introduction to Conversational American Sign Language	
Professional Education Requirements	25
EDUC 61-260 Secondary Teaching Practicum I (1)	
EDCI 62-353 Teaching Reading in Content Areas (2)	
EDCI 62-371 Introduction to Special Education (3)	
PSYC 08-322 Adolescent Psychology (2)	
**EDUC 61-360 Secondary Teaching Practicum II (1)	
**EDUC 61-461 School and Society (2)	
**EDUC 61-520 Techniques of Classroom Management and Discipline (2)	
***EDUC 61-462 School and Society Seminar (1)	
***EDUC 61-470 Directed Teaching in Elementary and Secondary School (10)	
***EDUC 61-521 Seminar in Classroom Management (1)	
**These courses are to be taken in the same trimester as MUS 19-482 Methods in Secondary School Instrumental Music or MUS 19-484 Methods in Secondary School Vocal Music	
***These courses must be taken during the student teaching trimester.	
Major Requirements	58-60
TOTAL MINIMUM ACADEMIC	124

Music Core Requirements

The Department of Fine and Performing Arts has formulated a curriculum that facilitates development of a student's musicianship in a comprehensive fashion with course offerings in applied music, music literature and music theory.

Core Requirements for Majors in Music:	Semester Hours
MUS 19-171 Beginning Sight Singing and Ear Training	1
MUS 19-172 Intermediate Sight Singing and Ear Training	1
MUS 19-173 Theory of Music	3
MUS 19-174 Theory of Music	3
MUS 19-271 Advanced Sight Singing and Ear Training I	1
MUS 19-272 Advanced Sight Singing and Ear Training II	1
MUS 19-273 Theory of Music	3
MUS 19-274 Theory of Music	3
MUS 19-385 Music Literature: Antiquity through Renaissance (BC-1600)	3
MUS 19-386 Music Literature: Baroque through Classical	3
MUS 19-387 Music Literature: Romantic through the Present	3
MUS 19-472 Musical Form and Analysis OR	
*MUS 19-493 Choral Composition and Arranging OR	
**MUS 19-494 Instrumental Composition and Arranging	2
MUS 19-499 Senior Recital and Seminar	1
MUS 19-299 Music Recital Attendance (activity credit)	7 hours (B.M.E.) 8 hours (B.A.)
Total Hours	28

* Required for Vocal Music Education

** Required for Instrumental Music Education

Applied Music:

Included in the requirements for the B.M.E. degree is a minimum of **four** semester hours credit in **upper level** coursework in the major applied area.

For the **B.A.** degree, a minimum of **six** semester hours credit in **upper level** coursework in the major applied area is required.

MAJORS

Comprehensive Major in Instrumental Music Education, 60 hours: B.M.E.–No Minor Required (Certifies Grades K-12)

CIP: 131312

Required Courses	Semester Hours
Music Core Requirements	28
Applied Music: Major Instruments, 8 hours; Piano (or other keyboard instrument), 3 hours; Electives, 2 hours. For Piano as a Major Instrument: Piano (or other keyboard instrument), 8 hours; Instrumental, 5 hours.	13
MUS 19-180 Introduction to Music Education	1
MUS 19-220 Brass Methods I	1
MUS 19-223 Brass Methods II	1
MUS 19-221 Percussion Methods I	1
MUS 19-224 Percussion Methods II	1
MUS 19-240 String Methods I	1
MUS 19-241 String Methods II	1
MUS 19-260 Woodwind Methods I	1
MUS 19-261 Woodwind Methods II	1

MUS 19-391 Elements of Conducting	2
MUS 19-421 Instrumental Conducting	2
MUS 19-481 Methods in Elementary School Music	2
Vocal Electives selected from MUS 19-250 Vocal Methods, 19-151 Applied Voice Class, or 19-152 Applied Voice Class	2
Instrumental ensembles taken for academic or activity credit selected from MUS 19-110 or 111, 19-115 or 116, 19-118 or 119, 19-209 or 210 (each fall and spring trimester of full-time enrollment, 7 trimesters minimum)	(7)
MUS 19-482 Methods in Secondary School Instrumental Music	2

This major meets Missouri teacher certification requirements in instrumental music K–12.

Comprehensive Major in Vocal Music Education, 58 hours: B.M.E.—No Minor Required (Certifies Grades K-12)

CIP: 131312

Required Courses	Semester Hours
Music Core Requirements	28
Applied Music: Voice Concentration: Voice, 8 hours; piano (or other keyboard instrument), 4 hours; electives, 1 hour. For Piano Concentration: Piano, 8 hours; voice, 5 hours	13
MUS 19-180 Introduction to Music Education	1
MUS 19-250 Vocal Methods	2
MUS 19-270 Instrumental Methods for Non-Instrumental Majors	2
MUS 19-391 Elements of Conducting	2
MUS 19-420 Choral Conducting	2
MUS 19-481 Methods in Elementary School Music	2
MUS 19-592 General Music Methods	2
MUS 19-593 Choral Literature for Secondary Schools	2
Vocal ensembles taken for either academic or activity credit: MUS 19-112, or 113 University Chorale (each fall and spring trimester of full-time enrollment, 7 trimesters minimum)	(7)
MUS 19-484 Methods in Secondary School Vocal Music	2

This major meets Missouri teacher certification requirements in vocal music K–12.

Comprehensive Major in Music, 41 hours: B.A.—No Minor Required

CIP: 500901

Required Courses	Semester Hours
Music Core Requirements	28
Applied music courses as recommended by advisor	10
University music ensembles taken for academic or activity credit selected from MUS 19-110 or 111, 19-115 or 116, 19-118 or 119, 19-209 or 210, 19-112 or 113. (each fall and spring trimester of full-time enrollment, 8 trimesters minimum)	(8)
Approved music electives as needed to total 41 hours	

SPECIAL NOTES: Care should be exercised in choosing courses to assure a minimum of 32 semester hours of work in courses numbered above 300.

The B.A. degree with a Comprehensive Major in Music provides the student with a broad liberal arts education and the opportunity to pursue specialized work in the performance area.

MINOR

Minor in Music, 24 hours

CIP: 500901

Required Courses	Semester Hours
MUS 19-171 Beginning Sight Singing and Ear Training	1
MUS 19-172 Intermediate Sight Singing and Ear Training	1
MUS 19-173 Theory of Music	3
MUS 19-174 Theory of Music	3
Literature and History of Music (by advisement)	6
Applied music courses	6
MUS 19-299 Music Recital Attendance (activity credit)	(4)
Music electives as needed to total 24 hours	
University music ensembles taken for either academic or activity credit selected from MUS 19-110 or 111, 19-115 or 116, 19-118 or 119, 19-209 or 210, 19-112 or 113. (7 trimesters minimum)	(7)

(See ensemble participation under department policies.)

This minor does not meet Missouri teacher certification requirements. It is recommended for students pursuing a B.A. or B.S. degree.

Course Descriptions

Music / 19

180 Introduction to Music Education

(1 hour)

This course provides an introduction to teaching music as a profession. (S)

200 Special Offerings (1-4 hours)

Courses which are offered on only one occasion or variable issue-oriented courses which have the content described in the title. Credit and prerequisites as announced. Repeatable with a change in topic.

201 The Enjoyment of Music (3 hours)

A general education course designed to provide the student a better understanding and appreciation of the varied styles of music. Fulfills Fine Arts component of General Education requirements. (F, S, SS)

202 Jazz Appreciation (3 hours)

A general education course designed to provide the student with a better understanding and appreciation of this uniquely American art form. Ful-

fills Fine Arts component of General Education requirements. (F, SS)

222 American Popular Music

(3 hours)

This course provides a cultural, social, and historical analysis of American popular music and an overview of relevant musical elements. Fulfills Fine Arts component of General Education requirements. (F)

225 Jazz Improvisation (2 hours)

Designed to enable students to understand the basic concepts of jazz improvisation and to utilize the basic tools of jazz improvisation in order to express themselves musically in the jazz idiom.

280 World Music (3 hours)

World Music surveys the music of cultures outside the Western art tradition, with an emphasis on understanding the music within the context of the culture. Areas of focus include Africa, Latin America, India, Japan, Native American, Indonesia, China, and others. The course includes the fundamentals of music as paralleled in GenEd music classes. Fulfills the Multicultural Diversity component of Institutional Requirements. No prerequisite. (S, SS)

**299 Music Recital Attendance
(1 activity hour)**

Attendance at recitals and concerts presented by the Department of Music is required of each music major and minor. B.M.E. majors must pass 7 trimesters prior to graduation. B.A. majors must pass 8 trimesters prior to graduation. Minors must pass 4 trimesters prior to graduation. (F, S)

400 Special Offerings (1-4 hours)

Courses which are offered on only one occasion or variable issue-oriented courses which have the content described in the title. Credit and prerequisites as announced. Repeatable with a change in topic.

**419 Independent Study in Music
(1-2 hours)**

Specialized study in areas such as music history and literature, and theory and composition to be conducted under the direction of a faculty member. Prerequisite: Permission of instructor. May be repeated for a total of four hours with a change in topic and/or new content.

**499 Senior Recital and Seminar
(1 hour)**

The presentation of a public recital as prescribed in the Music Department Student Handbook. Attendance at senior seminar and completion of required portfolio. Prerequisite: Senior standing. (F, S)

500 Special Offerings (1-4 hours)

Courses which are offered on only one occasion or variable issue-oriented courses which have the content described in the title. Credit and prerequisites as announced. Repeatable with a change in topic.

APPLIED MUSIC

Study in applied music is open to all University students contingent upon the availability of faculty, with priority being given first to music majors, second to music minors, third to non-music majors and minors participating in ensembles and fourth to other University students. Such study is offered at three levels: lower level (courses numbered below 300), upper level (courses numbered in the 300s and 400s) and senior/graduate level (courses numbered in the 500s). Instructors may request the Registrar to delete a student from the class roster for failure to schedule a lesson time within the first five days of a trimester and the first three days of a summer session.

Prerequisites: For all levels of applied music, students must have the permission of the instructor and/or the faculty within the area of study.

For upper level, a qualifying examination must be passed; for senior/graduate level, a satisfactory senior recital must have been given.

Class Instruction: Applied music with group instruction is available in piano and in voice with enrollment directed by the faculty within the area of study.

Class Piano (1 hour each)

MUS 131, 132, 231, 232. Class Piano 1-4

Voice Class (1 hour each)

MUS 151, 152. Applied Voice Class

Individual Instruction: Students may enroll in one or two hours of private lessons per trimester. Each semester hour credit provides a one-half hour lesson per week in a trimester and requires a minimum of five hours of practice per week. Individual instructors may have additional requirements. These courses may be repeated so that the student can develop sufficient skills and repertoire over the course of their entire program in order to receive a degree. Students must complete a minimum of 8 hours (B.M.E.) to 10 hours (B.A.) in their applied area of concentration while only being able to take 2 to 4 credit hours each year.

Brass (1-2 hours each)

MUS 123, 323, 523. Applied Trumpet
MUS 124, 324, 524. Applied French Horn
MUS 125, 325, 525. Applied Trombone
MUS 126, 326, 526. Applied Baritone
MUS 127, 327, 527. Applied Tuba

Harpichord (1-2 hours each)

MUS 137, 337, 537. Applied Harpichord

Organ (1-2 hours each)

MUS 135, 335, 535. Applied Organ

Percussion (1-2 hours each)

MUS 128, 328, 528. Applied Percussion

Piano (1-2 hours each)

MUS 130, 330, 530. Applied Piano

Strings (1-2 hours each)

MUS 145, 345, 545. Applied Violin
MUS 146, 346, 546. Applied Viola
MUS 147, 347, 547. Applied Cello
MUS 148, 348, 548. Applied Bass

Voice (1-2 hours each)

MUS 155, 355, 555. Applied Voice

Woodwind (1-2 hours each)

MUS 164, 364, 564. Applied Flute
 MUS 165, 365, 565. Applied Oboe
 MUS 166, 366, 566. Applied Clarinet
 MUS 167, 367, 567. Applied Saxophone
 MUS 168, 368, 568. Applied Bassoon

136 Applied Accompanying (1 hour)

The development of skills in accompanying vocal and instrumental music at the keyboard. May be repeated for credit. This course will count toward keyboard enrollment requirements for music majors. A maximum of two credits may count toward applied keyboard requirements. Prerequisite: Permission of the instructor. (F, S)

520 Secondary Applied Study (1 hour)

Private lessons in the areas of vocal, instrumental and keyboard study which are outside the student's primary area of applied accomplishment. Repeatable. Prerequisite: Consent of instructor.

ENSEMBLES

Performing ensembles listed below are open to all University students regardless of majors. Some, as noted, do require auditions for participation and credit. All ensemble courses may be repeated for additional credit as per the limitations in individual course descriptions because each term new literature for that ensemble is studied and ensemble performance skills are improved.

110 Marching Band (1 hour)

Marching activities and performance during the football season. May be taken as many as four times for academic credit. Credit cannot be received for this course in the same trimester of enrollment in MUS 19-111. (F)

111 Marching Band Activity (1 hour activity credit)

Marching activities and performance during the football season. Credit cannot be received for this course in the same trimester of enrollment in MUS 19-110. (F)

112 University Chorale (1 hour)

Large choir performing a variety of literature including major choral works. May be taken as many as four times for academic credit. Credit cannot be received for this course in the same trimester of enrollment in MUS 19-113. (F, S)

113 University Chorale Activity (1 hour activity credit)

Large choir performing a variety of literature including major choral works. Credit cannot be received for this course in the same trimester of enrollment in MUS 19-112. (F, S)

115 Symphonic Band (1 hour)

A large concert band with open enrollment performing a variety of music. May be taken as many as four times for academic credit. Credit cannot be received for this course in the same trimester of enrollment in MUS 19-116. (S)

116 Symphonic Band Activity (1 hour activity credit)

A large concert band with open enrollment performing a variety of music. Credit cannot be received for this course in the same trimester of enrollment in MUS 19-115. (S)

118 Orchestra (1 hour)

A select instrumental group that specializes in performing the repertoire written for orchestra. This performing ensemble is open to all University students regardless of major. All ensembles as courses may be repeated for additional credit. Prerequisite: Audition.

119 Orchestra Activity (1 hour activity credit)

A select instrumental group that specializes in performing the repertoire written for orchestra. This performing ensemble is open to all University students regardless of major. Credit cannot be received for this course in the same trimester of enrollment in MUS 19-118.

203 Madrigal/Show Choir (1 hour)

Select choral group specializing in madrigal, vocal jazz and swing choir literature. Prerequisite: Audition. May be taken as many as four times for academic credit. Credit cannot be received for this course in the same trimester of enrollment in MUS 19-204. (F, S)

204 Madrigal/Show Choir Activity (1 hour activity credit)

Select choral group specializing in madrigal, vocal jazz and swing choir literature. Prerequisite: Audition. Credit cannot be received for this course in the same trimester of enrollment in MUS 19-203. (F, S)

205 Jazz Ensemble (1 hour)

Big-band jazz ensemble and may include vocalists. Prerequisite: Audition. May be taken as many as four times for academic credit. Credit cannot be

received for this course in the same trimester of enrollment in MUS 19-206. (F, S)

**206 Jazz Ensemble Activity
(1 hour activity credit)**

Big-band jazz ensemble and may include vocalists. Prerequisite: Audition. Credit cannot be received for this course in the same trimester of enrollment in MUS 19-205. (F, S)

207 Tower Choir (1 hour)

Select choral ensemble. Prerequisite: Audition. May be taken as many as four times for academic credit. Credit cannot be received for this course in the same trimester of enrollment in MUS 19-208. (F, S)

**208 Tower Choir Activity
(1 hour activity credit)**

Select choral ensemble. Prerequisite: Audition. Credit cannot be received for this course in the same trimester of enrollment in MUS 19-207. (F, S)

209 Wind Symphony (1 hour)

A select instrumental group that specializes in performing the repertoire written for the large and small instrumental combinations, including concert band music. Prerequisite: Audition. May be taken as many as four times for academic credit. Credit cannot be received for this course in the same trimester of enrollment in MUS 19-210. (F, S)

**210 Wind Symphony Activity
(1 hour activity credit)**

A select instrumental group that specializes in performing the repertoire written for the large and small instrumental combinations, including concert band music. Prerequisite: Audition. Credit cannot be received for this course in the same trimester of enrollment in MUS 19-209. (F, S)

**212 Brass Ensemble
(1 hour activity credit)**

A variety of brass ensembles of varying sizes and instrument combinations. Prerequisite: Permission of instructor. (F, S)

**214 Woodwind Ensemble
(1 hour activity credit)**

A variety of woodwind ensembles of varying sizes and instrument combinations including such groups as flute choir, woodwind quintet and clarinet choir. Prerequisite: Permission of instructor. (F, S)

**215 Jazz Combo
(1 hour activity credit)**

This course is designed to provide the student with a small ensemble to learn and use the concepts

of Jazz Improvisation and to learn to perform in a small group setting in order to express themselves musically through the jazz idiom. Prerequisite: Permission of instructor (F, S)

**218 University Singers
(1 hour activity credit)**

Small choral group performing a variety of literature. Prerequisite: Permission of instructor. (F, S)

**219 Percussion Ensemble
(1 hour activity credit)**

A variety of percussion ensembles of varying sizes and instrument combinations. Prerequisite: Permission of instructor. (F, S)

LITERATURE AND HISTORY

**385 Music Literature: Antiquity through Renaissance (BC-1600)
(3 hours)**

Survey of the development of Western music from the time of the ancient Greeks through the Renaissance, with emphasis on development of listening skills. Prerequisite: MUS 19-173 or 174, or 201 for non-majors. (F)

386 Music Literature: Baroque through Classical (3 hours)

A survey of the development of Western music from the Baroque and Classical eras, with continued emphasis on development of listening skills. Prerequisite: MUS 19-173 or 174, or 201 for non-majors. (S)

387 Music Literature: Romantic through the Present (3 hours)

A survey of the development of Western music from the Romantic period to the present with continued emphasis on the development of listening skills. Prerequisite: MUS 19-385 or 386, or 201 for non-majors. (F)

METHODS AND MATERIALS

220 Brass Methods I (1 hour)

Development of basic skills and techniques of brass instrument performance and pedagogy. (F, odd years)

221 Percussion Methods I (1 hour)

Development of basic skills and techniques of playing and teaching percussion with an emphasis on unpitched instruments. (F, odd years)

223 Brass Methods II (1 hour)

Development of intermediate skills and techniques of brass instrument performance and pedagogy. (S, even years)

224 Percussion Methods II (1 hour)

Development of basic skills and techniques of playing and teaching percussion with an emphasis on pitched instruments. (S, even years)

240 String Methods I (1 hour)

Development of the basic skills and techniques of playing and teaching orchestral string instruments. (F, even years)

241 String Methods II (1 hour)

Development of the intermediate skills and techniques of playing and teaching orchestral string instruments. (S, odd years)

250 Vocal Methods (2 hours)

A study of the basic principles of voice production: quality, diction, range, breathing, vocalization, dynamics, agility and vocal hygiene as a basis for an approach to vocal teaching. Students will also learn the International Phonetic Alphabet (IPA) and its application to the English, Italian, German and French languages. (S)

260 Woodwind Methods I (1 hour)

The introduction and development of the basic skills needed to teach beginning woodwind students on Clarinet and Saxophone. These skills include performance, pedagogy, and instrument care.

261 Woodwind Methods II (1 hour)

The introduction and development of the basic skills needed to teach flute and double reed students. These skills include performance, pedagogy, and instrument care. (S, odd years)

270 Instrumental Methods for Non-Instrumental Majors (2 hours)

Development of functional ability in wind, string, brass and percussion instruments. Instrumental music majors may not receive credit for this course. (S)

380 Music in the Elementary School (2 hours)

Current concepts of music learning procedures and materials for the elementary classroom. Elements of music are presented with concrete experiences to explore appropriate methods and materials. Music majors cannot receive credit for this course. Prerequisite: MUS 19-201, 19-202, 19-222, or ART 13-102 (F, S, SS)

391 Elements of Conducting (2 hours)

Baton technique and the elements of interpretation in conducting choral and instrumental groups. (F)

402 Music Practicum (1 hour)

Supervised classroom/rehearsal observation and teaching in various music activities. Enrollment by faculty selection. May be repeated with a change in topic and/or new content but only two hours may count as an elective toward an undergraduate degree.

420 Choral Conducting (2 hours)

A refinement and augmentation of the choral foundation provided in MUS 19-391. Prerequisite: MUS 19-391. (S)

421 Instrumental Conducting (2 hours)

A refinement and augmentation of the foundation provided in MUS 19-391, with specific attention to instrumental (orchestra and band) conducting. Prerequisite: MUS 19-391. (S)

481 Methods in Elementary School Music (2 hours)

A study of methods and materials for music in the elementary school. Music majors or minors only. Prerequisite: MUS 19-180. (S)

482 Methods in Secondary School Instrumental Music (2 hours)

Problems peculiar to the junior and senior high school band. Analysis of materials and methods including instructional observation. Music majors only. Prerequisites: Passing of piano proficiency and admission to teacher education. Meets requirements for special secondary methods in education sequence. (F)

484 Methods in Secondary School Vocal Music (2 hours)

Problems peculiar to junior and senior high school choral programs. Analysis of materials and methods including instructional observation. Music majors only. Prerequisite: Passing of piano proficiency examination and admission to teacher education. Meets requirements for special secondary methods in education sequence. (F)

501 Elementary Music Education: Special Topics (1-3 hours)

A study of selected materials and/or methods for music instruction in the elementary school with particular attention being given to recent developments and current issues. Repeatable for additional experience, new material and progression of study.

502 Junior High Music Education: Special Topics (1-3 hours)

A study of selected methods and/or materials for music instruction in the junior high or middle school with particular attention being given to recent developments and current issues. Repeatable for additional experience, new material and progression of study. (SS)

503 Senior High Music Education: Special Topics (1-3 hours)

A study of selected methods and/or materials for music instruction in the senior high school with particular attention being given to recent developments and current issues. Repeatable for additional experience, new material and progression of study. (SS)

501 Principles of Singing (2 hours)

Processes in vocal pedagogy: respiration, phonation, articulation and resonance. Students will study English, Italian, German and French diction and there will be a survey of the vocal repertoire. (SS, even years)

582 Advanced Instrumental Conducting (2 hours)

An application of conducting practices in interpretation, style and performance through the study of representative works for concert band, wind ensemble and orchestra. (SS, even years)

583 Advanced Choral Conducting (2 hours)

Study of representative large works through conducting practices in interpretation, style and performance. (SS, odd years)

587 Literature for Elementary and Middle Schools (2 hours)

A study of course materials and methods for elementary and middle school music classrooms.

590 Early Childhood Music (2 hours)

Designed to assist the early childhood teacher in developing better techniques of teaching music to ones' specific levels.

591 Marching Band Technique (2 hours)

A study of the fundamentals of marching maneuvers, parade routines, computer-assisted drill design, and the administration and organization of a successful marching band program. (F, odd years)

592 General Music Methods (2 hours)

A study of the materials and methods for teaching general music middle school through high school. (S)

593 Choral Literature for Secondary Schools (2 hours)

A survey of choral literature including the music of all periods, both sacred and secular, and a study of the style and interpretation of music from each period. (F)

594 Instrumental Literature for Secondary Schools (2 hours)

A historical and stylistic survey of music for the wind band with particular emphasis on compositions appropriate for secondary school ensembles. (F)

595 Contemporary Issues in Instrumental Music (2 hours)

A study of current trends, standards, materials and practices in administering, organizing and maintaining a successful instrumental music program. (S)

596 Contemporary Issues in Vocal Music (2 hours)

Current practices in administration and organization of school vocal programs. (S)

597 Comparative Methods in Elementary Music (2 hours)

A survey of today's methods of teaching music education in the elementary school with emphasis on techniques employed by Zoltan Kodaly, Carl Orff and Dalcroze.

THEORY**103 Foundations of Music Theory (2 hours)**

An introduction to traditional pitch and rhythmic notation as well as the study of basic materials such as tempo, meter, key signatures, intervals, scales and simple triad spellings. This course does not satisfy the general education requirement in music nor count as a music elective toward any major or minor in the Department of Music. (F)

171 Beginning Sight Singing and Ear Training (1 hour)

Development of skills in dictation, sight singing, notation and the aural comprehension of music. Prerequisite: MUS 19-103 or score of 70 on Theory Placement Examination. (S)

172 Intermediate Sight Singing and Ear Training (1 hour)

A continuation of MUS 19-171 including chromatic relationships, more difficult rhythmic grouping and two-part music. Prerequisite: MUS 19-171. (F)

173 Theory of Music (3 hours)

An intensive course in the fundamentals of music including scales, modes, intervals, tonality and the four types of triads. Prerequisite: MUS 19-103 or score of 70 on Theory Placement Examination. (S)

174 Theory of Music (3 hours)

Introduction to harmony and part-writing, figured bass, the principal triads in root position and the dominant seventh in root position. Prerequisite: MUS 19-173. (F)

271 Advanced Sight Singing and Ear Training I (1 hour)

A continuation of MUS 19-172 including more difficult intervallic, melodic, harmonic and rhythmic problems. Prerequisite: MUS 19-172. (S)

272 Advanced Sight Singing and Ear Training II (1 hour)

A continuation of MUS 19-271 progressing to the most difficult intervallic, melodic, harmonic and rhythmic problems. Prerequisite: MUS 19-271. (F)

273 Theory of Music (3 hours)

A continuation of MUS 19-174 including figured bass, triads, and seventh chords in all inversions,

nonharmonic tones, secondary dominants and secondary leading tone chords and the neapolitan sixth chord. Prerequisite: MUS 19-174. (S)

274 Theory of Music (3 hours)

Completion of the study of harmony including advanced progression, enharmonic modulations and augmented sixth chords. Study of late romantic trends and impressionism. Introduction to dodecaphonic techniques. Prerequisite: MUS 19-273. (F)

472 Musical Form and Analysis (2 hours)

Analytical study of the musical forms employed in the vocal and instrumental compositions of Bach, Mozart, Beethoven, Wagner and other master composers. Prerequisite: MUS 19-274. (F)

493 Choral Composition and Arranging (2 hours)

Principles and practices of composing and arranging for choirs and small vocal ensembles. Prerequisites: MUS 19-272 and 274. (S)

494 Instrumental Composition and Arranging (2 hours)

Principles and practices of composing and arranging for school orchestras, bands, and other instrumental ensembles. Prerequisites: MUS 19-173, 174, 273, and two of the following: MUS 19-220, 221, 240, 260. (S)

Theatre / 43

Statement of Purpose for Theatre

Supporting Northwest's institution-wide vision and mission, the Discipline of Theatre has a threefold purpose: (1) to serve the educational needs of the students of Northwest by providing programs of study that integrate theory and practice in Theatre; (2) to provide quality cultural performances and experiences for the University and surrounding communities; and (3) to make a significant contribution to the advancement of knowledge in these fields. The department seeks to accomplish this by: (a) attracting students who have the potential to become competent professionals, (b) preparing students in department majors for successful employment in those fields or for advanced study in graduate programs, (c) providing all students with competency training that is essential to their success in school and in the world, and (d) maintaining a relationship with alumni and supporting their continual development as professionals and citizens.

Students in the Discipline of Theatre are provided with both a solid theoretical understanding of the field and numerous opportunities for hands-on competence. Student organizations within the department provide additional experiential learning opportunities. Whether majoring in a

theatre field (Performance, Technical/Design or Comprehensive), or seeking teacher certification in one of those areas, students in the department learn from their instructors and classroom experiences, learn by doing, learn from one another and learn from professionals in their fields.

Majors and non-majors alike are eligible and encouraged to participate in performance or technical positions in the mainstage and laboratory production theatre series, forensics activities, multicultural events, and student organizations.

The department also serves as a center for cultural activity and enrichment for the University and surrounding communities. Public performances of dramatic literature from all major periods and of all major styles are produced throughout the academic year. The high caliber of these performances instills an appreciation for the performance process and the aesthetics of production arts.

By encouraging and supporting its faculty members to continuously engage in creative and scholarly activities, the department fulfills its obligation to not only partake of the field of knowledge but also to enlarge that field. This ensures that students taking courses within the department receive the best and most current education possible. By providing opportunities and encouraging its majors to engage in additional creative activities and scholarly research outside of the classroom, the department offers students the opportunity to further enhance their educational experience and to join with the faculty in expanding their fields of knowledge.

DEGREE PROGRAMS IN THEATRE

The comprehensive Bachelor of Science in Theatre (60 hours) does not require an outside minor and provides students with a foundation in all major areas of theatre study while allowing concentration in a specific production activity. Specialization options, available in performance and technical/design areas, prepare the student to enter the professional field or to undertake advanced study and training.

The Bachelor of Arts in Theatre (30 hours), which requires a minor in another area, provides students with theoretical and practical knowledge in all areas of theatre study in preparation for advanced training, graduate work or entry into the nonprofessional field.

The comprehensive Bachelor of Science in Education in Speech/Theatre (55 hours) prepares students to teach and direct speech and theatre in secondary schools. This major does not require a minor and, when completed under the B.S.Ed., Secondary Education Program, meets the State of Missouri teacher certification standards for grades 9-12.

The non-comprehensive Bachelor of Science in Education in Speech/Theatre (38 hours) requires a minor. This major, when completed under the B.S.Ed., Secondary Education Program, also meets the State of Missouri teacher certification standards for grades 9-12.

The minor in Theatre (24 hours) provides students majoring in other departments with a general knowledge of all major areas of theatre study and the opportunity to apply that knowledge in a production environment.

A minor in Speech/Theatre Education (32 hours) is available to students majoring in another area. This minor, when completed under the B.S.Ed., Secondary Education Program, meets the State of Missouri teacher certification standards for grades 9-12.

The department also offers an endorsement in Speech/Theatre for students seeking Missouri Middle School (grades 5-9) certification. The middle school program is advised through the College of Education and Human Services.

DEPARTMENTAL POLICIES FOR THEATRE

Portfolio Requirement

Successful completion of all degrees requires the presentation of an academic and professional portfolio during the student's senior year. Immediately upon declaring a major, the student must request a portfolio packet from his/her advisor.

Speech/Theatre Education Directing Requirement

All candidates for the B.S.Ed. degree with a secondary speech/theatre major or certifiable minor must demonstrate their ability to direct a complete theatrical presentation that is approved by and acceptable to department faculty. Opportunities for meeting this requirement will be discussed with the academic advisor and include lab series, second stage, and external venue shows. THEA 43-373 Directing must be successfully completed prior to attempting this requirement.

Advanced Standing Requirement

Students majoring in theatre must complete Freshman Seminar (1 hour), English Composition (6 hours), Oral Communication (3 hours), and Mathematics (3-4 hours) by the end of the sophomore year. A student must present a cumulative grade point average of 2.00 for all courses listed above. No departmental major may be enrolled in and pursue advanced departmental courses (numbered 300 or above) until these courses and the specific advanced standing requirements for the student's major are met.

Students seeking exemption or who are not granted advanced standing in theatre may appeal by submitting a written petition to the dean of the College of Arts and Sciences through the chair of the department.

Theatre Majors

Students seeking a major in theatre are expected to demonstrate a capacity to integrate, from the theatre core courses, principles of a common formal language, process of seeing, and perception of content. Through visual, written and verbal evidence, students must show understanding of conceptual purposes behind directed work in the theatre core courses and sufficient commitment to expand their knowledge in order to successfully pursue advanced study.

No theatre major may be enrolled in and pursue advanced theatre courses (numbered 300 and above) until theatre advanced standing has been granted. Theatre minors must complete the theatre core sequence with a grade of "C" or better in all core courses prior to being enrolled in and pursuing advanced theatre courses.

To achieve theatre advanced standing, a student 1) must have no grade lower than "C" in any theatre core course, and 2) must demonstrate his/her readiness for advanced theatre courses by satisfactorily responding to written and oral questions related to the current theatre reading list and from theatre core courses.

Theatre majors may apply for theatre advanced standing during the trimester they are completing the theatre core. Transfer theatre majors seeking to enroll in advanced theatre courses must apply for theatre advanced standing at the time of registration. There will be a review of the transfer students' portfolio of work in the first week of their first term. Upon approval of advanced standing, the department chair will assign the student a faculty advisor who is knowledgeable of the student's program.

Speech/Theatre Education Majors

Students seeking a major in speech/theatre education are expected to demonstrate a capacity to integrate, from the required communication and theatre core courses, principles of common formal language, process of seeing, and perception of content, as well as sufficient commitment to expand their knowledge in order to successfully pursue advanced study.

No speech/theatre education major may be enrolled in and pursue advanced communication or theatre courses (numbered 300 and above) until advanced standing has been granted. Speech/theatre education minors must complete the required communication and theatre core courses with a grade of “C” or better in all core courses prior to being enrolled in and pursuing advanced communication and theatre courses.

To achieve speech/theatre education advanced standing, a student (1) must have no grade lower than “C” in any communication or theatre core course and (2) must demonstrate his/her readiness for advanced communication and theatre courses by satisfactorily responding to written and oral questions related to the required communication and theatre core courses.

Speech/theatre education majors may apply for advanced standing during the trimester they are completing the required communication and theatre core courses. Transfer speech/theatre majors seeking to enroll in advanced communication or theatre courses must apply for advanced standing at the time of registration. There will be a review of each transfer student’s portfolio of work in the first week of their first term.

MAJORS

Core Requirements for Majors and Minors in Theatre

Semester Hours

THEA 43-110 Theatre Foundations	3
THEA 43-210 Design Principles	3
THEA 43-225 Oral Interpretation and Textual Analysis	3
THEA 43-230 Acting	3

Total Hours	12
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Major in Theatre, 30 hours: B.A.–Minor Required

CIP: 500501

Required Courses

Semester Hours

Theatre Core Requirements	12
THEA 43-305 Independent Practicum in Theatre	1
THEA 43-373 Directing	3
THEA 43-407 History of Theatre I	3
THEA 43-408 History of Theatre II	3
THEA 43-498 Theatre Seminar	2
THEA 43-499 Senior Project	1

Two hours of technical skills from:	2
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THEA 43-211 Technical Skills: Scenery (2)	
THEA 43-212 Technical Skills: Costumes (2)	
THEA 43-213 Technical Skills: Electrics (2)	

Three hours of theatre design from:	3
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THEA 43-354 Stage Lighting (3)	
THEA 43-391 Costuming (3)	
THEA 43-395 Scene Design (3)	

**Comprehensive Major in Theatre, 60 hours:
B.S.–No Minor Required**

CIP: 500501

Required Courses	Semester Hours
Theatre Core Requirements	12
THEA 43-211 Technical Skills: Scenery	2
THEA 43-212 Technical Skills: Costumes	2
THEA 43-213 Technical Skills: Electrics	2
THEA 43-305 Independent Practicum in Theatre (enroll 3 trimesters)	3
THEA 43-373 Directing	3
THEA 43-407 History of Theatre I	3
THEA 43-408 History of Theatre II	3
THEA 43-498 Theatre Seminar	2
THEA 43-499 Senior Project	1
Specialization option (see list below)	27
Performance Specialization Option (27 hours)	
THEA 43-235 Theatre Voice and Movement (3)	
THEA 43-258 Stage Makeup (3)	
THEA 43-330 Advanced Acting (3)	
THEA 43-335 Acting Period Styles and Techniques (3)	
THEA 43-426 Interpreter's Theatre (3)	
Performance-related course(s) from 19- or 22-prefix departments, approved by advisor (3)	
Theatre electives, approved by advisor (9)	
Technical Theatre and Design Option (27 hours)	
THEA 43-221 Drafting (3)	
THEA 43-222 Advanced Drafting (3)	
THEA 43-354 Stage Lighting (3)	
THEA 43-383 Stage and Theatre Management (3)	
THEA 43-391 Costuming (3)	
THEA 43-395 Scene Design (3)	
Tech/design-related course(s) from 13- or 15-prefix departments, approved by advisor (3)	
Theatre electives, approved by advisor (6)	

MINOR

Minor in Theatre, 24 hours

CIP: 500501

Required Courses	Semester Hours
Theatre Core Requirements	12
THEA 43-305 Independent Practicum in Theatre	1
THEA 43-373 Directing	3
Two hours of technical skills from:	2
THEA 43-211 Technical Skills: Scenery (2)	
THEA 43-212 Technical Skills: Costumes (2)	
THEA 43-213 Technical Skills: Electrics (2)	

Three hours of theatre design from:	3
THEA 43-354 Stage Lighting (3)	
THEA 43-391 Costuming (3)	
THEA 43-395 Scene Design (3)	
Three hours of theatre history from:	3
THEA 43-407 History of Theatre I (3)	
THEA 43-408 History of Theatre II (3)	

SPEECH/THEATRE EDUCATION MAJORS

Core Requirements for Speech/Theatre Education Majors/Minors	Semester Hours
THEA 43-110 Theatre Foundations	3
THEA 43-210 Design Principles	3
THEA 43-225 Oral Interpretation and Textual Analysis	3
THEA 43-230 Acting	3
COM 29-210 Communication Theory	3
COM 29-230 Public Speaking	3
Total Hours in Speech/Theatre Education Core	18

Comprehensive Major in Speech/Theatre Education, 55 hours: B.S.Ed.—No Minor Required (Certifies Grades 9-12)

CIP: 131399

Required Courses	Semester Hours
Speech/Theatre Education Core Requirements	18
COM 29-133 Practicum in Debate and Forensics AND /OR COM 29-338 Advanced Practicum in Debate and Forensics	2
COM 29-232 Small Group Communication	3
COM 29-325 Listening Behavior and Skills	3
COM 29-332 Propaganda and Persuasion	3
COM 29-335 Interpersonal Communication	3
COM 29-341 Argumentation and Debate	3
THEA 43-305 Independent Practicum in Theatre	1
THEA 43-373 Directing	3
THEA 43-460 Creative Dramatics	3
Two hours of technical skills from:	2
THEA 43-211 Technical Skills: Scenery	2
THEA 43-212 Technical Skills: Costumes	2
THEA 43-213 Technical Skills: Electrics	2
Three hours of theatre history from:	3
THEA 43-407 History of Theatre I	3
THEA 43-408 History of Theatre II	3
Eight hours of approved speech communication, theatre, or mass communication electives (8)	

This major, when completed under the B.S.Ed., Secondary Program, meets Missouri teacher certification standards for speech/theatre secondary level.

Students must take COM 29-480 Methods in Teaching Speech/Theatre in the Secondary School as part of their professional education requirements.

**Major in Speech/Theatre Education 38 hours: B.S.Ed.–
Minor Required (Certifies Grades 9-12)**

Required Courses	Semester Hours
Speech/Theatre Education Core Requirements	18
COM 29-133 Practicum in Debate and Forensics AND /OR COM 29-338 Advanced Practicum in Debate and Forensics	2
COM 29-332 Propaganda and Persuasion	3
COM 29-335 Interpersonal Communication	3
COM 29-341 Argumentation and Debate	3
THEA 43-305 Independent Practicum in Theatre	1
THEA 43-373 Directing	3
Two hours of technical skills from:	
THEA 43-211 Technical Skills: Scenery	2
THEA 43-212 Technical Skills: Costumes	2
THEA 43-213 Technical Skills: Electrics	2
Three hours of theatre history from:	
THEA 43-407 History of Theatre I	3
THEA 43-408 History of Theatre II	3

This major, when completed under the B.S.Ed. Secondary Program, meets Missouri teacher certification standards for speech/theatre secondary level.

Students must take COM 29-480 Methods in Teaching Speech/Theatre in the Secondary School as part of their professional education requirements.

MINOR

**Minor in Speech/Theatre Education, 32 hours
(Certifies Grades 9-12. See Professional Education Requirements.)**

CIP: 131324

Required Courses	Semester Hours
Speech/Theatre Education Core Requirements	18
COM 29-133 Practicum in Debate and Forensics	1
COM 29-335 Interpersonal Communication	3
COM 29-341 Argumentation and Debate	3
THEA 43-305 Independent Practicum in Theatre	1
THEA 43-373 Directing	3
Three hours from:	
COM 29-325 Listening Behavior and Skills	3
COM 29-332 Propaganda and Persuasion	3
THEA 43-407 History of Theatre I	3
THEA 43-408 History of Theatre II	3

Students must take COM 29-480 Methods in Teaching Speech/Theatre in the Secondary School as part of their professional education requirements.

Area of Endorsement in Speech/Theatre for the Middle School, 21 hours

CIP: 131331

Certifies Grades 5-9 when completed with the Middle School major

Required Courses	Semester Hours
THEA 43-110 Theatre Foundations	3
THEA 43-230 Acting	3
THEA 43-373 Directing	3
THEA 43-460 Creative Dramatics	3
COM 29-210 Communication Theory	3
COM 29-230 Public Speaking	3
COM 29-341 Argumentation and Debate	3

The completion of the above requirements meets the Speech/Theatre Area of Endorsement for use with Missouri Middle School Certification, grades 5-9. Students must take COM 29-480 Methods of Teaching Speech/Theatre in the Secondary School. Advisement for Middle School Certification is provided by the Department of Professional Education in the College of Education and Human Services. See that section of this catalog.

Course Descriptions

Theatre / 43

101 Theatre Appreciation (3 hours)

An introductory course surveying the aesthetic process by which plays are translated into theatrical terms and projected from a stage to an audience, including play analysis, acting, directing, scene design, costume, makeup and stage lighting. (F, S, SS)

110 Theatre Foundations (3 hours)

Provides an introduction to the study of theatre, including the play production process, the basic crafts and skills required for both technical theatre and performance, and script analysis. Lab hours are required. (F)

200 Special Offerings (1-4 hours)

Courses which are offered on only one occasion or variable issue-oriented courses which have the content described in the title. Credit and prerequisites as announced. Repeatable with topics changing.

210 Design Principles in Theatre (3 hours)

An introductory course in the theory, process, and techniques of set, lighting, sound, and costume de-

sign. Students will study the principles and dynamics of design, the development of a design concept, script analysis from the designer's perspective, and collaborative work. Lab hours are required. (S)

211 Technical Skills: Scenery (2 hours)

Provides theory and practice in basic skills and crafts related to scenery and properties in the theatrical production process. Lab hours are required. (Rotates every third trimester, excluding summer) (F, S)

212 Technical Skills: Costumes (2 hours)

Provides theory and practice in basic skills and crafts related to costuming in the theatrical production process. Lab hours are required. (Rotates every third trimester, excluding summer) (F, S)

213 Technical Skills: Electrics (2 hours)

Provides theory and practice in basic skills and crafts related to lighting and sound in the theatrical production process. Lab hours are required. (Rotates every third trimester, excluding summer) (F, S)

221 Drafting (3 hours)

Introduces the student to drafting rules and procedures. Students will begin the trimester with hand-drafting (paper and pencil) work and will move on to basic 2D CAD skills using the program VectorWorks. (F, alt. years)

222 Advanced Drafting (3 hours)

Building upon skills acquired in THEA 43-221 Drafting, the student will continue with advanced 2D projects, and will be introduced to 3D modeling/rendering using the CAD program VectorWorks. Prerequisite: THEA 43-221 (S, alt. years)

225 Oral Interpretation and Textual Analysis (3 hours)

Introduces the student to principles of literary analysis and techniques of oral interpretation as the foundation for all performance experiences. (S)

230 Acting (3 hours)

Provides training in fundamental principles and techniques of modern acting. Emphasis is given to the formation and development of the actor's imagination, intellect, and overall working process. (F)

235 Theatre Voice and Movement (3 hours)

A survey of and practice with multiple theatre movement and voice theories designed to develop student awareness and skill related to the body's expressive potential. Prerequisite: THEA 43-230 or permission of instructor. (S, alt. years)

258 Stage Makeup (3 hours)

Acquaints the student with basic principles of the art and technique of makeup and assisting the actor in the development and projection of his or her character on stage. (F)

305 Independent Practicum in Theatre (1 hour)

Involves focused and mentored participation in various practical aspects of play production and/or performance; may be repeated for a total of four semester hours for further mastery. (F, S)

330 Advanced Acting (3 hours)

Concentrated study in character analysis and acting methods. Prerequisite: THEA 43-230 or permission of instructor. (S, alt. years)

335 Acting Period Styles and Techniques (3 hours)

Provides training in the performance of character roles from various periods of dramatic literature and genres. Prerequisite: THEA 43-230 or permission of instructor. (S, alt. years)

354 Stage Lighting (3 hours)

Concerns the role that lighting has to play in production, the lighting designer's place in the production process and the procedures involved in designing lighting for stage. Prerequisite: THEA 43-110 or permission of instructor. (F, alt. years)

373 Directing (3 hours)

Discusses the basic function of a director in the production of a play including selection, interpretation, composition, movement, characterization, rhythm, design concept and actor training. Prerequisites: THEA 43-110 and 230 or permission of instructor. (F)

383 Stage and Theatre Management (3 hours)

This course will explore the duties, responsibilities, and technique of modern stage and theatrical managers. (S, alt. years)

391 Costuming (3 hours)

Examines the use of clothing and stage costumes by major periods through style and design. Prerequisite: THEA 43-110 or permission of instructor. (S, alt. years)

395 Scene Design (3 hours)

Provides the student with a basic knowledge of the techniques and methods for designing scenery for the theatre, opera, musical, ballet and television. Prerequisites: THEA 43-110, 211, and 221, or permission of instructor. (S, alt. years)

400 Special Offerings (1-4 hours)

Courses which are offered on only one occasion or variable issue-oriented courses which have the content described in the title. Credit and prerequisites as announced. Repeatable with topics changing.

401 Special Topics (1-3 hours)

Provides concentrated study in special areas within theatre. Topics vary trimester to trimester. Prerequisites as announced. Repeatable with topics changing.

407 History of Theatre I (3 hours)

An examination of theatre's evolution from its origins through 1700 as a reflection of and influence on society. (F)

408 History of Theatre II (3 hours)

An examination of western theatre trends from the 18th to the 21st century as a reflection of and influence on society. (S)

426 Interpreter's Theatre (3 hours)

Provides study and practical application in selecting and adapting literature for group reading. Culminates in a public performance. Prerequisite: Permission of instructor. (F, alt. years)

440 Preparing Repertory (3 hours)

Provides instruction and training in the methods required for preparing a repertory theatre season. May be repeated for a total of nine semester hours for further mastery. (SS)

445 Summer Repertory Theatre (3 hours)

Provides instruction and training in the various activities involved in the operation of a repertory theatre company. May be repeated for a total of nine semester hours for further mastery. (SS)

460 Creative Dramatics (3 hours)

Introduces the methods, techniques, and rationale for teaching and using creative dramatics activities with students from pre-school through secondary grades. (S, alt. years)

468 Internship in Theatre Performance (1-3 hours)

Professional experience in theatre performance. The particular interests of the students are addressed through practical application with theatre practitioners. Prerequisite: Permission of instructor. Repeatable for new experience.

469 Internship in Technical Theatre (1-3 hours)

Professional experience in technical theatre. The particular interests of the students are addressed through practical application with theatre practitioners. Prerequisite: Permission of instructor. Repeatable for new experience.

498 Theatre Seminar (2 hours)

Examines current theatre trends and practices preparing the student for entry into the field or advanced study. This course includes a formal presentation of the student's professional portfolio. Prerequisite: Junior or senior standing and permission of department chairperson.

499 Senior Project (1 hour)

A public performance or exhibition of materials comprising the student's area of emphasis in theatre. Prerequisites: THEA 43-498 or concurrent enrollment; Must meet the current departmental cut score(s) on the current standardized general education test(s) (contact the department office for specific information), and permission of department chairperson. (F, S)

500 Special Offerings (1-4 hours)

Courses which are offered on only one occasion or variable issue-oriented courses which have the content described in the title. Credit and prerequisites as announced. Repeatable with topics changing.

509 Advanced Theatre Production (1-3 hours)

Involves a practical approach to the art of producing a play. Specialized elements in mounting a play for production are discussed, relating to the specific needs of the students enrolled. The course culminates in a public performance. Repeatable for further mastery. (SS)

572 Independent Study in Acting (1-2 hours)

Repeatable with topics changing.

573 Independent Study in Directing (1-2 hours)

Repeatable with topics changing.

574 Independent Study in Dramaturgy (1-2 hours)

Repeatable with topics changing.

575 Independent Study in Technical Theatre (1-2 hours)

Repeatable with topics changing.

Department of Humanities and Social Sciences

Chairperson: Michael Steiner

Faculty: Joel Benson, Jeremy Bryson, Kimberly Casey, Mark Corson, Robert Dewhirst, Patricia Drews, James Eiswert, Matthew Engel, Richard Field, Elyssa Ford, Richard Fulton, Dawn Gilley, Theodore Goudge, Brian Hesse, Ming-Chih Hung, Matthew Johnson, Yanfen Le, Curtis Richardson, Daniel Smith, Thomas Spencer, Michelle Wade, Yi-Hwa Wu

Statement of Mission

The Department of Humanities and Social Sciences includes the disciplinary areas of geography, geographic information science, history, humanities, philosophy, political science, and social science education, thus serving a kaleidoscope of constituencies on campus. Throughout the department, academic experiences that embrace broad, general, liberal education as well as applied skills encourage students to be inquisitive, creative, and imaginative as well as functional. The department strives to prepare students to be adaptable and flexible in their occupational and professional pursuits but ever cognizant of and responsible to the human and environmental conditions. The disciplines represented by the department should serve as a foundation upon which every person bases his or her professional career as well as being integral to their lives and the lives of those around them.

DEGREE PROGRAMS

The Department of Humanities and Social Sciences offers eleven majors, twelve minors and certification in middle and secondary school social sciences.

The Bachelor of Arts (30 hours) and the Bachelor of Science (37 hours) degrees in Geography provide students the opportunity to prepare themselves to pursue positions in government, business, education, urban and regional planning, environmental analysis, and natural resource management. The comprehensive Bachelor of Science (53 hours) degree in Geographic Information Science prepares students for careers that apply GIS and related geospatial technologies to these fields.

The Bachelor of Arts (30 hours) and Bachelor of Science in History (36 hours) provide a traditional liberal arts program and prepares students for careers in such diverse areas as government, public service, business and industry, archives, museums, historical preservation, writing and research.

The Bachelor of Arts in Philosophy (31 hours) provides students with the rich history of the Western philosophical tradition and the values of free, impartial and disciplined inquiry embodied therein. The major in philosophy fosters skills of critical thinking and clear expression which are transferable to any field, and integrates philosophical study with other fields through interdisciplinary electives.

A Bachelor of Science in Education degree in Social Science (51 hours) draws upon economics, geography, government, history and sociology in providing preparation for teaching social science. This major must be completed as a part of the B.S.Ed. degree, Secondary Education Program, thus meeting Missouri teacher certification standards for social studies grades 9-12, as well as preparing the student to become a facilitator for lifelong learning in a world of diversity and change. This is a comprehensive major; no minor is required. However, students are free to complete a minor in another field appropriate to the B.S.Ed. degree, Secondary Program, if seeking another teaching area.

The Bachelor of Arts (31 hours) and Bachelor of Science (37 hours) degrees in Political Science introduce the student to the decision-making processes that guide, direct and determine a society's behavior. Courses focus on the politics and administration of government and factors involved in the competition for political power. The political science program prepares students for a number of careers as well as advanced study in law, municipal planning, city management, urban affairs, education and public policy analysis.

The Bachelor of Science in Public Administration (37 hours) prepares the student for a career in local, state or national government as well as nonprofit organizations. Like the political science major, public administration requires a minor. Majors are required to intern at a governmental agency or at a nonprofit organization.

The Bachelor of Science in Comprehensive Crisis Response (36 hours) uses a multi-disciplinary approach to study crisis, drawing from courses and faculty in communications, geography, psychology, and social sciences. In addition to the crisis management core, multiple options, and electives within those options, provide flexibility so that students can tailor the major to their individual and specific academic and professional needs. This approach provides the student with both theoretical and practical knowledge that is valued in the public, private, and non-profit sectors.

Minors are available in the areas of geography, geographic information science, history, humanities, philosophy, public history, criminal justice, political science, public administration, international relations and comprehensive crisis response. These minor programs assist students interested in a variety of careers, including museum studies, archives, historic preservation, national park service, law enforcement, juvenile justice, theology, crisis management, business and graduate studies.

Test-Out Policy

Credit by examination through the Department of Humanities and Social Sciences is not available for courses in this catalog.

Department Policies

All students selecting majors or minors in this department must have a departmental advisor from the appropriate area who shall approve all programs, deviations or options. An advisement file shall be maintained on each major as well as for each minor. Advanced standing requirements for each of the majors in the department are indicated preceding each major.

Humanities / 26

MINOR

Minor in Humanities, 18 hours

CIP: 240103

Required Courses	Semester Hours
HUM 26-341 Greek Civilization	3
HUM 26-342 Roman Civilization	3
HIST 33-503 The Middle Ages	3
HIST 33-506 The Renaissance and Reformation	3
Two 300-level or higher courses in art history, literature or philosophy	6

Directed General Education Requirement

ART 13-109 Survey of Art I: Prehistory through Medieval Art (3 hours) OR ART 13-111 Survey of Art II: Renaissance to the Present (3 hours) is required as a foundation course for advanced study and must be completed as one of the humanistic studies options within the General Education Requirement for the minor in humanities.

Geography / 32

Internship and Independent Study

Students may apply for no more than six credit hours of combined internship and independent study hours toward their major requirements.

Major/Minor Shared Core Requirements

For students who have a major in Geography and a minor in Geographic Information Systems (GIS), only the Maps and Map Interpretation course may be counted toward both the major and minor.

Core Requirements for All Majors in Geography	Semester Hours
GEOG 32-201 Maps and Map Interpretation	3
GEOG 32-221 Economic Geography	3
GEOG 32-340 Geography of North America	3
GEOG 32-362 Cartography	3
GEOG 32-410 Geographic Thought and Research Methods	3
GEOG 32-499 Senior Seminar	1
Total Hours	16

MAJORS

Major in Geography, 30 hours: B.A.—Minor Required

CIP: 450701

Required Courses	Semester Hours
Geography Major Core Requirements:	16
Electives in Regional Geography: (Choose two)	6
GEOG 32-441 Geography of Europe (3)	

- GEOG 32-442 Geography of Asia (3)
- GEOG 32-443 Geography of the Middle East (3)
- GEOG 32-444 Geography of Africa (3)
- GEOG 32-445 Geography of Latin America (3)
- GEOG 32-511 Special Topics in Geography (regional)

Electives in Systematic Geography:

8

- **GEOG 32-102 People and Cultures of the World (3)
- GEOG 32-207 GPS Fundamentals (3)
- GEOG 32-211 Special Topics in Geography (6 hours maximum)
- GEOG 32-302 Cadastral Mapping (2)
- GEOG 32-360 Dynamic and Synoptic Meteorology (3)
- GEOG 32-361 Climatology (3)
- GEOG 32-363 Remote Sensing (3)
- GEOG 32-365 Geographic Information Systems (3)
- GEOG 32-370 Natural Disasters (3)
- GEOG 32-409 Independent Study in Geography (1-3)
- GEOG 32-415 Internship in Geography (1-6)
- GEOG 32-465 Introduction to Customized GIS (3)
- GEOG 32-501 Conservation of Natural Resources (3)
- GEOG 32-510 Geographic Education: Themes and Materials (2)
- GEOG 32-511 Special Topics in Geography (6 hours maximum or 2 courses)
- GEOG 32-520 Military Geography (3)
- GEOG 32-521 Political Geography (3)
- GEOG 32-522 Urban Geography (3)
- GEOG 32-562 Digital Cartography and GeoVisualization (3)
- GEOG 32-563 Digital Image Processing (3)
- GEOG 32-565 Advanced Geographic Information Systems (3)
- GEOL 27-326 Geology of the National Parks (3)
- GEOL 27-360 Environmental Geology (4)
- GEOL 27-455 Geologic Field Methods (3)
- GEOL 27-510 Geomorphology (3)
- GEOL 27-515 Environmental Regulations (2)

**GEOG 32-102 cannot be used as a Multicultural/Diversity institutional requirement course if used as an elective in the B.A. Geography major.

Major in Geography, 37 hours: B.S.–Minor Required

CIP: 450701

Required Courses	Semester Hours
Geography Major Core Requirements	16
Electives in Regional Geography: (Choose one or two)	3-6
GEOG 32-441 Geography of Europe (3)	
GEOG 32-442 Geography of Asia (3)	
GEOG 32-443 Geography of the Middle East (3)	
GEOG 32-444 Geography of Africa (3)	
GEOG 32-445 Geography of Latin America (3)	
Electives in Systematic Geography:	15-18
**GEOG 32-102 People and Cultures of the World (3)	
GEOG 32-207 GPS Fundamentals (3)	

- GEOG 32-211 Special Topics in Geography (6 hours maximum)
 GEOG 32-302 Cadastral Mapping (2)
 GEOG 32-360 Dynamic and Synoptic Meteorology (3)
 GEOG 32-361 Climatology (3)
 GEOG 32-363 Remote Sensing (3)
 GEOG 32-365 Geographic Information Systems (3)
 GEOG 32-370 Natural Disasters (3)
 GEOG 32-409 Independent Study in Geography (1-3)
 GEOG 32-415 Internship in Geography (1-6)
 GEOG 32-465 Introduction to Customized GIS (3)
 GEOG 32-501 Conservation of Natural Resources (3)
 GEOG 32-510 Geographic Education: Themes and Materials (2)
 GEOG 32-511 Special Topics in Geography (1-4)
 GEOG 32-520 Military Geography (3)
 GEOG 32-521 Political Geography (3)
 GEOG 32-522 Urban Geography (3)
 GEOG 32-562 Digital Cartography and GeoVisualization (3)
 GEOG 32-563 Digital Image Processing (3)
 GEOG 32-565 Advanced Geographic Information Systems (3)
 GEOL 27-326 Geology of the National Parks (3)
 GEOL 27-360 Environmental Geology (4)
 GEOL 27-455 Geologic Field Methods (3)
 GEOL 27-510 Geomorphology (3)
 GEOL 27-515 Environmental Regulations (2)

**GEOG 32-102 cannot be used as a Multicultural/Diversity institutional requirement course if used as an elective in the B.S. Geography major.

Comprehensive Major in Geographic Information Science, 53 hours: B.S.—No Minor Required

CIP: 450799

Required Courses	Semester Hours
GEOG 32-201 Maps and Map Interpretation	3
GEOG 32-207 GPS Fundamentals	3
GEOG 32-221 Economic Geography	3
GEOG 32-362 Cartography	3
GEOG 32-363 Remote Sensing	3
GEOG 32-365 Geographic Information Systems	3
GEOG 32-410 Geographic Thought and Research Methods	3
GEOG 32-465 Introduction to Customized GIS	3
GEOG 32-499 Senior Seminar	1
GEOG 32-565 Advanced Geographic Information Systems	3
CSIS 44-140 Visual Basic Application Programming	3
CSIS 44-346 Database Applications	1
Electives in GIS (Choose six hours)	6
GEOG 32-302 Cadastral Mapping (2)	
GEOG 32-415 Internship in Geography (1-6)	
GEOG 32-562 Digital Cartography and Geovisualization (3)	
GEOG 32-563 Digital Image Processing (3)	
Other advisor-approved electives	

Electives in Regional Geography: (Choose three hours)	3
GEOG 32-340 Geography of North America (3)	
GEOG 32-441 Geography of Europe (3)	
GEOG 32-442 Geography of Asia (3)	
GEOG 32-443 Geography of the Middle East (3)	
GEOG 32-444 Geography of Africa (3)	
GEOG 32-445 Geography of Latin America (3)	
Area of Emphasis	12
Choose one area of emphasis from the following options:	
Data and Technology Emphasis, 12 hours	
Required Courses	
CSIS 44-141 Computer Programming I	3
CSIS 44-241 Computer Programming II	3
CSIS 44-460 Database Systems	3
Electives (Choose 3 hours)	3
CSIS 44-540 Visual Application Development (3)	
CSIS 44-560 Advanced Topics in Database Systems (3)	
CSIS 44-563 Developing Web Applications and Services (3)	
Geographic Emphasis, 12 hours	
Required Course	
GEOG 32-522 Urban Geography	3
Electives (Choose 9 hours)	9
GEOG 32-360 Dynamic and Synoptic Meteorology (3)	
GEOG 32-361 Climatology (3)	
GEOG 32-501 Conservation of Natural Resources (3)	
GEOG 32-520 Military Geography (3)	
GEOG 32-521 Political Geography (3)	
GEOL 27-510 Geomorphology (3)	
Earth Technology Emphasis, 12 hours	
Required Courses	
GEOL 27-360 Environmental Geology	4
GEOL 27-515 Environmental Regulations	2
Electives (Choose 6 hours)	6
GEOL 27-335 Physical Oceanography (3)	
GEOL 27-340 Introduction to Hydrogeology (3)	
GEOL 27-510 Geomorphology (3)	
GEOG 32-370 Natural Disasters (3)	
GEOG 32-501 Conservation of Natural Resources (3)	
BIOL 04-420 Environmental Issues (4)	
BIOL 04-474 Wildlife Management and Conservation (2)	
Civil/Public Emphasis, 12 hours	
Required Courses	
GEOG 32-522 Urban Geography	3
POLS 34-355 Economic Development	3
Electives (Choose 6 hours)	6
POLS 34-203 State and Local Government (3)	
POLS 34-332 Principles of Public Administration (3)	
POLS 34-502 Public Policy (3)	

SOC 35-316 Urban Sociology (3)
 ENGL 10-315 Writing for the Professions (3)

Emergency Management Response Emphasis, 12 hours

Required Courses

SOSC 36-301 Introduction to Disaster Response and Recovery 3
 SOSC 36-302 Principles of Humanitarian Relief 3

Electives (Choose 6 hours) 6

GEOG 32-370 Natural Disasters (3)
 HIST 33-450 Homeland Security and Defense (3)
 PSYC 08-345 Disaster Psychology (3)
 COM 29-420 Crisis Communication (3)

Directed General Education Courses

GEOG 32-101 Introduction to Geography 3
 GEOL 27-114/115 General Earth Science and Laboratory OR
 GEOL 27-110/111 General Geology and Laboratory 4
 MATH 17-114 General Statistics I 3

Note: Students with the comprehensive B.S. in Geographic Information Science can fulfill the Geography minor with an additional regional class (3 hours) and 12 hours of advisor approved 300-level or above courses.

MINORS

Minor in Geography, 24 hours

CIP: 450701

Required Courses

Semester Hours

GEOG 32-201 Maps and Map Interpretation 3
 GEOG 32-221 Economic Geography 3
 GEOG 32-340 Geography of North America 3
 GEOG 32-410 Geographic Thought and Research Methods 3
 Geography electives (approved) 12
 (Electives must include at least 3 hours from each of the two groupings:
 Regional and Systematic)

Minor in Geographic Information Systems, 28 hours

CIP: 450702

This is an interdisciplinary minor in conjunction with the Department of Computer Science/Information Systems.

Directed Institutional Requirement

CSIS 44-130 Computers and Information Technology 3

Required Courses

Semester Hours

Geography

GEOG 32-201 Maps and Map Interpretation 3
 GEOG 32-365 Geographic Information Systems 3
 GEOG 32-565 Advanced Geographic Information Systems 3

Computer Science

CSIS 44-140 Visual Basic Application Programming 3
 CSIS 44-141 Computer Programming I 3

CSIS 44-241 Computer Programming II	3
CSIS 44-346 Database Applications	1
CSIS 44-460 Database Systems	3
Advisor-Approved Electives	6
GEOG 32-362 Cartography (3)	
GEOG 32-363 Remote Sensing (3)	
GEOG 32-562 Digital Cartography and GeoVisualization (3)	
GEOG 32-563 Digital Image Processing (3)	
CSIS 44-242 Data and File Structures (3)	
CSIS 44-320 Advanced Word Processing (1)	
CSIS 44-330 Presentation Graphics (1)	
CSIS 44-340 Digital Media (1)	
CSIS 44-540 Visual Application Development (3)	
CSIS 44-590 Current Topics in Computer Science (1-3)	

History / 33

Advanced Standing Requirement

Majors in history may be admitted to advanced standing in their major when they have 1) been assigned an advisor in their major; and 2) completed, with a grade of “C” or better, at least one course in each of the areas of history, government, social science and humanities/philosophy from the General Education Requirements.

Core Requirements for Majors In History

Semester Hours

*HUM 26-102 Western Civilization I: The Ancient World to 1500	3
*HUM 26-103 Western Civilization II: 1500 to the Present	3
HIST 33-301 The Historian’s Craft and Its Uses	2
HIST 33-401 Senior Seminar	1

Six hours from the following: 6

HIST 33-524 Colony to Nation 1607-1828 (3)
HIST 33-525 United States Since 1945 (3)
HIST 33-534 Civil War and Reconstruction (3)
HIST 33-556 Roots of U.S. Reform (3)

Six hours from the following: 6

HIST 33-370 History of the Near and Middle East (3)
HIST 33-375 History of Latin America (3)
HIST 33-386 The Pacific Rim (3)
HIST 33-389 Early Modern Europe: The West Meets the World (3)
HIST 33-589 Europe in the Age of Nationalism (3)

Total Hours 21

*Cannot be used to fulfill any General Education Requirement.

MAJORS

Major in History, 30 hours: B.A.–Minor Required

CIP: 540101

Required Courses	Semester Hours
Core Requirements	21
Approved departmental electives	9

Major in History, 36 hours: B.S.–Minor Required

CIP: 540101

Required Courses	Semester Hours
Core Requirements	21
Approved departmental electives	15

MINORS

Minor in History, 24 hours

CIP: 450801

Required Courses	Semester Hours
*HUM 26-102 Western Civilization I: The Ancient World to 1500	3
*HUM 26-103 Western Civilization II: 1500 to the Present	3
Choose one course from the following:	3
HIST 33-524 Colony to Nation 1607-1828 (3)	
HIST 33-525 United States Since 1945 (3)	
HIST 33-534 Civil War and Reconstruction (3)	
HIST 33-556 Roots of U.S. Reform (3)	
Choose one course from the following:	3
HIST 33-370 History of the Near and Middle East (3)	
HIST 33-375 History of Latin America (3)	
HIST 33-386 The Pacific Rim (3)	
HIST 33-389 Early Modern Europe: The West Meets the World (3)	
HIST 33-589 Europe in the Age of Nationalism (3)	
Approved departmental electives	12

*Cannot be used to fulfill any General Education requirement.

Minor in Public History, 23 hours

CIP: 450805

Required Courses	Semester Hours
HIST 33-344 History of American Folklife	3
HIST 33-320 Introduction to Public History	3
HIST 33-590 Historical Resources Internship	3
HIST 33-590 Historical Resources Internship (Directed Archival)	2
POLS 34-332 Principles of Public Administration	3
Electives (Choose from any of the following):	9
HIST 33-350 American Military History (3)	

- HIST 33-360 The American Woman (3)
 HIST 33-534 The Civil War and Reconstruction (3)
 HIST 33-562 The History of Missouri (3)
 HIST 33-582 Frontiers in American History (3)
 Other advisor-approved electives could include:
 Geographic Information Systems
 Public Relations
 Management
 Federalism
 Desktop Publishing (Journalism)
 Advertising

Philosophy / 39

Advanced Standing Requirement

To be granted advanced standing, all philosophy majors must have 1) been assigned an advisor in their major; and 2) completed, with a grade of “C” or better, at least one course in each of the areas of history, government, social science and humanities from the General Education Requirements; and 3) completed, with a grade of “C” or better, PHIL 39-171 Introduction to Philosophy.

Core Requirements for Majors In Philosophy	Semester Hours
PHIL 39-273 Introduction to Logic	3
*PHIL 39-274 Introduction to Ethics: Historical/Theoretical OR	3
PHIL 39-275 Introduction to Ethics: Professional OR	
PHIL 39-276 Introduction to Ethics: Bio-Medical	
PHIL 39-376 History of Ancient and Medieval Philosophy	3
PHIL 39-377 History of Modern and Contemporary Philosophy	3
PHIL 39-570 Metaphysics	3
PHIL 39-571 Epistemology	3
PHIL 39-401 Senior Seminar	1
Total Hours	19

*Cannot be used to fulfill any General Education requirement.

MAJOR

Major in Philosophy, 31 hours: B.A.—Minor Required

CIP: 380101

Required Courses	Semester Hours
Core Requirements	19
Two courses from each of the following groups:	
Group A:	6
HIST 33-542 American Ideas (3)	
PHIL 39-374 Philosophy of Religion (3)	
PHIL 39-475 Aesthetics (3)	
PHIL 39-590 Advanced Topics in Philosophy (if appropriate) (3)	
COM 29-235 Introduction to Classical Rhetoric (3)	

Group B:

6

- PHIL 39-473 Philosophical Anthropology (3)
- PHIL 39-474 Philosophy of the Sciences (3)
- PHIL 39-590 Advanced Topics in Philosophy (if appropriate) (3)
- PSYC 08-310 Cognitive Psychology (3)
- PSYC 08-423 History and Systems of Psychology (3)
- POLS 34-440 Early Western Political Thought (3)
- POLS 34-441 Modern Western Political Thought (3)
- SCED 28-550 History of Science and Technology (3)

NOTE: PHIL 39-590 Advanced Topics in Philosophy cannot be used for the major more than twice. PSYC 08-310 and 423 have prerequisite courses determined by their appropriate departments. It is recommended that a student interested in these electives explore the possibility of a minor in these areas.

MINOR**Minor in Philosophy, 18 hours**

CIP: 380101

Required Courses**Semester Hours**

- | | |
|---|---|
| *PHIL 39-274 Introduction to Ethics: Historical/Theoretical OR | 3 |
| PHIL 39-275 Introduction to Ethics: Professional OR | |
| PHIL 39-276 Introduction to Ethics: Bio-Medical | |
| PHIL 39-376 History of Ancient and Medieval Philosophy OR | |
| PHIL 39-377 History of Modern and Contemporary Philosophy | 3 |
| PHIL 39-570 Metaphysics | 3 |
| PHIL 39-571 Epistemology | 3 |
| One elective from each of the groups (A and B) listed in the major requirements, with the following additional options: | |

Group A:

- PHIL 39-376 History of Ancient and Medieval Philosophy OR
- PHIL 39-377 History of Modern and Contemporary Philosophy

Group B:

- PHIL 39-273 Introduction to Logic

*Cannot be used to fulfill any General Education requirement.

Political Science / 34**Advanced Standing Requirement**

All political science majors wishing to apply for advanced standing must have completed the General Education requirement for political science (POLS 34-102).

Participation in the Assessment Program

Graduating seniors are expected to take the ACAT, Political Science exam as part of the University's exit assessment program.

Core Requirements for Majors in Political Science

- | | |
|--|-----------------------|
| Core A—American Government and Politics | Semester Hours |
| POLS 34-301 Parties and Interest Groups | 3 |
| POLS 34-302 The American Presidency | 3 |

POLS 34-303 The American Congress	3
POLS 34-401 News Media and Politics	3
POLS 34-502 Public Policy	3
Core B—Comparative Politics and International Relations	
POLS 34-310 Comparative Government	3
POLS 34-421 International Conflict Resolution	3
POLS 34-425 Transnational Politics	3
Core C—Public Administration	
POLS 34-203 State and Local Government	3
POLS 34-332 Principles of Public Administration	3
POLS 34-434 Modern Organizational Theory	3
POLS 34-439 Federalism and Intergovernmental Relations	3
Core D—Law and Courts	
POLS 34-340 Law and Politics	3
POLS 34-436 Constitutional Law	3
POLS 34-438 Civil Liberties	3

MAJORS

Major in Political Science, 31 hours: B.A.—Minor Required

CIP: 451001

Required Courses	Semester Hours
One course from each of Core A, B, C, D	12
An additional course from 3 of the 4 cores (A, B, C, D)	9
POLS 34-440 Early Western Political Thought OR POLS 34-441 Modern Western Political Thought	3
POLS 34-490 Senior Seminar	1
Political Science Electives	6

Major in Political Science, 37 hours: B.S.—Minor Required

CIP: 451001

Required Courses	Semester Hours
One course from each of Core A, B, C, D	12
An additional course from 3 of the 4 cores (A, B, C, D)	9
POLS 34-440 Early Western Political Thought OR POLS 34-441 Modern Western Political Thought	3
POLS 34-490 Senior Seminar	1
Political Science Electives	12

Major in Public Administration, 37 hours: B.S.—Minor Required

CIP: 440401

Required Courses	Semester Hours
POLS 34-203 State and Local Government	3
POLS 34-332 Principles of Public Administration	3
POLS 34-434 Modern Organizational Theory	3
POLS 34-439 Federalism and Intergovernmental Relations	3
POLS 34-490 Senior Seminar	1

POLS 34-495 Field Problems in Public Administration (Credit depending upon nature of problem undertaken)	3-8
POLS 34-502 Public Policy	3
Political Science Electives	9
Electives	4-9

MINORS

Minor in Political Science, 24 hours

CIP: 451001

Required Courses	Semester Hours
One course from each of Core A, B, C, D	12
POLS 34-440 Early Western Political Thought OR POLS 34-441 Modern Western Political Thought	3
Political Science Electives	9

Minor in Public Administration, 24 hours

CIP: 440401

Required Courses	Semester Hours
POLS 34-203 State and Local Government	3
POLS 34-332 Principles of Public Administration	3
POLS 34-434 Modern Organizational Theory	3
POLS 34-439 Federalism and Intergovernmental Relations	3
POLS 34-502 Public Policy	3
Political Science Electives	6
Approved Electives	3

Minor in Criminal Justice, 24 hours

CIP: 430104

Required Courses	Semester Hours
POLS 34-205 Introduction to Criminal Justice	3
POLS 34-315 Juvenile Justice System in America	3
POLS 34-338 Courts and Rights of the Accused	3
PSYC 08-223 Abnormal Psychology OR PSYC 08-333 Developmental Psychology	3
SOC 35-320 Delinquency OR SOC 35-421 Criminology	3
SOC 35-375 Police and Society	3
Approved Electives	6

Minor in International Studies, 24 hours

CIP: 450901

Required Courses	Semester Hours
Modern Language (Minimum of 3 hours must be 200-level or above; all 6 hours must be in the same language)	6

**Regional Geography Course	3
Choose one course from the following:	
GEOG 32-340 Geography of North America (3)	
GEOG 32-441 Geography of Europe (3)	
GEOG 32-442 Geography of Asia (3)	
GEOG 32-444 Geography of Africa (3)	
GEOG 32-445 Geography of Latin America (3)	
POLS 34-310 Comparative Government	3
**Non-Western History Course	3
Choose one course from the following:	
HIST 33-370 History of the Near and Middle East (3)	
HIST 33-375 History of Latin America (3)	
HIST 33-386 The Pacific Rim (3)	
POLS 34-305 Global Events and Trends	3
Electives	6
Choose two courses from the following:	
ART 13-399 International Studies in Studio (3)	
GEOG 32-521 Political Geography (3)	
POLS 34-421 International Conflict Resolution (3)	
POLS 34-425 Transnational Politics (3)	
ECON 52-450 International Economics (3)	
MKTG 55-438 International Business (3)	
Advisor approved courses	

*Cannot be used to fulfill any General Education requirement.

**Elective sequences should be chosen in consultation with the International Studies advisor.

Social Science / 36

Advanced Standing Requirement

Majors in social science may be admitted to advanced standing in their major when they have 1) been assigned an advisor in their major; and 2) completed, with a grade of "C" or better, at least one course in each of the areas of history, government, social science and humanities/philosophy from the General Education Requirements.

Core Requirements for Majors in Social Science	Semester Hours
ECON 52-151 General Economics II	3
GEOG 32-101 Introduction to Geography	3
HIST 33-301 The Historian's Craft and Its Uses	2
HIST 33-401 Senior Seminar	1
*HUM 26-103 Western Civilization II: 1500 to the Present	3
SOC 35-101 General Sociology OR	
SOC 35-108 General Anthropology	3
Total Hours	15

*Cannot be used to fulfill any General Education Requirement.

MAJORS

Comprehensive Major in Social Science, 51 hours: B.S.Ed.—No Minor Required (Certifies Grades 9-12)

CIP: 131317

Required Courses	Semester Hours
Core Requirements	15
American History	12
HIST 33-484 U.S. Economic System—A Comparative History (3)	
HIST 33-524 Colony to Nation 1607-1828 (3)	
Electives in American History (6)	
World History	12
HIST 33-517 England: From Stonehenge to Versailles (3)	
HIST 33-386 The Pacific Rim (3) OR	
HIST 33-370 The History of the Near and Middle East (3)	
HIST 33-312 History of Russia to 1914 (3) OR	
HIST 33-513 Modern Russia (3)	
Electives in World History (3)	
Political Science	9
Choose two from the following:	
POLS 34-203 State and Local Government (3)	
POLS 34-302 The American Presidency (3)	
POLS 34-303 The American Congress (3)	
POLS 34-401 News Media and Politics (3)	
Elective in Political Science (3)	
Behavioral Science Elective	3
Choose one class from Anthropology, Sociology or Psychology	
Directed General Education Requirement	
ECON 52-150 General Economics 1 (3)	

PSYC 08-303 Educational Psychology and PSYC 08-322 Adolescent Psychology are completed as part of the Professional Education requirements.

SOSC 36-480 Methods in Secondary School Social Sciences is to be completed as part of the Professional Education requirements.

This major, when completed under the B.S.Ed. Secondary Program will meet Missouri teacher certification standards for Social Studies grades 9-12.

Major in Comprehensive Crisis Response, 36 hours: B.S.—Minor Required

CIP: 430302

Core Requirements	Semester Hours
COM 29-420 Crisis Communication	3
GEOG 32-370 Natural Disasters	3
HIST 33-450 Homeland Security and Defense	3
POLS 34-439 Federalism and Intergovernmental Relations	3
PSYC 08-345 Disaster Psychology	3

SOSC 36-301 Introduction to Disaster Response and Recovery	3
SOSC 36-302 Principles of Humanitarian Relief	3
Total Core Requirements	21
Required Courses	
SOSC 36-490 Internship in Crisis Response	3
SOSC 36-491 Field Experience in Crisis Response	3
Choose one option below:	
Option 1: General	9
Select one course from each group:	
Group A: Spatial Operations	
GEOG 32-201 Maps and Map Interpretation (3)	
GEOG 32-365 Geographic Information Systems (3)	
GEOG 32-522 Urban Geography (3)	
Group B: Problems and Resolutions	
HIST 33-380 Humanitarian Crises of the Modern World (3)	
POLS 34-332 Principles of Public Administration (3)	
POLS 34-421 International Conflict Resolution (3)	
Group C: Administration and Management	
PSYC 08-315 Psychology of Groups and Teams (3)	
COM 29-432 Organizational Communication (3)	
COM 29-360 Principles of Public Relations (3)	
POLS 34-434 Modern Organizational Theory (3)	
POLS 34-502 Public Policy	
Option 2: Business Continuity	9
*Advisor-approved electives	
Option 3: Hazardous Material	9
*Advisor-approved electives	

*Courses taken through University of Central Missouri online.

MINOR

Certification in Social Science, 21 hours: B.S.Ed., Major in Middle School (Certifies Grades 5-9)

CIP: 131317

Required Courses	Semester Hours
*HUM 26-103 Western Civilization II: 1500 to the Present	3
ECON 52-150 General Economics I	3
SOC 35-101 General Sociology	3
GEOG 32-101 Introduction to Geography	3
POLS 34-203 State and Local Government	3
Select two courses in History numbered 33-300 and above	6

*Cannot be used to fulfill any General Education Requirement.

This listing meets the Missouri certification standards for concentration requirements under the Middle School Major.

Minor in Comprehensive Crisis Response, 27 hours

Core Requirements	Semester Hours
PSYC 08-345 Disaster Psychology	3
COM 29-420 Crisis Communication	3
HIST 33-450 Homeland Security and Defense	3
SOSC 36-301 Introduction to Disaster Response and Recovery	3
SOSC 36-302 Principles of Humanitarian Relief	3
Total Core Requirements	15
Select one course from each group:	9
Group A—Spatial Operations:	
GEOG 32-201 Maps and Map Interpretation (3)	
GEOG 32-365 Geographic Information Systems (3)	
GEOG 32-522 Urban Geography (3)	
Group B—Problems and Resolutions:	
HIST 33-380 Humanitarian Crises of the Modern World (3)	
POLS 34-332 Principles of Public Administration (3)	
POLS 34-421 International Conflict Resolution(3)	
Group C—Administration and Management:	
PSYC 08-315 Psychology of Groups and Teams (3)	
COM 29-360 Principles of Public Relations (3)	
COM 29-432 Organizational Communication (3)	
POLS 34-434 Modern Organizational Theory (3)	
POLS 34-502 Public Policy (3)	
Electives/Special Projects	3

Course Descriptions

Humanities / 26**102 Western Civilization I: The Ancient World to 1500 (3 hours)**

An introduction to the development of Western Culture from the Ancient World through the Renaissance. (F, S, SS)

103 Western Civilization II: 1500 to the Present (3 hours)

An introduction to the development of Western Culture from 1500 to the present. (F, S, SS)

104 The Humanities: The Eastern World (3 hours)

An introductory survey covering the literary, artistic, philosophical and religious traditions of selected Eastern cultures with special emphasis on China and Japan. (S)

105 Information Technology and Culture (3 hours)

How contemporary technology shapes, positively and negatively, our interactions with the world, and the ability to understand and use contemporary information technology in that world. (F)

162 Comparative Religions (3 hours)

An introduction to and a comparative analysis of selected religious traditions. (S)

341 Greek Civilization (3 hours)

A broad study of the major trends, events and personalities in Greek history until the decline of the Hellenistic monarchies before the rising power of Rome. Special stress is laid upon those controlling concepts of Greek life and thought which form the roots of our modern artistic and intellectual culture. (F, alt. years)

342 Roman Civilization (3 hours)

The study of the major trends, events and personalities in Rome's history from its origin to its decline. (S)

380 Special Topics in Humanities (3 hours)

A survey course in the humanities with topics to be selected by the instructor. May be taken more than once with approval of advisor for new topics.

401 Senior Seminar (1 hour)

An intensive study of an issue in humanities of the student's choice, in consultation with a faculty advisor, concluding with a research paper and a formal presentation. Prerequisite: The student must have completed at least 21 hours toward the major. (F, S)

409 Independent Study in the Humanities (1-2 hours)

Investigation of special problems in any area of study offered (humanities, classics or religion). Consent of instructor necessary. Repeatable for new topics.

500 Special Offerings (1-3 hours)

Courses which are offered on only one occasion or variable issue-oriented courses which have the content described in the title. Credit and prerequisites as announced. Repeatable for new topics.

Geography / 32**101 Introduction to Geography (3 hours)**

Survey course designed to familiarize students with the geographic studies including the relationship between humans and the natural environment as well as spatial patterns of human activities. Cultural, socio-economic, political and physical spatial patterns relating to an increased understanding of contemporary local, national and global issues will be emphasized. (F, S, SS)

102 People and Cultures of the World (3 hours)

Course introduces a geographical perspective that examines the cultural, political, and physical processes that shape the diverse regions of the world. (F, S, SS)

201 Maps and Map Interpretation (3 hours)

This course introduces concepts such as map

projections, map distortion, coordinate systems, and map measurement techniques designed to help students learn how to analyze and interpret map information. (F, S)

207 GPS Fundamentals (3 hours)

An introductory course to the Global Positioning System and the integration with other geospatial technologies, such as Geographic Information Systems (GIS) and remote sensing, for field or in-office work. (F, S, SS)

211 Special Topics in Geography (1-4 hours)

This course will be offered according to student needs and interest. Each offering will be designed to incorporate the latest information pertaining to a timely topic in geography. May be repeated once for a new area of study to earn no more than six credits total. (F, S, SS)

221 Economic Geography (3 hours)

Survey course dealing with the interrelationships of geography and the human attempt to make a living. Such topics as capitalism, population, resources, and industry will be considered. (F, S)

302 Cadastral Mapping (2 hours)

A course in the theory, concepts, and practice of creating and maintaining a digital database of property boundaries using current software tools. Prerequisite: GEOG 32-201 or permission of instructor. (SS)

340 Geography of North America (3 hours)

An introduction to the regional approach that examines variations in the physical and human geography focused on the United States and Canada. (F)

360 Dynamic and Synoptic Meteorology (3 hours)

A study of the physical characteristics of the atmosphere and the variables that control day-to-day weather at local and regional (synoptic) scales. Prerequisite: GEOG 32-101 or GEOL 27-114/115. (alt. trimesters, alt. years)

361 Climatology (3 hours)

Climate types and their significance to ecosystems and human activities are discussed. Emphasis is placed on applied climatology, paleoclimatology and the significance of climate change. Prerequisite: GEOG 32-360 or GEOL 27-114/115. (alt. trimesters, alt. years)

362 Cartography (3 hours)

An introductory course on map design, compilation and construction. The course utilizes computer cartography and map design encompassing the theoretical and applied aspects of the collection, organization, manipulation, and display of geographical data. Prerequisite: GEOG 32-201 or permission of instructor. (F)

363 Remote Sensing (3 hours)

A study of the technologies used in earth observation. The focus is on the use of aerial photography and satellite imagery for geological and geographic research. Prerequisite: GEOG 32-201 or permission of instructor. (S)

365 Geographic Information Systems (3 hours)

An introduction to geographic information systems encompassing the theoretical and applied aspects of the collection, storage, analysis and display of spatial (geographical) data. Prerequisite: GEOG 32-201 or junior standing. (F, S)

370 Natural Disasters (3 hours)

A course designed to analyze the processes that result in disasters, both natural and human-induced. Topics such as preparedness, mitigation and prevention of disasters will also be discussed. Prerequisites: GEOG 32-101, GEOL 27-114 or permission of instructor. (SS)

409 Independent Study in Geography (1-3 hours)

Offered only by special arrangement and with the consent of the instructor involved and the department chairperson. Requires written proposal at time of registration. Repeatable for additional experience.

410 Geographic Thought and Research Methods (3 hours)

An advanced course in geographic research, emphasizing data collection, analysis and presentation. The course will also examine the history of geographic thought in the U.S. Prerequisites: GEOG 32-201 and junior standing. (F)

415 Internship in Geography (1-6 hours)

Students register for internship credit with the permission of the instructor, department chairperson, and a written proposal at the time of registration. The internship packet available from the Department of Humanities and Social Sciences specifies

the requirements for earning academic credit for the internship. Students enroll in the appropriate number of credit hours for the workload of the internship. As a guideline, 160 work hours are worth 3 credit hours. Repeatable for additional experience. (F, S, SS)

441 Geography of Europe (3 hours)

An advanced regional course focused on the physical and human geography of Europe from the North Atlantic to the Urals. (S, odd years)

442 Geography of Asia (3 hours)

An advanced regional course focused on the physical and human geography of Asia (including Southeast, East, and South Asia). (S)

443 Geography of the Middle East (3 hours)

An advanced regional course focused on the physical and human geography of Southwest Asia and North Africa. (S, even years).

444 Geography of Africa (3 hours)

A comprehensive course study of the physical and cultural geography of the African continent. (S, even years)

445 Geography of Latin America (3 hours)

A systematic and regional approach to the physical and human geography of Latin America. The course emphasizes culture, politics, development and resource utilization. (F)

465 Introduction to Customized GIS (3 hours)

A course designed to apply state-of-the-art programming language to customize and automate GIS tasks. Customization of GIS provides users with personalized and specialized functions and interfaces while automation makes daily geoprocessing analysis easier and faster. Prerequisite: GEOG 32-365 (S)

499 Senior Seminar (1 hour)

A capstone course in geography. The course is designed to assess the student's ability to synthesize and evaluate geographic knowledge as it applies toward professional enhancement and/or further professional development in higher education. Prerequisites: Senior standing and completion of the Geography Core. (F, S)

500 Special Offerings (1-4 hours)

One time course offering in a timely area of geography. Repeatable for new topics.

501 Conservation of Natural Resources (3 hours)

A study of the earth's environment and resource limits as related to population growth and humankind's need to provide food, water, mineral resources and energy in order to survive and prosper. Emphasis is placed on developing an appreciation for the interconnectedness of the natural world and the potential consequences of disrupting those connections. (alt trimesters, alt. years)

510 Geographic Education: Themes and Materials (2 hours)

Designed for elementary or secondary teachers wishing to incorporate an instructional unit in geography in either the social science or science curriculum. (SS)

511 Special Topics in Geography (1-4 hours)

Will be offered according to student needs and interest. Each offering will be designed to incorporate the latest information pertaining to a timely topic in geography. Topics may include: applied geographic information systems, urban and regional planning, location analysis, geography of sport, etc. Prerequisites: 12 hours of geography and permission of instructor. Repeatable for new area of study to earn no more than six credits total. (F, S, SS)

520 Military Geography (3 hours)

An advanced course in geography that applies both physical and human spatial approaches to the study of military issues across the spectrum of conflict. (F, odd years)

521 Political Geography (3 hours)

An advanced course in geopolitics with emphasis on fundamental principles and their application to the major regions and nations of the world today. Prerequisite: Junior standing or permission of instructor. (F, even years)

522 Urban Geography (3 hours)

An advanced course offering an in-depth study of characteristics of cities and problems faced in urban environments. The course emphasizes how historical, social, and cultural factors shape cities. Prerequisite: Junior standing or permission of instructor. (S)

543 Applications of Remotely Sensed Data (3 hours)

This course integrates the use of remotely sensed information into a Geographic Information System (GIS) environment. Emphases are placed on understandings of image formats, sources on the

Internet, composite color display scheme, visual interpretation, and extracting data from images. (online, F, SS)

545 Principles of GIS (3 hours)

GIS is a powerful technology for managing and analyzing geographic data. This course provides students with the conceptual background including a rigorous study of fundamental geographic information systems principles, including the nature of spatial data, vector and raster data models, and key GIS analysis operations. It provides a strong foundation for advanced courses or work in GIS. (online, alt. trimesters, alt. years)

562 Digital Cartography and GeoVisualization (3 hours)

A computer aided cartography course surveying various mapping techniques with GIS software. This course emphasizes the quality of the map as a whole and individual map elements as well as introducing various techniques for visualizing geographic data. Prerequisite: GEOG 32-362. (S)

563 Digital Image Processing (3 hours)

An advanced remote sensing course focusing on techniques for displaying, processing, modifying, transforming, and analyzing remotely sensed images. This course stresses the ability to extract data and information from images. Prerequisite: GEOG 32-363. (F)

565 Advanced Geographic Information Systems (3 hours)

Builds on the techniques and concepts learned in Geographic Information Systems (GEOG 32-365). Stresses research and project design strategies and advanced analytical techniques using geographic information systems to solve spatial problems. Prerequisite: GEOG 32-365. (F, S)

580 Spatial Analysis and Geostatistics (3 hours)

Designed to make the student familiar with the analysis and statistical tools used by geographers. Covers the fundamental aspects of geostatistics that are used in research and business environments. (online, alt. trimesters, alt. years)

History / 33**155 America—A Historical Survey (3 hours)**

A general education course that will survey the scope of American history through selected chronologically-arranged topics. (F, S, SS)

225 Ethnicity in America (3 hours)

Focuses on the historical development of ethnic and racial minorities in America, their inclusion and exclusion, from politics and economy to the mainstream U.S. culture of the middle class. (F, alt. years)

301 The Historian's Craft and Its Uses (2 hours)

This course is designed to introduce the student to the tools of the craft; to research, to writing and to critical thinking, as well as to the product of the craft—the uses of history—both academic and public, with grant writing experience. (F, S)

310 France Since Louis XIV (3 hours)

An advanced survey of French history from the reign of Louis XIV to the European Community. (F, alt. years)

312 History of Russia to 1914 (3 hours)

This course constitutes a survey of Russian history from the Medieval state of Kiev to the Revolution of 1905. (F, alt. years)

320 Public History (3 hours)

Course is designed to introduce the undergraduate student to the field of public history. It will introduce the student to historic preservation, museum management, archives and cultural resource management. (S alt. years)

344 History of American Folklife (3 hours)

A course based on (a) the nature and content of American folklife and folklore, and (b) a practical experience in collecting folklife artifacts of north-west Missouri. (S, alt. years)

350 American Military History (3 hours)

A course in the military history of the United States and the relationships of society, politics, diplomacy and economics to the military. (S)

360 The American Woman (3 hours)

A survey of the changing roles of women, the changing perception of what women should be and the development of feminism in the United States since settlement. (F, alt. years)

365 American Religious History (3 hours)

A survey of the diversity of religion in the U.S. focusing on the ways in which American life (politics, economics, foreign policy, social reform) has been influenced by religious movements and ideas in the past, and the challenges offered today by religious pluralism. (F, alt. years)

370 History of the Near and Middle East (3 hours)

A survey of the history of the Near and Middle East since the time of Mohammed. (S alt. years)

375 History of Latin America (3 hours)

A brief survey of the history of Latin America designed for the general student, foreign language majors and business administration majors. (S, alt. years)

380 Humanitarian Crises of the Modern World (3 hours)

This course examines both the history and evolution of genocide and the changes in humanitarian responses in the operating environment. This course will cover a broad range of subjects including: the normative frameworks of humanitarian action—international humanitarian law, humanitarian principles, and codes of conduct; the impact of conflicts and the “global war on terror” on populations and humanitarian action; methodologies developed to improve the effectiveness and accountability of humanitarian action; the evolving structure of the international humanitarian system.

386 The Pacific Rim (3 hours)

The course examines the history of East Asian development with emphasis on the nineteenth and twentieth centuries. Following an introduction to the origins of Chinese, Japanese, Korean and South-east Asian cultures, the course assesses conflict along the Pacific rim driven by historically rooted tensions and especially European influence. (S)

389 Early Modern Europe: The West Meets the World (3 hours)

An in-depth examination of the society, culture, and international expansion of Europe from the mid-16th to the mid-18th century, a bloody and often unstable era, but one in which art and science flourished and the world economy and modern political systems were created. (S, alt. years)

401 Senior Seminar (1 hour)

A supervised program demonstrating the use of historical research methods with a formal presentation. For senior history/social science majors. Prerequisite: HIST 33-301. (F, S)

450 Homeland Security and Defense (3 hours)

A course in the history of homeland security and defense in the United States and the relationships of society, politics, diplomacy, and economics to the topic since 1915. (S)

**484 U.S. Economic System—
A Comparative History (3 hours)**

A study of the historical development and an analysis of U.S. economic thought and institutions, and their role as a major force in world economic systems. (F)

**490 Advanced Studies in History
(3 hours)**

The content of this course will vary when offered. Selected areas of history and historical problems will be given. May be repeated once with permission of advisor for new topics.

**499 Independent Study in History
(1-3 hours)**

Offered by special arrangement and petition approved by the student's advisor, the instructor involved and the department chairperson. Repeatable for new topic areas.

500 Special Offerings (1-3 hours)

Courses which are offered on only one occasion or variable issue-oriented courses which have the content described in the title. Credit and prerequisites as announced. Repeatable for new topics.

503 The Middle Ages (3 hours)

A survey of the political and cultural history of Europe from the fall of the Roman Empire to the Renaissance. (F, alt. years)

**506 The Renaissance and Reformation
(3 hours)**

An advanced course which presents an in-depth study of the eras of Renaissance and Reformation in Western Europe. (S, alt. years)

513 Modern Russia (3 hours)

After a brief introduction this course will consist of a detailed study of the Bolshevik Revolution in Russia, policies and programs of the Communist Party and Government since 1917, and both domestic and international affairs. (F, alt. years)

**517 England: From Stonehenge to
Versailles (3 hours)**

Course is designed as a survey of English history from the earliest inhabitants to the treaty of Versailles. (F)

**521 History of Germany Since 1648
(3 hours)**

An advanced course dealing with the history of modern Germany. (S, alt. years)

**524 Colony to Nation 1607-1828
(3 hours)**

A study of the social, economic, intellectual, cultural and political institutions that arose and developed from English colony to a self-sustaining nation. Emphasis is placed on the colonial experience of Europeans, Africans and Indians continuing through the constitutional period and the development of the new nation. (S)

525 United States Since 1945 (3 hours)

An advanced course which will look at the development of the contemporary United States through an examination of foreign affairs as well as selected social movements within the country. (S)

**526 Constitutional History of the United
States (3 hours)**

An advanced course in American history which deals with the constitutional aspects of our development with considerable reference to constitutional law and interpretation. Recommended particularly for pre-law students and all students planning to teach American Government. (F alt. years)

**534 The Civil War and Reconstruction
(3 hours)**

An advanced course in American history which analyzes the conflicting theories and issues of the antebellum period, interprets the coming of the Civil War, the conduct of the government, military operations and foreign relations during the war and problems of the Reconstruction Period. (F)

542 American Ideas (3 hours)

A study of political, religious, social and other aspects of American life. Among the issues to be emphasized are Puritanism, the Enlightenment, the Federalist/Anti-Federalist controversy, 19th century democratic ideas, Social Darwinism, the progressive era, Humanism, New Deal thought, the New Conservatism of the Fifties and the New Left movement. (S, alt. years)

556 Roots of U.S. Reform (3 hours)

Industrialization, Populism and Progressivism as the basis of reform then continuing with the culmination of Reform in the New Deal. (F, alt. years)

562 The History of Missouri (3 hours)

A brief survey of the Spanish and French rule followed by a study of the history and development of Missouri from the acquisition of the territory by the United States to the present day. Special emphasis is placed on its historical significance, important figures, government, constitution, current problems and local history. (S, alt. years)

565 The History of American Foreign Relations (3 hours)

An introduction to the history of U.S. foreign policy. This course will concentrate on the key episodes in U. S. foreign policy with an emphasis on the assumptions that formed the context for power relationships in the European, Asian and American worlds from the time of American independence to the present. (S, alt. years)

582 Frontiers in American History (3 hours)

A study of America's territorial expansion from the colonial period to the close of the 19th century, including the impact on the nation's people, institutions, policies and ideas. Special emphasis will be devoted to the conflict between settlers and native people. (SS, alt. years)

589 Europe in the Age of Nationalism (3 hours)

An examination of the impact of nationalism upon Europe since the French Revolution. (S, alt. years)

590 Historical Resources Internship (1-5 hours)

On-site activity in libraries, museums, historic sites and parks. Credit will vary according to time spent and type of activity. Instructor's permission and prearrangement are required. Maximum credit to be earned is five semester hours. Repeatable for new experiences.

Philosophy / 39**171 Introduction to Philosophy (3 hours)**

Basic problems and ideas encountered in the moral and intellectual life of humankind are analyzed in a systematic, rather than an historical manner. Attention is devoted to the philosophies and theories of knowledge, metaphysics, religion, morals, politics and science. (F, S, SS)

273 Introduction to Logic (3 hours)

A consideration of the principal techniques of traditional and symbolic logic—syllogistic logic, sentential logic, and predicate logic—and their relationship to language. (F, alt. years)

274 Introduction to Ethics: Historical/Theoretical Ethics (3 hours)

An examination of the fundamental concepts, principles and major theoretical approaches of ethics used to determine the moral demands of

human conduct with applications to important ethical questions of contemporary interests. This course takes a historical/theoretical approach to ethics. (S, alt. years; SS alt. years)

275 Introduction to Ethics: Professional Ethics (3 hours)

An examination of the fundamental concepts, principles and major theoretical approaches of ethics used to determine the moral demands of human conduct with applications to ethical questions of contemporary interests. This course focuses on professional ethics. (F, S)

276 Introduction to Ethics: Bio-Medical Ethics (3 hours)

An examination of the fundamental concepts, principles and major theoretical approaches of ethics used to determine the moral demands of human conduct with applications to ethical questions of contemporary interests. This course focuses on bio-medical ethics. (F, S)

374 Philosophy of Religion (3 hours)

Philosophical inquiry into the nature and function of religion with special emphasis on the problems of the existence and essence of deity. Prerequisite: PHIL 39-171 or consent of instructor. (S, alt. years)

376 History of Ancient and Medieval Philosophy (3 hours)

A survey of the main strands of Western philosophy from the beginnings in Ancient Greece and Rome to the dawn of the Modern era. Prerequisite: PHIL 39-171 or consent of instructor. (F, alt. years)

377 History of Modern and Contemporary Philosophy (3 hours)

A survey of the main strands of Western philosophy from the rise of Modernism to the present day. Prerequisite: PHIL 39-171 or consent of instructor. (S, alt. years)

401 Senior Seminar (1 hour)

Intensive study of a philosophical issue of the student's choice, in consultation with a faculty advisor, concluding with a research paper and a formal presentation. Prerequisites: PHIL 39-171 and majors with 21 hours in philosophy. (F, S)

473 Philosophical Anthropology (3 hours)

A study of various philosophical understandings of the nature and functioning of the human mind and their implications. Prerequisite: PHIL 39-171 or consent of instructor. (S, alt. years)

474 Philosophy of the Sciences (3 hours)

An introduction to the fundamental concepts, methods, and models of science, and how they shape the content of the various scientific disciplines. Prerequisite: PHIL 39-171 or consent of instructor. (S, alt. years)

475 Aesthetics (3 hours)

A consideration of the major concepts and theories of aesthetics, dealing with questions concerning the value of art, the nature of artistic creation and the appropriate criteria for the evaluation of artistic works. Prerequisite: PHIL 39-171 or consent of instructor. (F, alt. years)

500 Special Offerings (1-3 hours)

Courses which are offered on only one occasion or variable issue-oriented courses which have the content described in the title. Credit and prerequisites as announced. Repeatable for new topics.

570 Metaphysics (3 hours)

A study of the nature of reality, including a consideration of questions concerning what constitutes the unity of a thing, the nature of causation, the relationship between mind and matter and the nature of God. Prerequisite: PHIL 39-171 or consent of instructor. (S, alt. years)

571 Epistemology (3 hours)

An inquiry into the nature and function of knowledge claims, the validity of induction and deduction, theories of justification and truth. Prerequisite: PHIL 39-171 or consent of instructor. (S, alt. years)

579 Independent Study in Philosophy (1-3 hours)

Investigation into special problems in philosophy. Offered only by special arrangement. For majors and minors only. Repeatable for new topics.

590 Advanced Topics (1-3 hours)

This course covers a specialized topic in the history of philosophy or current issues and trends in philosophy as announced. Course may be repeated for a total of six hours provided that the topics are not the same. Prerequisites: PHIL 39-171 and 15 hours in philosophy or consent of instructor.

Political Science / 34**102 Introduction to American Government and Politics (3 hours)**

Attention is directed toward the fundamental principles, institutions, and problems of American

Constitutional Government—national, state, and local. Particular stress is given to the Missouri Constitution, as well as to national Constitutional growth. (F, S, SS)

105 The African World (3 hours)

An introduction into Africa's rich histories and cultures, as well as its complex social, economic and political realities. (F, alt. years)

201 Missouri Politics (1 hour)

The provisions and principles of the Constitution of the State of Missouri will be examined. (F, S)

203 State and Local Government (3 hours)

A study of the functions and structures of state, county and city governments. (F, S)

205 Introduction to Criminal Justice (3 hours)

A study of the agencies and processes involved in the criminal justice system: legislature, the police, the prosecutor, the public defender, the courts and corrections. (F)

301 Parties and Interest Groups (3 hours)

This course will examine, compare and contrast the development, organization and function of both political parties and interest groups in American politics within the context of elections at all levels of government. (S)

302 The American Presidency (3 hours)

This course will encompass the political, legal, organizational and policy-making aspects of the American presidency. (S)

303 The American Congress (3 hours)

This course will examine the political and institutional development of Congress. The study will span both the formal legal powers and the internal dynamics of this major national policy-making institution. (F)

305 Global Events and Trends (3 hours)

This course is structured to give students a better understanding of global events and trends. Among other topics the course addresses the illicit trade in people, guns and drugs, the political economy of religions, and the politics surrounding emerging technologies. Course topics change from semester to semester, depending on what is happening in the world. (F)

310 Comparative Government (3 hours)

A study of the various types of political and governmental structures operative in the contemporary world as well as the various types of political functions performed within national systems. Emphasis is placed on the comparative study of national political systems. (F)

311 Practicum in Political Science (1-2 hours)

A course designed to provide structure and academic focus to non-traditional work by students within the curricular structure of the department. Activities given credit under this course must be relevant to the student course of study, approved by the chairperson and mentored by a faculty member. A student may accumulate no more than two hours of credit for this course. Repeatable for new experiences.

315 Juvenile Justice System in America (3 hours)

An investigation of the American criminal justice system's response to socially dysfunctional youth: prevention, diversion, law enforcement, the courts, probation, parole, schools, correctional institutions and alternative placement. (S)

320 Propaganda in the Movies (3 hours)

An investigation into the definition and use of motion pictures as a means of spreading political propaganda. Feature movies, cartoons and documentaries will be studied to illustrate the varied themes used as propaganda in both domestic and international contexts. The course studies the environment within which the movies were made and the techniques used by the moviemakers that enhance their value as propaganda. (S)

332 Principles of Public Administration (3 hours)

A study of decision-making processes in public organizations. (F)

338 Courts and the Rights of the Accused (3 hours)

Examines the American judicial system as applied to individuals accused of crimes against the state. (F)

340 Law and Politics (3 hours)

An introduction to the American legal system, its functions, constituting elements, and role in our democratic system. (F)

345 Women and American Politics (3 hours)

A study of women's role in American politics. This course will examine women's struggle for suffrage and equal rights, women's participation in the electoral process and political institutions, and the impact of public policy on women. (S, alt. years)

365 Africa in Popular Media (3 hours)

How do media reflect and shape realities, impressions and imagery of "Africa"? The course uses audio, visual and print media from within and outside the continent to explore this question. (S)

401 News Media and Politics (3 hours)

An examination of the theories and studies of how public opinion is formed, measured and related to the behavior of public officials. The final third of the course focuses on the politics of the relations between public officials and journalists during the news-gathering process. (F)

421 International Conflict Resolution (3 hours)

This course focuses on the principles of international relations, illustrated through the use of international conflict resolution. (S)

425 Transnational Politics (3 hours)

An investigation of the structures and functions of international organizations of a political and economic nature. This is an interdisciplinary course that emphasizes the interdependency of international political and economic organizations of a governmental and non-governmental nature. (S)

434 Modern Organizational Theory (3 hours)

An examination of the evolution of organizational theory in the public sector. Emphasis will be placed upon the public organization's role in society, as well as theory of public management, organizational goals, structure and behavior. (F)

436 Constitutional Law (3 hours)

Examines the Supreme Court's role in dealing with basic problems of constitutional Law. Topics covered include the powers of the three branches of the national government, federal-state power relations, Congressional power over commerce, equal protection of the laws, and the conduct of elections. (F)

438 Civil Liberties (3 hours)

Investigates the legal and political context influencing the exercise of fundamental rights. It is a study of the lines that must be drawn by a democratic

society as it attempts to reconcile individual freedom with the rights of the community. In so doing it examines the way in which the U.S. Constitution, as judicially interpreted, has shaped the American concepts of civil liberties (outside the realm of criminal law) and civil rights. (S)

439 Federalism and Intergovernmental Relations (3 hours)

Investigation and analysis of the American federal system, including its constitutional, political and administrative characteristics. (S)

440 Early Western Political Thought (3 hours)

Main currents of political thought in their historical setting from Plato to the 17th century, with a critical evaluation of those elements of continuing worth. (S, alt. years)

441 Modern Western Political Thought (3 hours)

Main currents of political thought from the 17th century to the present, with a critical evaluation of the elements of continuing worth. (S, alt. years)

490 Senior Seminar (1 hour)

A one hour course designed to give pre-graduation students the opportunity to 1) integrate diverse elements of the substance of the major in a meaningful way; and 2) to review key skills targeted by the major and departmental mentor. (F, S)

495 Field Problems in Public Administration (3-8 hours)

A supervised internship in an approved local, state or federal governmental agency including the preparation of a formal written report. Award of credit hours will vary according to the nature of the project undertaken. Repeatable for new experiences. (F, S, SS)

499 Independent Study in Political Science (1-3 hours)

Offered only by special arrangement with the consent of the instructor involved and the department chairperson. Repeatable for new topics. (F, S)

502 Public Policy (3 hours)

An intensive, advanced course in American policy making processes and problems of policy development at the national level. The focus is on the analysis of current public policies and their consequences. (S)

511 Special Topics in Political Science (1-3 hours)

A variable topics course designed to meet curricular and student needs not fulfilled by the rest of the political science curriculum. Content of the course will be described in the title. The course may be repeated for new topics to earn no more than six credit hours in total, subject to the approval of the instructor.

Social Science / 36

301 Introduction to Disaster Response and Recovery (3 hours)

This course provides a broad introduction to the field of emergency management. It focuses on the different types of hazards, the individuals and agencies involved in response and recovery operations, human behaviors in disaster situations, hazard detection, warning, evacuation and sheltering, care for the injured, dead, and distressed, management of media relations, donations and volunteers, methods for facilitating recovery and mitigation, and the role of technology. (S)

302 Principles of Humanitarian Relief (3 hours)

An examination of the principles, practitioners, and practices of humanitarianism since 1863 with special emphasis on the United States. This course provides students with historical, theoretical, and practical understanding of humanitarianism in the modern world. (F)

480 Methods in Secondary School Social Sciences (3 hours)

A course for prospective teachers in the social sciences stressing materials, methods and techniques in teaching social studies in terms of the needs and problems of secondary education. This course must be taken before student teaching. (F)

490 Internship in Comprehensive Crisis Response (1-3 hours)

A supervised internship in an approved experience in crisis response management including preparation of a formal written report. Credit will vary according to the time spent and type of activity. Instructor's permission and prearrangement required. Repeatable for new experiences.

491 Field Experience in Crisis Response (1-3 hours)

A supervised field experience in an approved exercise in crisis response management including preparation of a formal written report. Credit will vary according to the time spent and type of activity. Instructor's permission and prearrangement are required. Repeatable for new experiences.

500 Special Offerings (1-3 hours)

Courses which are offered on only one occasion or variable issue-oriented course which have the content described in the title. Credit and prerequisites as announced. Repeatable for new topics.

Department of Mathematics, Computer Science and Information Systems

Chairperson: Phillip Heeler

Faculty: Joni Adkins, Christine Benson, Judy Clark, Russell Euler, Kurtis Fink, Brian Haile, Carolyn Hardy, Christina Heintz, Lynda Hollingsworth, Diana Linville, Cheryl Gregorson Malm, Gary McDonald, Merry McDonald, Michael Rogers, Jawad Sadek, Matthew Schieber, Mary Shepherd, Carol Spradling, Csilla Tasi, David Vlieger, Jennifer Wall, Denise Weiss, Han Yu, Nancy Zeliff

Statement of Mission

The mission of the Department of Mathematics, Computer Science and Information Systems is to provide programs through which students learn to solve problems and gain professional competence in the areas of mathematics, computer science, and information systems. In addition to courses supporting our majors, we offer general education and service courses that reflect the pivotal role of mathematics, computer science and information systems in all disciplines. The goal of each major is to provide a sufficiently focused curriculum to enable each student to compete successfully in the job market, while also providing sufficient breadth to facilitate lifelong learning, whether that learning continues through formal graduate study or on-the-job experiences. Each major offers the student opportunities to obtain thorough knowledge of the field of study, develop the professional competencies to communicate that knowledge, and acquire a value system to make sound decisions regarding the issues that confront professionals in the work place.

DEGREE PROGRAMS

The Department of Mathematics, Computer Science, and Information Systems offers programs leading to the Bachelor of Arts degree in Mathematics and the Bachelor of Science degrees in the areas of mathematics, computer science, interactive digital media, management information systems and business technology. For students interested in teaching mathematics or business and economics, in grades 9-12, the department offers the Bachelor of Science in Education degree with majors in mathematics education and business education. In addition, there are minors in business education (as well as non-degree business technology and information systems programs), computer applications, computer networking, computer science, data management, geographic information systems, interactive digital media, marketing and cooperative education, mathematics education (grades 9-12), mathematics education (middle school), statistics, and systems management.

Students in the mathematics major develop their abilities to interpret, solve, and explain problems. Through a balanced selection of coursework from both pure and applied mathematics students expand their understanding of how data analysis and mathematical modeling impact aspects of contemporary society. Education majors also learn how to help students understand

these aspects of mathematics. Students who incorporate preparatory work in actuarial science into a mathematics major (with possible economics minor) can choose courses leading to VEE credit from the Society of Actuaries in Economics, Corporate Finance, and Applied Statistical Methods, as well as courses preparing them for three actuarial exams (administered by the Society of Actuaries).

The focus of the computer science major is software design and implementation. The program also provides a solid background in the fundamental principles of computer networks, computer organization, database systems, operating systems and programming languages.

Interactive digital media students will possess cross-disciplinary knowledge and skills in areas that deal with visual aesthetic understanding and communication, integrated with technological knowledge. Students in the computer science programming concentration will design and implement computer programs, and explore the additional topics of computer organization, networking, database development and other computer technologies.

Students in the management information systems program develop a solid, interrelated combination of business knowledge and applied computer technology skills. This combination makes graduates suited for a variety of information technology careers.

Business technology and business education students develop technology and computer-related skills as well as interpersonal, decision making, and analytical skills. Graduates will effectively assist organizations with business, computer, and technology operations. Additionally, education majors learn to motivate students to develop these same skills and attributes.

In all of these programs, students learn fundamental concepts while engaging in activities similar to those encountered in the workplace. Small classes taught by full-time faculty using active learning instructional paradigms focus on the student's learning process, with the teacher's role that of guide, facilitator and mentor.

All of these programs are supported by a wide variety of computing facilities ranging from local area networks of microcomputers to campus-wide access to an international network of computing services.

Test-Out Policy

Undergraduate students may test out of certain lower division courses in mathematics. Examinations are available each trimester. See the department chairperson for courses that are available for test-out.

Students may challenge their placement in MATH 17-090 Math Skills by taking combined modules test and showing mastery (80% proficiency) in each of the 10 modules of instruction. Students will be required to enroll in 17-090 Math Skills to complete instruction in those modules for which proficiency is not achieved. Students should contact the department for additional details.

Developmental Mathematics

MATH 17-090/091 Math Skills is required of students with an ACT Mathematics score of 20 or below. Students must achieve mastery (80%) in each of 10 modules of instruction prior to enrolling in a college-level mathematics course. Evidence of mastery may be shown through successful completion of each module in the 17-090/091 course or through successful completion of a proctored proficiency examination indicating 80% mastery in each of the 10 modules of instruction.

Advanced Standing Requirement

In order to achieve advanced standing in the Mathematics, a student must have a grade of “C” or better in each of the courses MATH 17-120 Calculus I, MATH 17-121 Calculus II and MATH 17-215 Discrete Mathematics. As long as proper prerequisites are satisfied, all mathematics courses are open to enrollment, regardless of whether or not advanced standing has been granted. In exceptional cases, a student who has not met the criteria may appeal to a departmental committee. The committee will hear the appeal and decide whether advanced standing should be granted.

To achieve Advanced Standing in Computer Science, the student must:

1. Attain at least a cumulative 2.00 GPA and a 2.00 GPA in all major courses
2. Attain a score at level 1 or higher on all areas of the Academic Profile
3. Attain at least a grade of “C” or better in each of the courses listed below:

MATH 17-215 Discrete Mathematics	4
CSIS 44-130 Computers and Information Technology	3
CSIS 44-141 Computer Programming I	3
CSIS 44-241 Computer Programming II	3
CSIS 44-242 Data and File Structures	3

Total **16**

To achieve Advanced Standing in Management Information Systems, the student must:

1. Attain at least a cumulative 2.00 GPA and a 2.00 GPA in all major courses
2. Attain a score at level 1 or higher on all areas of the Academic Profile

To achieve Advanced Standing in Business Education or Business Technology, the student must:

1. Receive a “C” or better for each required course taken in the area of Computer Science or Information Systems
2. Attain a score at level 1 or higher on all areas of the Academic Profile

Business Education majors and minors must also meet the requirements for Admittance to Teacher Education as specified on page 316 of this catalog.

Students who have met this Advanced Standing requirement are official members of the department and can pursue any major course, assuming the prerequisites have been met.

NOTE: Students who have not successfully achieved Advanced Standing prior to becoming an academic senior (90 or more academic credit hours) will be prohibited from enrolling in any major course until they have achieved Advanced Standing. In exceptional cases, a student not meeting the “90-hour rule” may appeal to the department’s Advanced Standing Committee.

Senior Assessment

For each of the majors in the Computer Science or Information Systems area, a senior-level major field assessment must be completed by each student.

Mathematics / 17

Core Requirements for Majors in Mathematics and Mathematics Education

To achieve the common objectives, all majors in Mathematics are required to complete a common core of 26 semester hours and participate in senior assessment. The area’s common core requirements are:

*MATH 17-120 Calculus I 4

MATH 17-121 Calculus II	4
MATH 17-215 Discrete Mathematics	4
MATH 17-230 Probability and Statistics	3
MATH 17-311 Elementary Linear Algebra	3
MATH 17-321 Multivariate Calculus	4
MATH 17-496 Senior Paper	1
**CSIS 44-149 Scientific Computing	3

Total Hours 26

*This course counts as a General Education course as well as a course in the major area.

**An institutional requirement for Information Technology is a prerequisite course.

MAJORS

Comprehensive Major in Mathematics, 54 hours: B.A., B.S.—No Minor Required

CIP: 270101

Required Courses	Semester Hours
Core Requirements	26
MATH 17-316 General Statistics II	3
MATH 17-390 Logic of the Exact Sciences	3
MATH 17-415 Introduction to Abstract Algebra	3
MATH 17-421 Intermediate Analysis	3
MATH 17-492 Seminar in Readings in Mathematics Literature	1
Approved departmental electives	9
Approved electives in a quantitative field (physics, chemistry, economics, computer science)	6

Comprehensive Major in Mathematics Education, 48 hours: B.S.Ed.—No Minor Required (Certifies Grades 9-12)

CIP: 131311

Required Courses	Semester Hours
Core Requirements	26
MATH 17-280 Methods in Teaching with Technology	3
MATH 17-351 College Geometry	3
MATH 17-390 Logic of the Exact Sciences	3
MATH 17-415 Introduction to Abstract Algebra	3
MATH 17-421 Intermediate Analysis	3
MATH 17-490 Seminar in History of Mathematics	1
Approved departmental electives	6

MATH 17-580 Methods in Secondary School Mathematics is the required subject field methods course.

This major meets Missouri certification standards.

MINORS

Minor in Mathematical Sciences, 24 hours

CIP: 270101

Required Courses	Semester Hours
*MATH 17-120 Calculus I	4
MATH 17-121 Calculus II	4
MATH 17-215 Discrete Mathematics	4
MATH 17-230 Probability and Statistics	3
**CSIS 44-149 Scientific Computing	3
Electives from both mathematics and statistics at the 300, 400, or 500 levels, to total 24 hours	6

*This course counts as a General Education course as well as a course in the minor area.

**An institutional requirement for Information Technology is a prerequisite course.

Minor in Statistics, 24 hours

CIP: 270501

Required Courses	Semester Hours
MATH 17-114 General Statistics I OR	
MATH 17-230 Probability and Statistics	3
MATH 17-316 General Statistics II	3
*CSIS 44-149 Scientific Computing	3
Electives from mathematics or statistics, with at least 2 semester hours in statistics, to total 24 hours	15

*An institutional requirement for Information Technology is a prerequisite course.

Minor in Mathematics Education, 23 hours: B.S.Ed.

CIP: 131311

Required Courses	Semester Hours
*MATH 17-171 Fundamentals of Mathematics	3
MATH 17-114 General Statistics I	3
MATH 17-117 Precalculus	4
MATH 17-120 Calculus I	4
MATH 17-280 Methods in Teaching with Technology	3
MATH 17-371 Algebra & Geometry for Elementary & Middle School Teachers	3
MATH 17-473 Advanced Topics for Middle School Teachers	3

23 Hour Concentration: The required courses total 23 hours. This minor will meet the concentration requirements for the Middle School Major.

MATH 17-582 Mathematical Methods for Middle School Teachers is the required subject field methods course.

*This course counts as a General Education course as well as a course in the minor area.

Minor in Mathematics Education, 30 hours: B.S.Ed., Secondary Program (Certifies Grades 9-12)

CIP: 131311

Required Courses	Semester Hours
*MATH 17-120 Calculus I	4
MATH 17-121 Calculus II	4
MATH 17-215 Discrete Mathematics	4
MATH 17-280 Methods in Teaching with Technology	3
MATH 17-351 College Geometry OR	
MATH 17-555 Non-Euclidean Geometry	3
**CSIS 44-149 Scientific Computing	3
Approved electives to total 30 hours, chosen from the following:	9
MATH 17-114 General Statistics I (3) OR	
MATH 17-230 Probability and Statistics (3)	
MATH 17-321 Multivariate Calculus (4)	
MATH 17-311 Elementary Linear Algebra (3)	
MATH 17-415 Introduction to Abstract Algebra (3)	
MATH 17-421 Intermediate Analysis (3)	
MATH 17-518 Number Theory (3)	
A geometry course not used as the required course	

In addition to the 30 hours, MATH 17-580 Methods in Secondary School Mathematics must be completed as a degree requirement.

*Requires a knowledge of trigonometry. MATH 17-119 Trigonometry may not be counted as a part of the 30 hours required for this minor.

*This course counts as a General Education course as well as a course in the minor area.

**An institutional requirement for information technology is a prerequisite course.

With proper choice of electives, this minor meets minimum Missouri certification standards for grades 9-12. Students should obtain a minor advisor early in the program.

Computer Science and Information Systems / 44

MAJORS

Comprehensive Major in Computer Science: B.S.—No Minor Required

CIP: 110101

Directed Institutional Requirement

CSIS 44-130 Computers and Information Technology	3
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Required Courses

	Semester Hours
CSIS 44-141 Computer Programming I	3
CSIS 44-241 Computer Programming II	3
CSIS 44-242 Data and File Structures	3

CSIS 44-296 Professional Development Seminar	3
CSIS 44-345 Computer Organization	3
CSIS 44-349 Survey of Algorithms	3
CSIS 44-356 CCNA: Network Fundamentals	3
CSIS 44-460 Database Systems	3
CSIS 44-525 Theory and Implementation of Programming Languages	3
CSIS 44-550 Operating Systems	3
CSIS 44-561 Software Engineering I	3
CSIS 44-562 Software Engineering II	3

Computer Science Options**Choose 9 hours from the following electives:**

CSIS 44-325 Programming Languages	3
CSIS 44-543 Mobile Computing	3
CSIS 44-555 Network Security	3
CSIS 44-560 Advanced Topics in Database Systems	3
CSIS 44-563 Developing Web Applications and Services	3

Science Options

*PHYS 25-110/111 and 25-112/113 General Physics I, II, and Laboratories OR 25-120/121 and 25-230/231 Fund. of Classical Physics I, II, and Labs OR CHEM 24-114/115 and 24-116/117 General Chemistry I, II, and Labs	8-10
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Math Option A: (15 hours)

Directed General Education: MATH 17-117 Precalculus (4)
MATH 17-215 Discrete Mathematics (4)
MATH 17-120 Calculus I (4)
MATH 17-230 Probability and Statistics (3) OR MATH 17-114 General Statistics I (3)

Math Option B: (13 hours)

Directed General Education: MATH 17-118 College Algebra (3)
MATH 17-215 Discrete Mathematics (4)
MATH 17-114 General Statistics I (3)
MATH 17-316 General Statistics II (3)

Total Major Requirements****63-66**

*Cannot be used to fulfill any General Education requirement.

** Does not include Directed General Education and Institutional Requirement.

NOTE: All required and elective computer science courses must be passed with a grade of "C" or better. A major field assessment is required of all senior year students majoring in computer science.

Comprehensive Major in Interactive Digital Media: 61 hours, B.S.–No Minor Required

CIP: 110801

Computer Science Programming Concentration

This is an interdisciplinary major in conjunction with the Department of Fine and Performing Arts, the Department of Mathematics, Computer Science and Information Systems, and the Department of Communication and Mass Media. Three concentrations are available for this major: Computer Science Programming (Mathematics, Computer Science and Information Systems), New Media (Communication and Mass Media), and Visual Imaging (Fine and Performing Arts).

Directed Institutional Requirement

CSIS 44-130 Computers and Information Technology	3
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Required Core Courses**Semester Hours**

ART 13-191 Introduction to Design	3
ART 13-207 Digital Photography	3
ART 13-292 Introduction to Creative Electronic Imaging	3
ART 13-294 Letter Forms and Graphic Design	3
MCOM 20-120 Introduction to Mass Media	3
MCOM 20-243 Media Design I	3
MCOM 20-303 Introduction to Web Publishing	3
MCOM 20-314 Communication Law and Ethics	3
CSIS 44-143 Script Programming I	3
CSIS 44-333 Web Development	3
CSIS 44-335 Script Programming II	3
MKTG 55-330 Principles of Marketing	3

Total Core Requirements**36****Required Courses for Concentration in Computer Science Programming:**

CSIS 44-141 Computer Programming I	3
CSIS 44-241 Computer Programming II	3
CSIS 44-242 Data and File Structures	3
CSIS 44-345 Computer Organization	3
CSIS 44-356 CCNA: Network Fundamentals	3
CSIS 44-415 Interactive Digital Media Seminar	1
CSIS 44-460 Database Systems	3
CSIS 44-563 Developing Web Applications and Services	3

Choose one from the following electives:

CSIS 44-325 Programming Languages (3)	3
CSIS 44-349 Survey of Algorithms (3)	3
CSIS 44-525 Theory and Implementation of Programming Languages (3)	3
CSIS 44-540 Visual Application Development (3)	3
CSIS 44-543 Mobile Computing (3)	3
CSIS 44-550 Operating Systems (3)	3
CSIS 44-560 Advanced Topics in Database Systems (3)	3
CSIS 44-561 Software Engineering I (3)	3
CSIS 44-590 Special Topics (3)	3

Total Concentration Hours**25****Total Major Requirements****61**

NOTE: All required and elective computer science courses must be passed with a grade of "C" or better.

Concentration in New Media – see the Department of Communication and Mass Media

Concentration in Visual Imaging – see the Department of Fine and Performing Arts

Comprehensive Major in Management Information Systems: B.S.–No Minor Required

CIP: 521201

Students choosing a Comprehensive Major in Management Information Systems must take the Common Professional Component courses outlined on page 252 plus fulfill the following major requirements:

Required Courses	Semester Hours
CSIS 44-141 Computer Programming I	3
CSIS 44-241 Computer Programming II	3
CSIS 44-312 Information Technology Hardware and Software	3
CSIS 44-356 CCNA: Network Fundamentals	3
CSIS 44-411 Systems Analysis and Design	3
CSIS 44-418 Information Technology Project Management	3
CSIS 44-460 Database Systems	3
Choose one from the following electives:	3
CSIS 44-242 Data and File Structures (3)	
CSIS 44-333 Web Development (3)	
CSIS 44-358 CCNA: Routing Protocols and Concepts (3)	
CSIS 44-555 Network Security (3)	
CSIS 44-560 Advanced Topics in Database Systems (3)	
CSIS 44-563 Developing Web Applications and Services (3)	

Total Major Requirements **24**

NOTE: Grade Requirement: Students must earn a grade of “C” or better in each of the CS and IS and Common Professional Component courses in this major. A major field assessment is required of all senior year students majoring in MIS.

Comprehensive Major in Business Technology: B.S.–No Minor Required

CIP: 520401

Students choosing a Comprehensive Major in Business Technology must take the Common Professional Component courses outlined on page 252 plus fulfill the following major requirements:

Required Courses	Semester Hours
CSIS 44-211 Spreadsheet Applications	1
CSIS 44-212 Advanced Spreadsheets and Charting	1
CSIS 44-312 Information Technology Hardware and Software	3
CSIS 44-320 Advanced Word Processing	1
CSIS 44-330 Presentation Graphics	1
CSIS 44-340 Digital Media	1
- CSIS 44-343 Digital Communications	3
CSIS 44-344 Desktop Publishing	3
CSIS 44-346 Database Applications	1
Advisor-approved elective	3

Choose one of the following emphasis areas for six hours **6**

Interactive Digital Media Emphasis

- CSIS 44-143 Script Programming I (3)
- CSIS 44-333 Web Development (3)

OR

ACBSP accredited program

Management Emphasis

MGMT 54-314 Human Resource Management (3)

MGMT 54-316 Organizational Behavior and Theory (3)

OR

Networking Emphasis

CSIS 44-356 CCNA: Networking Fundamentals (3)

CSIS 44-358 CCNA: Routing Protocols and Concepts (3)

Total Major Requirements

24

**# Major in Business Education: B.S.Ed., Secondary Program—
No Minor Required (Certifies Grades 9-12)**

CIP: 131303

Students choosing a Major in Business Education must take the Common Professional Component courses totaling 48 hours outlined on page 252, plus fulfill the following major requirements:

Required Courses	Semester Hours
CSIS 44-320 Advanced Word Processing	1
CSIS 44-330 Presentation Graphics	1
CSIS 44-333 Web Development	3
CSIS 44-340 Digital Media	1
CSIS 44-343 Digital Communications OR	
CSIS 44-495 Internship in Computer Science/Information Systems	3
CSIS 44-344 Desktop Publishing	3
CSIS 44-584 Implementing Business and Marketing Education Programs	3
Total Major Requirements	15

CSIS 44-580 Methods of Teaching Business and Marketing is the required subject field methods course.

MINORS**Minor in Computer Science, 21 hours**

CIP: 110101

Directed Institutional Requirement

CSIS 44-130 Computers and Information Technology 3

Required Courses

CSIS 44-141 Computer Programming I 3

CSIS 44-241 Computer Programming II 3

CSIS 44-242 Data and File Structures 3

CSIS 44-345 Computer Organization 3

NOTE: CSIS 44-241 has a prerequisite of MATH 17-110 or 118, and CSIS 44-345 has a prerequisite of one trimester of chemistry, physics or physical sciences. Students electing to take this minor should choose their general studies math and science courses to satisfy these prerequisites.

Choose at least 9 hours from the following electives: 9

CSIS 44-149 Scientific Computing (3)

CSIS 44-325 Programming Languages (3)

CSIS 44-349 Survey of Algorithms (3)

CSIS 44-356 CCNA: Network Fundamentals (3)

CSIS 44-460 Database Systems (3)

ACBSP accredited program

CSIS 44-525 Theory and Implementation of Programming Languages (3)	
CSIS 44-543 Mobile Computing (3)	
CSIS 44-550 Operating Systems (3)	
CSIS 44-561 Software Engineering I (3)	
CSIS 44-540 Visual Application Development (3)	
CSIS 44-590 Special Topics (3)	

Total Minor Requirements 21

NOTE: Grade Requirement: Students must earn a grade of “C” or better in each of the Computer Science courses in the 21-hour minor.

Minor in Computer Networking, 21 hours

CIP: 110901

Directed Institutional Requirement

CSIS 44-130 Computers and Information Technology	3
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Required Courses Semester Hours

CSIS 44-312 Information Technology Hardware and Software OR	
CSIS 44-345 Computer Organization	3
CSIS 44-356 CCNA: Network Fundamentals	3
CSIS 44-358 CCNA: Routing Protocols & Concepts	3
CSIS 44-456 CCNA: LAN Switching and Wireless	3
CSIS 44-458 CCNA: Accessing the WAN	3
CSIS 44-555 Network Security	3

Select an additional three hours from the following or advisor approved elective: 3

CSIS 44-140 Visual Basic Application Programming (3)	
CSIS 44-141 Computer Programming I (3)	
CSIS 44-333 Web Development (3)	
CSIS 44-460 Database Systems (3)	
CSIS 44-540 Visual Application Development (3)	
CSIS 44-550 Operating Systems (3)	
CSIS 44-563 Developing Web Applications and Services (3)	

Total Minor Requirements 21

NOTE: Grade Requirement: Students must earn a grade of “C” or better in each of the Computer Science courses in the 21-hour minor.

Minor in Business Education, 30-33 hours: B.S.Ed., Secondary Program (Certifies Grades 9-12)–See Professional Education Requirements

CIP: 131303

Directed Institutional Requirement

CSIS 44-130 Computers and Information Technology	3
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Required Courses Semester Hours

CSIS 44-320 Advanced Word Processing	1
CSIS 44-330 Presentation Graphics	1
CSIS 44-333 Web Development	3
CSIS 44-340 Digital Media	1
CSIS 44-343 Digital Communications	3
ACCT 51-201 Accounting I	3
ECON 52-150 General Economics I	3

ACBSP accredited program

FIN 53-311 Business Law I	3
MGMT 54-310 Managerial Communication	3
MGMT 54-313 Principles of Management	3
MKTG 55-330 Principles of Marketing	3
CSIS 44-584 Implementing Business and Marketing Education Programs	3
CSIS 44-495 Internship in Computer Science/Information Systems (3) OR 2,000 Work Hours in a Business/Office	0-3

Total Minor Requirements 30*-33**

* 30 hours is minimum required for initial business education certification as prescribed by DESE.

** 33 hours is minimum required if a student does not have 2000 hours in business/office related work experience.

Minor in Marketing and Cooperative Education, 32 hours

CIP: 131310

Required Courses	Semester Hours
ACCT 51-201 Accounting I	3
ACCT 51-202 Accounting II	3
VOED 02-510 Coordination of Cooperative Education	2
CSIS 44-584 Implementing Business and Marketing Education Programs	3
ECON 52-150 General Economics I	3
FIN 53-324 Fundamentals of Business Finance	3
MGMT 54-313 Principles of Management	3
MKTG 55-330 Principles of Marketing	3
MKTG 55-438 International Business	3
Choose six hours from the following:	6
MKTG 55-331 Retailing (3)	
MKTG 55-332 Promotion (3)	
MKTG 55-333 Consumer Behavior (3)	
MKTG 55-430 Sales and Sales Management (3)	
MKTG 55-431 Logistics Management (3)	

Total Minor Requirements 32

Approved occupational experience or appropriate internship is required.

Endorsement for Middle School Certification–Business Education, Grades 5-9

CIP: 131303

Certifies grades 5-9 when completed with the Middle School Major

Directed Institutional Requirement

CSIS 44-130 Computers and Information Technology	3
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Required Courses	Semester Hours
CSIS 44-211 Spreadsheets	1
CSIS 44-212 Advanced Spreadsheets and Charting	1
CSIS 44-320 Advanced Word Processing	1
CSIS 44-330 Presentation Graphics	1
CSIS 44-333 Web Development	3
CSIS 44-340 Digital Media	1
CSIS 44-343 Digital Communications	3

CSIS 44-344 Desktop Publishing	3
CSIS 44-346 Database Applications	1
ECON 52-130 Survey of Economics	3
FIN 53-120 Personal Money Management	3
Total Endorsement Requirements	21

Computer Concentration—Elementary Education

Concentration in Subject Area, 20 hours

This alternative is recommended for persons who wish to extend their competencies in a particular subject area, but do not seek additional certification at this time. Students should see the coordinator of Elementary Education for specific subject area requirements.

Directed Institutional Requirement

CSIS 44-130 Computers and Information Technology	3
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Required Courses

Semester Hours

CSIS 44-211 Spreadsheets	1
CSIS 44-212 Advanced Spreadsheets and Charting	1
CSIS 44-320 Advanced Word Processing	1
CSIS 44-330 Presentation Graphics	1
CSIS 44-333 Web Development	3
CSIS 44-340 Digital Media	1
CSIS 44-346 Database Applications	1
CSIS 44-471 Practicum in Computer Science Teaching 1	1
CSIS 44-471 Practicum in Computer Science Teaching 1	1

Advisor-Approved Electives

6

CSIS 44-312 Information Technology Hardware and Software (3)
CSIS 44-343 Digital Communications (3)
CSIS 44-344 Desktop Publishing (3)

Total Endorsement Requirements

20

Minor in Data Management, 21 hours

CIP: 110802

Directed Institutional Requirement

CSIS 44-130 Computers and Information Technology	3
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Required Courses

Semester Hours

CSIS 44-141 Computer Programming I	3
CSIS 44-211 Spreadsheet Applications	1
CSIS 44-212 Advanced Spreadsheets and Charts	1
CSIS 44-241 Computer Programming II	3
CSIS 44-346 Database Applications	1
CSIS 44-460 Database Systems	3
CSIS 44-560 Advanced Topics in Database Systems	3

Choose six hours of electives:

6

CSIS 44-242 Data and File Structures (3)
CSIS 44-411 Systems Analysis and Design (3)
CSIS 44-540 Visual Application Development (3)
CSIS 44-561 Software Engineering I (3)

CSIS 44-563 Developing Web Applications and Services (3)

Total Minor Requirements 21

NOTES: 1) CSIS 44-241 has a prerequisite of MATH 17-110, 114 or 118. 2) CSIS 44-411 has a prerequisite of MGMT 54-313 and CSIS 44-317. 3) **Grade Requirement:** Students must earn a grade of "C" or better in each of the Computer Science courses in the 21-hour minor.

Minor in Computer Applications, 24 hours

CIP: 110899

Required Courses	Semester Hours
CSIS 44-130 Computers and Information Technology	3
CSIS 44-140 Visual Basic Application Programming	3
CSIS 44-211 Spreadsheet Applications	1
CSIS 44-212 Advanced Spreadsheets and Charting	1
CSIS 44-312 Information Technology Hardware and Software	3
CSIS 44-320 Advanced Word Processing	1
CSIS 44-330 Presentation Graphics	1
CSIS 44-333 Web Development	3
CSIS 44-340 Digital Media	1
CSIS 44-344 Desktop Publishing	3
CSIS 44-346 Database Applications	1
Select at least three hours from the following electives:	3
CSIS 44-141 Computer Programming I (3)	
CSIS 44-143 Script Programming I (3)	
CSIS 44-356 CCNA: Network Fundamentals (3)	
Total Minor Requirements	24

NOTE: Students with a Comprehensive Major in Business Technology are not permitted to minor in Computer Applications.

Minor in Systems Management, 24 hours

CIP: 521201

Required Courses	Semester Hours
CSIS 44-130 Computers and Information Technology	3
CSIS 44-140 Visual Basic Application Programming OR	
CSIS 44-141 Computer Programming I	3
CSIS 44-317 Management Information Systems	3
CSIS 44-411 Systems Analysis and Design	3
CSIS 44-418 Information Technology Project Management	3
ACCT 51-201 Accounting I	3
MGMT 54-313 Principles of Management	3
MKTG 55-330 Principles of Marketing	3
Total Minor Requirements	24

Note: Students with a comprehensive major in Management Information Systems are not permitted to minor in Systems Management.

Minor in Interactive Digital Media, 24 hours

CIP: 110801

This is an interdisciplinary minor in conjunction with the Department of Fine and Performing Arts, the Department of Mathematics, Computer Science and Information Systems, and the Department of Communication and Mass Media.

Directed Institutional Requirement

CSIS 44-130 Computers and Information Technology	3
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Required Courses**Semester Hours**

ART 13-191 Introduction to Design	3
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ART 13-292 Introduction to Creative Electronic Imaging	3
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MCOM 20-243 Media Design I	3
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MCOM 20-303 Introduction to Web Publishing	3
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CSIS 44-143 Script Programming I	3
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CSIS 44-333 Web Development	3
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Electives (Select any six hours from the following):	6
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ART 13-120 Drawing (3)	
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ART 13-207 Digital Photography (3)	
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MCOM 20-334 Multimedia Production (3)	
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CSIS 44-141 Computer Programming I (3)	
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CSIS 44-335 Script Programming II (3)	
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Total Minor Requirements	24
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Minor in Geographic Information Systems, 28 hours

CIP: 450702

This is an interdisciplinary minor in conjunction with Computer Science/Information Systems and Geography.

Directed Institutional Requirement

CSIS 44-130 Computers and Information Technology	3
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Required Courses**Semester Hours****Geography**

GEOG 32-201 Maps and Map Interpretation	3
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GEOG 32-365 Geographic Information Systems	3
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GEOG 32-565 Advanced Geographic Information Systems	3
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Computer Science

CSIS 44-140 Visual Basic Application Programming	3
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CSIS 44-141 Computer Programming I	3
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CSIS 44-241 Computer Programming II	3
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CSIS 44-346 Database Applications	1
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CSIS 44-460 Database Systems	3
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Advisor-Approved Electives	6
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GEOG 32-362 Cartography (3)	
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GEOG 32-363 Remote Sensing (3)	
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GEOG 32-562 Advanced Cartography (3)	
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GEOG 32-563 Digital Image Processing (3)	
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CSIS 44-242 Data and File Structures (3)	
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CSIS 44-320 Advanced Word Processing (1)	
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CSIS 44-330 Presentation Graphics (1)	
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- CSIS 44-340 Digital Media (1)
- CSIS 44-540 Visual Application Development (3)
- CSIS 44-590 Current Topics in Computer Science (1-3)

Total Minor Requirements

28

NON-DEGREE PROGRAMS

The Computer Science and Information Systems area offers a two-year business technology program. On the successful completion of a program, the student is awarded a certificate. Unless otherwise noted, all courses in this program are fully accredited and may be applied to a degree program should a student later decide to complete a college degree. A student must maintain a "C" average. All non-degree programs in the Computer Science and Information Systems area require CSIS 44-130 Computers and Information Technology, as a prerequisite course as required by course descriptions.

Business Technology Certificate, 60 hours

CIP: 520499

Required Courses	Semester Hours
CPAS 76-101 Freshman Seminar	1
PSYC 08-103 General Psychology	3
ENGL 10-111/112 Composition OR	
ACT English credit/10-115 Honors Composition	6
COM 29-102 Fundamentals of Oral Communication	3
CSIS 44-130 Computers and Information Technology	3
CSIS 44-211 Spreadsheet Applications	1
CSIS 44-212 Advanced Spreadsheets and Charting	1
CSIS 44-320 Advanced Word Processing	1
CSIS 44-330 Presentation Graphics	1
CSIS 44-333 Web Development	3
CSIS 44-340 Digital Media	1
CSIS 44-343 Digital Communications	3
CSIS 44-346 Database Applications	1
ACCT 51-201 Accounting I	3
ACCT 51-202 Accounting II	3
FIN 53-311 Business Law I	3
MGMT 54-310 Managerial Communication	3
MGMT 54-313 Principles of Management	3
Advisor approved electives to total 60 hours	17

Required courses plus advisor-approved electives to total 60 hours with a 2.00 grade point average.

Information Systems Certificate, 15 hours

Required Courses	Semester Hours
CSIS 44-130 Computers and Information Technology	3
CSIS 44-140 Visual Basic Application Programming	3
CSIS 44-320 Advanced Word Processing	1
CSIS 44-330 Presentation Graphics	1
CSIS 44-333 Web Development	3
CSIS 44-340 Digital Media	1
CSIS 44-344 Desktop Publishing	3

Course Descriptions

Mathematics and Statistics / 17

MATHEMATICS

090 Math Skills (1-3 hours)

A basic developmental course structured in 10 modules designed to build mastery of the College Entry Level Competencies. Topics include real numbers; data representation; linear equations and inequalities; graphing linear equations and inequalities; polynomials; factoring; rational expressions and equations; systems of equations and inequalities; radical expression and equations; and quadratic equations and functions. These modules prepare students for MATH 17-114, 115, 117, 118, 119 and 171. The course does not satisfy the General Education requirements in mathematics or any graduation requirement. Required of students with an ACT Math score of 20 or below. (F, S)

091 Math Skills (1-2 hours)

A continuation of 17-090: a basic developmental course structured in 10 modules designed to build mastery of the College Entry Level Competencies. Topics include real numbers; data representation; linear equations and inequalities; graphing linear equations and inequalities; polynomials; factoring; rational expressions and equations; systems of equations and inequalities; radical expression and equations; and quadratic equations and functions. These modules prepare students for MATH 17-114, 115, 117, 118, 119 and 171. The course does not satisfy the General Education requirements in mathematics or any graduation requirement. Prerequisite: completion of MATH 17-090. (F, S)

110 Finite Mathematics (4 hours)

Topics include set algebra, matrices, functions, analytics of the straight line, linear programming and probability spaces, with emphasis on applications from business and economics. Will satisfy the General Education requirement in mathematics. Proficiency examination is available. Prerequisite: An ACT Math score of 21 or higher or evidence of mastery (80% proficiency) in each of 10 modules in MATH 17-090/091.

115 Concepts of Mathematics (3 hours)

An explanation of ways in which mathematics is used to understand the contemporary world.

Will satisfy the General Education requirement in mathematics. A proficiency examination is available. Prerequisite: An ACT Math score of 21 or higher or evidence of mastery (80% proficiency) in each of 10 modules in MATH 17-090/091.(F, S)

117 Precalculus (4 hours)

A course to prepare students to take calculus. Topics include functions and graphs, equations and inequalities, and analytic geometry and trigonometry. A student cannot receive credit for MATH 17-117 and 118 or 119. Will satisfy the General Education requirement in mathematics. Prerequisite: An ACT Math score of 21 or higher or evidence of mastery (80% proficiency) in each of 10 modules in MATH 17-090/091 and one unit of high school geometry. (F, S)

118 College Algebra (3 hours)

Topics include functions and graphs, systems of equations and inequalities and analytic geometry. Designed for students who plan continued study in college mathematics. Will satisfy the General Education requirement in mathematics. Proficiency examination is available. Prerequisite: An ACT Math score of 21 or higher or evidence of mastery (80% proficiency) in each of 10 modules in MATH 17-090/091. (F, S, SS)

119 Trigonometry (2 hours)

Trigonometric functions and analytic trigonometry. Proficiency examination is available. Prerequisites: One unit of high school geometry and an ACT Math score of 21 or higher or evidence of mastery (80% proficiency) in each of 10 modules in 17-090/091. (F, S)

120 Calculus I (4 hours)

An introduction to single-variable calculus. Topics include intuitive treatment of limits and continuity, differentiation of elementary functions, curve sketching, extreme values, areas, rates of change, definite integral and fundamental theorem of calculus. Will satisfy the General Education requirement in mathematics. Proficiency examination is available. Prerequisites: MATH 17-117 or 118 and 119 or equivalent. ACT Math score of at least 27 recommended. (F, S)

121 Calculus II (4 hours)

Topics include sequences and series, approximations, techniques and applications of integration

and plane curves. Prerequisite: MATH 17-120 or consent of instructor. (F, S)

171 Fundamentals of Mathematics (3 hours)

An analytic exploration of elementary mathematics concepts, including set theory, operations in numeration systems and bases, number theory, operations and applications with rational and real numbers, probability and statistics, logic, relations and modular arithmetic. Will satisfy the General Education requirement in Mathematics. Proficiency examination is available. Prerequisite: An ACT Math score of 21 or higher or evidence of mastery (80% proficiency) in each of 10 modules in MATH 17-090/091. (F, S)

215 Discrete Mathematics (4 hours)

An introduction to discrete models; topics include sets, symbolic logic, relations, combinatorics, mathematical induction, probability, vectors and matrices and graph theory. Prerequisites: One unit of high school geometry and an ACT Math score of 21 or higher or evidence of mastery (80% proficiency) in each of 10 modules in MATH 17-090/091. (F, S)

311 Elementary Linear Algebra (3 hours)

An elementary introduction to finite-dimensional vector spaces and matrices. Topics include linear independence, bases, matrix operations, canonical forms, similarity, invertibility, geometric applications and determinants. (F)

321 Multivariate Calculus (4 hours)

Topics include functions of several variables, partial differentiation and multiple integration. Prerequisite: MATH 17-121 or consent of instructor. (F, S)

351 College Geometry (3 hours)

A survey of geometry with an emphasis on the theorems and proofs of Euclidean and neutral geometry. Prerequisites: MATH 17-120 or consent of instructor. (S)

361 Differential Equations (3 hours)

A study of solutions of elementary differential equations. Topics include standard first-order forms, special higher-order linear equations, Laplace transform techniques, power series solutions and applications. Prerequisite: MATH 17-121 or consent of instructor. (F)

390 Logic of the Exact Sciences (3 hours)

Topics include the propositional and predicate calculus and methods of mathematical proof. Pre-

requisites: MATH 17-120 and 215 or consent of instructor. (S)

415 Introduction to Abstract Algebra (3 hours)

An introduction to standard abstract algebraic systems. Prerequisite: MATH 17-215 or consent of instructor. MATH 17-390 recommended. (S)

421 Intermediate Analysis (3 hours)

A careful examination of the main theorems of elementary calculus. Topics include completeness of \mathbb{R} , limits of sequences and functions, continuity, mean-value theorem, Riemann integration and representation of functions. Prerequisite: MATH 17-321 or consent of instructor. MATH 17-390 recommended. (S)

490 Seminar in History of Mathematics (1 hour)

This course is an in-depth study of great historical innovations, thoughts and theories in mathematics. Prerequisite: 22 hours of mathematics. (S)

492 Seminar in Readings in Mathematical Literature (1 hour)

This course is an in-depth study of timely topics for senior students of mathematics. Prerequisite: 22 hours of mathematics. (F)

496 Senior Paper (1 hour)

A supervised paper required of all majors in the department. Prerequisite: 12 hours of mathematics at the 300+ level. (F, S)

499 Independent Study (1-3 hours)

Prerequisite: Consent of instructor. May be repeated with different topics.

511 Applied Linear Algebra (3 hours)

A second course in linear algebra with emphasis on applications. Topics may include linear programming, graph theory, game theory, Markov chains, computer graphics, equilibrium temperature distributions, electrical networks and least squares models. Prerequisite: MATH 17-311 or consent of instructor. (Alt. years)

518 Number Theory (3 hours)

A standard course in classical number theory. Topics include divisibility, congruences, theory of quadratic residues and Diophantine analysis. Prerequisite: 22 hours in mathematics or consent of instructor. (Alt. years)

520 Advanced Calculus (3 hours)

An advanced course in analysis; may include vector analysis, differentials and integration theory. Pre-

requisite: MATH 17-321 or consent of instructor. (Alt. years)

521 Complex Analysis (3 hours)

Topics may include the algebra and geometry of complex numbers, elementary and analytic functions of a complex variable, contour integration, residues, Taylor and Laurent series and basic fundamental theorems. Prerequisite: MATH 17-321 or consent of instructor. (Alt. years)

555 Non-Euclidean Geometry (3 hours)

An introduction to plane hyperbolic, elliptic and projective geometries and geometric transformation groups. Prerequisite: 22 hours of mathematics or consent of instructor. (Alt. years)

556 Introduction to Point Set Topology (3 hours)

Topics include metric spaces and axiomatic topology including the separation axioms, product spaces, derived sets, limit points and convergence. Prerequisite: MATH 17-321 or consent of instructor. (Alt. years)

561 Applied Mathematics (3 hours)

Topics may include construction and use of mathematical models, probability theory, Markov chains, network analysis, linear programming, differentiation and integration. Prerequisites: MATH 17-121, 215 and CSIS 44-149, or consent of instructor. (Alt. years)

565 Numerical Analysis (3 hours)

Topics may include finite differences, numerical differentiation and integration and eigenvalue problems. Prerequisites: CSIS 44-149 and MATH 17-121, or consent of instructor. (Alt. years)

599 Special Projects (1-6 hours)

Prerequisites: 30 hours in mathematics or computer science and consent of instructor. May be repeated with different topics.

STATISTICS

114 General Statistics I (3 hours)

Basic concepts of decision making, central values, variability, probability and statistical inference, elementary concepts of correlation, parametric tests of significance, and regression analysis. Will satisfy the General Education requirement in mathematics. Proficiency examination is available. Prerequisite: An ACT Math score of 21 or higher or evidence of mastery (80% proficiency) in each of 10 modules in MATH 10-090/091. (F, S, SS)

230 Probability and Statistics (3 hours)

Fundamental principles and techniques of statistical investigations including probability, discrete and continuous random variables, estimation and hypothesis testing. Prerequisites: MATH 17-120 or consent of instructor. (F, S)

316 General Statistics II (3 hours)

Applied course in statistics, including analysis of variance, multiple regression and the use of SAS, a statistical package. Prerequisite: MATH 17-114 or 230, or consent of instructor. (F, SS)

531 Applied Time Series (2 hours)

A course in forecasting and some of the statistical techniques that can be used to produce forecasts. Prerequisites: MATH 17-114 or 230 or consent of instructor. (Alt. years)

535 Probability Theory (3 hours)

A mathematical development of probability with emphasis on continuous random variables. Prerequisites: MATH 17-121 and 230, or consent of instructor. (F, odd years)

536 Statistical Inference (3 hours)

A mathematical development of statistics with emphasis on continuous random variables. Prerequisite: MATH 17-535. (S, even years)

537 Design of Experiments (3 hours)

A course covering many of the statistical designs and techniques widely used in research and applications. Prerequisite: MATH 17-316. (Alt. years)

MATHEMATICS EDUCATION

280 Methods in Teaching with Technology (3 hours)

Introduces technological tools and appropriate methods for using them to teach mathematics and science. Prerequisite: Successful completion of an institutional requirement for Information Technology. (S)

371 Algebra and Geometry for Elementary and Middle School Teachers (3 hours)

Topics include plane and space figures, congruence, similarity, mensuration and transformation geometry. For elementary and middle school education majors only. Proficiency examination is available. Prerequisite: A grade of "C" or better in MATH 17-171. (F, S)

471 Mathematical Methods for Elementary Teachers (3 hours)

A study of current techniques, this course is designed to acquaint prospective teachers with both the content of elementary school mathematics and the materials available to aid in the teaching of this content. Activities are incorporated to provide experience with the various methods of teaching mathematics to elementary students. Prerequisite: A grade of "C" or better in MATH 17-371. (F, S, SS)

473 Advanced Topics for Middle School Teachers (3 hours)

A course designed to provide more fundamental treatment of mathematical topics for the middle school. Topics include algebraic systems, trigonometry, number theory, problem-solving techniques, graphing, logic, probability and its applications to statistics. Prerequisite: Consent of instructor. (F)

498 Seminar in Teaching Elementary School Mathematics (1 hour)

Supervised practice in teaching mathematics in the elementary school with weekly seminar on teaching issues. Prerequisite: MATH 17-471.

575 Workshop in Mathematics Education (1-6 hours)

Prerequisite: Consent of instructor. May be repeated with different topics.

580 Methods in Secondary School Mathematics (3 hours)

A study of teaching procedures and current literature useful in teaching secondary school mathematics. (S)

582 Mathematical Methods for Middle School Teachers (3 hours)

This course is a study of current techniques for teaching middle school mathematics, including a two-week practicum experience in the school. Prerequisite: A grade of "C" or better in MATH 17-371. (F)

**Computer Science/
Information Systems / 44****130 Computers and Information Technology (3 hours)**

Introduction to computer systems. Topics include integrated office applications, hardware, software, Internet, and the rights and responsibilities of computer users. (F, S, SS)

**495 Internship in Computer Science/
Information Systems (1-3 hours)**

Prerequisites: 9 hours in computer science/information systems and permission of department chairperson. May be repeated for new experience. (F, S)

499 Independent Study (1-3 hours)

Prerequisite: Consent of instructor. Repeatable for new material. (F, S)

599 Special Projects (1-6 hours)

Prerequisites: 30 hours in the department and consent of instructor. Repeatable for additional experience, new material, and progression of study. (F, S)

COMPUTER SCIENCE**140 Visual Basic Application Programming (3 hours)**

An introduction to event-driven programming in an object-oriented environment. Prerequisites: 2 units of high school algebra and CSIS 44-130 with a grade of "C" or better, or department chair's permission. (F, S)

141 Computer Programming I (3 hours)

An introduction to object-oriented programming; analyze problems, design and implement solutions. Prerequisites: 2 units of high school algebra and CSIS 44-130 with a grade of "C" or better, or department chair's permission. (F, S)

149 Scientific Computing (3 hours)

Tools and techniques for using a computer to solve numeric problems with an emphasis on scientific and mathematical applications. Prerequisites: MATH 17-117 or 17-120 and a course in the computer competency section of Institutional Requirements with a grade of "C" or better in each. (S)

241 Computer Programming II (3 hours)

Intermediate computer programming, design of algorithms and introduction to data structures. Prerequisites: CSIS 44-141, and MATH 17-110 or 114 or 117 or 118 or 120, with a grade of "C" or better. (F, S)

242 Data and File Structures (3 hours)

Abstract data structures including stacks, queues, lists and trees. File structures emphasizing random access files. Construction of graphical user interfaces. Prerequisite: CSIS 44-241, with a grade of "C" or better, or consent of instructor. (F, S)

296 Professional Development Seminar (3 hours)

Emphasis on ethical issues in the workplace and professional development for the field of computing. Prerequisite: Sophomore standing and CSIS 44-141. (F)

325 Programming Languages (3 hours)

A survey of the features of contemporary programming languages chosen to illustrate two different programming paradigms. Extensive programming in each of the languages. Prerequisite: CSIS 44-242, with a grade of "C" or better. (S)

345 Computer Organization (3 hours)

Introduction to computer systems organization with emphasis on machine language and assembler programming. Prerequisites: CSIS 44-242, with a grade of "C" or better, and one trimester of chemistry, physics or physical science. (S)

349 A Survey of Algorithms (3 hours)

A study of algorithms central to the major areas of computer science. Prerequisites: CSIS 44-242 and MATH 17-120 and 215, each with a grade of "C" or better. (S)

356 CCNA: Network Fundamentals (3 hours)

Course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The Open Systems Interconnection (OSI) and Transport Control Protocol (TCP) layered models are used to examine the nature and roles of protocols and services at the application, network, data link, and physical layers. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media and operations are introduced. The first of four courses leading to a Cisco Certified Network Associate (CCNA) certification. Prerequisite: CSIS 44-130 with a grade of "C" or better. (F)

358 CCNA: Routing Protocols and Concepts (3 hours)

Describes the architecture, components, and operation of routers, and explains the principles of routing and routing protocols. Students analyze, configure, verify, and troubleshoot the primary routing protocols Routing Information Protocol (RIP) v1, RIPv2, Enhanced Interior Gateway Routing Protocol (EIGRP), and Open Shortest Path First (OSPF). The second of four courses to prepare students for the Cisco Certified Network Associate (CCNA) certification. Prerequisite: CSIS 44-356 with a grade of "C" or better. (S)

456 CCNA: LAN Switching and Wireless (3 hours)

Helps students develop an in-depth understanding of how switches operate and are implemented in the LAN environment for small and large networks. Beginning with a foundational overview of Ethernet, this course provides detailed explanations of Local Area Network (LAN) switch operation, Virtual LAN (VLAN) implementation, Rapid Spanning Tree Protocol (RSTP), VLAN Trunking Protocol (VTP), Inter-VLAN routing, and wireless network operations. Students analyze, configure, verify, and troubleshoot VLANs, STP, VTP, and wireless networks. Campus network design and Layer 3 switching concepts are introduced. The third of four courses leading to a Cisco Certified Network Associate (CCNA) certification. Prerequisite: CSIS 44-358 with a grade of "C" or better. (F)

458 CCNA: Accessing the Wide Area Network (3 hours)

Introduction to Wide Area Network (WAN) technologies including configuring, verifying, and troubleshooting. Basic network security is introduced as well as Access Control Lists (ACLs), Virtual Private Networks (VPNs), Dynamic Host Configuration Protocol (DHCP), Network Address Translation (NAT), Port Address Translation (PAT), and IPv6. The fourth of four courses leading to a Cisco Certified Network Associate (CCNA) certification. Prerequisite: CSIS 44-456 with a grade of "C" or better. (S)

460 Database Systems (3 hours)

An introduction to database systems, including data modeling, design, and implementation. Prerequisite: CSIS 44-241, with a grade of "C" or better. (S)

471 Practicum in Computer Science Teaching (1 hour)

Supervised practice in an educational computing environment. Through the use of journals, observation by staff members and curriculum projects, students will develop their teaching skills, plan teaching strategies, and develop organizational and instructional competencies. May be repeated for additional experience. Prerequisites: 10 hours of computer science and 5 hours of education. (F, S)

525 Theory and Implementation of Programming Languages (3 hours)

Syntax and semantics of programming languages; the translation process; and features of procedural, applicative, and object-oriented languages. Prerequisite: CSIS 44-242, with a grade of "C" or better, or consent of instructor. (F)

540 Visual Application Development (3 hours)

An introduction to programming Microsoft Windows applications. Prerequisite: CSIS 44-460, or CSIS 44-241 and 346, with a grade of "C" or better; or equivalent (prerequisite may be taken concurrently). (S)

542 Object-Oriented Programming (3 hours)

Provides fast-paced coverage of object-oriented programming and data structures. Students will gain extensive programming experience. Prerequisites: Graduate standing and an undergraduate course in data structures with a grade of "C" or better; no previous experience with object-oriented programming is necessary. (F, S)

543 Mobile Computing (3 hours)

Students will learn the intricacies of mobile computing development. Prerequisite: CSIS 44-242 or 542, with a grade of "C" or better. (F, S)

550 Operating Systems (3 hours)

Course covers concepts of operating systems, including process and storage management, protection, security and distributed systems. Prerequisite: CSIS 44-345, with a grade of "C" or better. (F)

555 Network Security (3 hours)

A study of computer network security issues. Includes hands-on experience in server applications as well as some practice in client/server programming. Prerequisite: CSIS 44-356, with a grade of "C" or better. (F, S)

560 Advanced Topics in Database Systems (3 hours)

Advanced topics in database systems, including database administration, distributed databases, data warehousing and object-oriented databases. Hands-on experience using a DBMS in a client/server environment. Prerequisite: CSIS 44-241 and 460, with a grade of "C" or better. (F, S)

561 Software Engineering I (3 hours)

A study of systems analysis, requirements specification, and human computer interaction. Prerequisites: CSIS 44-242 and 460, with a grade of "C" or better. (F)

562 Software Engineering II (3 hours)

A study of software design, testing and project management. Prerequisite: CSIS 44-561, with a grade of "C" or better. (S)

563 Developing Web Applications and Services (3 hours)

Technologies and protocols supporting web applications and web services. Students gain experience in client-side and server-side programming. Prerequisites: CSIS 44-241 and 460, each with a grade of "C" or better. (F, S)

590 Current Topics in Computer Science (1-3 hours)

Courses emphasizing current topics in computer science which are offered according to student need and interest, and have the content described in the title. May be repeated provided the content is different. Prerequisite dependent upon topic.

599 Special Projects (1-6 hours)

Study of special topics as related to computer science. Prerequisites: 30 hours in the department and consent of instructor. (F, S, SS)

INTERACTIVE DIGITAL MEDIA**143 Script Programming I (3 hours)**

An introduction to a script language for multimedia software applications. Prerequisite: CSIS 44-130. (F)

333 Web Development (3 hours)

This course will acquaint the student with a variety of multimedia resources that could be incorporated in the design and production of a multimedia project on a variety of computer platforms. The focal points in this class will be on the proper design and generation of multimedia projects with an emphasis on web pages. Prerequisite: CSIS 44-130. (F, S)

335 Script Programming II (3 hours)

An introduction to a scripting language that enables web browser interactivity. Prerequisites: CSIS 44-333 and some previous programming experience (CSIS 44-141 or 143 for example) is required. (S)

415 Interactive Digital Media Seminar (1 hour)

A seminar dealing in issues faced by multimedia professionals and preparation for advanced study. Major emphasis will be placed on the development of a professional portfolio, resume writing and interviews for the field of multimedia. Prerequisites: Junior or senior standing by advisement. (F)

MANAGEMENT INFORMATION SYSTEMS

312 Information Technology Hardware and Software (3 hours)

Course provides the hardware and software technology background to enable systems development personnel to understand trade-offs in computer architecture for effective use in a business environment. System architecture is explored for single use, central, and networked computing systems; single and multi-user operating systems. Prerequisite: CSIS 44-130. (S)

317 Management Information Systems (3 hours)

A study of business systems and their relationship with computer systems. The interaction of various systems of the organization and computer technology is emphasized. Prerequisites: MGMT 54-313 and CSIS 44-130. (F, S, SS)

411 Systems Analysis and Design (3 hours)

A study of the procedures necessary to analyze and design computerized business systems. Written and oral proposals based on design methods and techniques will be used to develop the student's analysis and communication skills. Prerequisites: CSIS 44-317 and advanced standing, or consent of the instructor. (F)

418 Information Technology Project Management (3 hours)

A detailed study of project management including life cycle, scope, integration, controls and the use of project management software. Prerequisite: CSIS 44-317 and 411 with a grade of "C" or better. (S)

516 Current Topics in Information Systems (1-3 hours)

Selected topics in information systems emphasizing current development in the field. May be repeated provided the content is different. Prerequisites: CSIS 44-317 and one high-level programming language or consent of instructor.

BUSINESS TECHNOLOGY

211 Spreadsheet Applications (1 hour)

A course on the intensive use of spreadsheets including features such as financial functions, querying a list, web queries for real-time data and what-if analysis. Prerequisite: CSIS 44-130 with a grade of "C" or better, or equivalent course. (F)

212 Advanced Spreadsheets and Charting (1 hour)

A course on the intensive use of spreadsheet features such as using templates, data consolidation, macros, solver, scenarios, and pivot tables and charts. Prerequisites: CSIS 44-130 with a grade of "C" or better, or equivalent course, and 44-211. (F)

320 Advanced Word Processing (1 hour)

Advanced word processing skills and concepts will be emphasized to manipulate, organize, and enhance documents. Prerequisite: CSIS 44-130 with a grade of "C" or better, or equivalent course. (S)

330 Presentation Graphics (1 hour)

Concepts, design elements, and preparation of presentation graphics. Projects with electronic presentation and imaging software will be completed. Prerequisite: CSIS 44-130 with a grade of "C" or better, or equivalent course. (S)

340 Digital Media (1 hour)

Designing and using digital media to produce multimedia projects with audio and video. Prerequisite: CSIS 44-130 with a grade of "C" or better, or equivalent course. (S)

343 Digital Communications (3 hours)

A study of varied input technologies and business procedures including the selection and use of tablet and handheld computers, scanning, speech recognition, and digital communication devices. Prerequisite: CSIS 44-130 with a grade of "C" or better, or equivalent course. (S)

344 Desktop Publishing (3 hours)

Course will identify the concepts and applications of desktop publishing and develop competencies using a powerful computer language as a desktop publishing tool. Prerequisite: CSIS 44-130 with a grade of "C" or better, or equivalent course. (S, odd years)

346 Database Applications (1 hour)

Applications of database management software for creating, querying and manipulating databases. Prerequisite: CSIS 44-130 with a grade of "C" or better, or equivalent course. (F)

447 Current Topics in Office Information Systems (1-3 hours)

Topics selected to emphasize the current developments in office systems. May be repeated provided the content is different.

BUSINESS EDUCATION

580 Methods of Teaching Business and Marketing (3 hours)

The selection, development, and presentation of the business, marketing, and cooperative education curriculum. Includes methods, techniques, assessment, and current issues and trends. (F)

582 Technology Curriculum and Integration (3 hours)

An examination of standards and curriculum for the integration of technology in educational and business environments. The integration of technology throughout K-12 classrooms will be emphasized. (F, odd years)

584 Implementing Business and Marketing Education Programs (3 hours)

Fundamental concepts in business, marketing, and cooperative education programs are studied for implementing effective programs. The study includes organization and development of curriculum, student organizations, funding, advisory committees and program evaluation. (SS)

585 Instructional Technology and the Learning Process (3 hours)

An in-depth study of the cognitive process as it relates to the technology-enhanced classroom. (SS, even years)

Department of Military Science / 42

Faculty Liaison to Military Science: Mark Corson

U.S. Army Faculty: Lieutenant Colonel Shay Howard, Master Sergeant Joseph Wilson, Sergeant First Class Grady DuBose

Statement of Mission

The Army Reserve Officers Training Corps (ROTC) provides an opportunity for qualified college students to pursue a commission in the United States Army while attending college as a full-time student. The program also provides the general student body the opportunity to attend leadership and confidence building classes without incurring a military obligation. A commission as a Second Lieutenant in the U.S. Army, Army Reserve or National Guard is awarded to individuals who have successfully completed the ROTC program and obtain a baccalaureate degree from Northwest Missouri State University.

Northwest Missouri State University has a partnership agreement with Missouri Western State University in order to provide the Reserve Officers Training Corps (ROTC) program to Northwest Missouri State University students. Other partnership schools include Rockhurst University, University of Missouri-Kansas City, Benedictine College, Park College and Avila College. These combined schools constitute the Pony Express ROTC Battalion.

PROGRAM DESCRIPTIONS

Four-year ROTC Program

This program consists of 26 credit hours of Military Science offered on campus: six credit hours from the basic ROTC program MILS 100- and 200-level courses, and 20 credit hours from the advanced ROTC program MILS 300- and 400-level courses. First-time sophomores who did not take Military Science during the freshman year may compress the basic program during their sophomore year by taking a 100- and a 200-level course (for 3 credit hours total) for two trimesters.

Two-year ROTC Program

This program option is designed for junior- and senior-level students who were unable to enroll in ROTC during their first two academic years. As a prerequisite, the two-year program substitutes a paid five-week leadership internship at Fort Knox, Ken., for the MILS 100- and 200-level courses. This Basic Course Qualification is designed for students with no prior military training. Students must attend in the summer between their sophomore and junior years to qualify for the program.

Advanced Standing Requirements

Qualified students seeking a commission in the U.S. Army may apply for advanced standing in the Military Science Department. Students who have completed the basic courses

(MILS 42-100- and 200-level) are eligible to apply along with prior active duty service members, Army Reserve and National Guardsmen who have completed basic training. Eligible students must receive permission from the chairperson of Military Science to enter the advanced courses prior to enrolling in the advanced courses.

To be granted advanced standing placement into the advanced ROTC program (last two years of military science), a student must have consent of the department chairperson, a minimum cumulative GPA of 2.00, be a citizen of the United States and have completed one of the following requirements:

1. Completed 100- and 200-level military science courses.
2. Prior military active duty personnel, Army Reservists and National Guardsmen who have completed basic training.
3. Four-year high school Junior ROTC graduate.
4. Written and oral communication skills (one from each category)
 - Written Communication Skills (Required)
 - ENGL 10-112 Composition (3)
 - ENGL 10-115 Honors Composition (3)
 - ENGL 10-311 Advanced Composition (3)
 - ENGL 10-315 Writing for the Professions (3)
 - Oral Communication Skills (Required)
 - COM 29-102 Fundamentals of Oral Communication (3)

Financial Assistance

Financial assistance is available through the U.S. Army Scholarship Program. Two- and three-year scholarships are awarded each year to selected students who are enrolled or will enroll in the Army ROTC program. The scholarships provide payment directly to the college for applicable tuition and fees. Each student receives a textbook allowance of \$1,200 annually paid in two increments of \$600. In addition, a tiered monthly tax-free stipend is paid directly to the student for the duration of the scholarship, not to exceed 10 months for each year of the scholarship. These scholarships are available for both undergraduate and graduate students. Non-scholarship contracted cadets in the advanced course also receive the tiered monthly tax-free stipend, not to exceed 10 months per year for two years. Students are furnished free textbooks for military science classes.

The Simultaneous Membership Program (SMP) allows students to be a member of a National Guard or Reserve unit while enrolled in ROTC. Advanced-course SMP students receive E5 pay, plus the tiered monthly tax-free stipend from ROTC, tuition assistance, and any Active Duty GI Bill entitlement.

The tiered stipend pay is: first year contracted cadets MSI, \$300; second year MSII, \$350; third year MSIII, \$450; and 4th year MSIV, \$500; per month not to exceed 10 months of the year.

Commission Requirements

This program requires all students seeking a commission to attend a paid four-week advanced training camp, normally the summer between the junior and senior years, at Fort Lewis, Wash. Attendance at camp may be deferred until after the senior year for exceptional cases with the recommendation of the chairperson of Military Science and approval from the ROTC chain of command.

Military Science Basic Courses (14 hours)

- MILS 42-102 Leadership Practicum (2)
- MILS 42-112 Leadership Practicum (2)
- MILS 42-116 Foundations of Officership (1)
- MILS 42-126 Basic Leadership (1)
- MILS 42-202 Leadership Practicum (2)
- MILS 42-212 Leadership Practicum (2)
- MILS 42-216 Individual Leadership Studies (2)
- MILS 42-226 Leadership and Teamwork (2)

Minor in Military Science, 23 hours

CIP: 290101

Qualified students accepted into the advanced classes of the ROTC program are eligible for this minor when declared at the time of entry into the advanced ROTC program.

Required Courses	Semester Hours
MILS 42-300 Leadership and Management I	3
MILS 42-302 Leadership Practicum	2
MILS 42-310 Small Unit Leadership and Tactics	3
MILS 42-312 Leadership Practicum	2
MILS 42-400 Leadership and Management II	3
MILS 42-402 Leadership Practicum	2
MILS 42-410 Army Management and Organizational Systems	3
MILS 42-412 Leadership Practicum	2
HIST 33-350 American Military History	3

Courses Recommended to Enhance Military Leadership (Choose one from each group)

Human Behavior Studies

- PSYC 08-103 General Psychology (3)
- SOC 35-101 General Sociology (3)
- SOC 35-365 Social Psychology (3)
- PHIL 39-274 Introduction to Ethics (3)

Management and Economics

- MGMT 54-313 Principles of Management (3)
- MGMT 54-314 Human Resource Management (3)
- MGMT 54-316 Organizational Theory and Behavior (3)
- ECON 52-150 General Economics (3)

National Security Studies

- POLS 34-102 Introduction to American Government and Politics (3)
- POLS 34-421 International Conflict Resolution (3)
- GEOG 32-521 Political Geography (3)
- GEOG 32-101 Introduction to Geography (3)
- GEOG 32-102 Peoples and Cultures of the World (3)

General Information

Military Obligations: All students are eligible to take MILS 100- and 200-level courses without incurring any military obligation. However, MILS 300- and 400-level courses are reserved for students who have a signed contract with ROTC to become an officer upon graduation. Currently a college graduate who is commissioned through ROTC is placed on active or reserve duty depending on his or her desires and on the needs of the service at the time of graduation.

Course Credit: This curriculum does not lead to a degree by itself, but is intended to complement and be utilized in conjunction with the student's academic degree program. Credits earned in military science courses are applicable toward graduation requirements as general electives.

Class Location: With the exception of a five-week paid summer camp, most basic course instruction is presented on campus. Various field trips are conducted to further enrich students' leadership skills for advanced-course students.

Course Descriptions

Military Science / 42

102 Leadership Practicum (2 hours)

Examines leadership in basic tactical and patrolling operations. A tactical application exercise and participation in physical fitness conditioning are required. Students practice leadership according to 16 principles and learn basic individual soldier skills. (F)

112 Leadership Practicum (2 hours)

Continuation of MILS 42-102. Examines advanced squad and platoon tactical operations with emphasis on patrolling operations. Topics include: leadership techniques, basic first aid and problem-solving exercises. A tactical field application exercise and physical fitness conditioning program are required. Students perform various leadership roles and present classroom instruction. (S)

116 Foundations of Officership (1 hour)

Introduces the student to issues and competencies central to a commissioned officer's responsibilities. These initial lessons establish a framework for understanding officership, leadership, and Army values. Addresses "life skills" including fitness and time management. Designed to give the student an accurate insight into the Army profession and the officer's role in the Army. (F)

126 Basic Leadership (1 hour)

Course builds upon the fundamentals introduced in MILS 42-116 Foundations of Officership, by focusing on leadership theory and decision making. "Life skills" lessons include: problem solving, critical thinking, leadership theory, followership, group interaction, goal setting, and feedback mechanisms. Prepares students to advance to more complex leadership instruction concerning the dynamics of

organization. Students are increasingly required to demonstrate knowledge of leadership fundamentals and communications. (S)

202 Leadership Practicum (2 hours)

Course examines squad and platoon offensive and defensive operations and leadership procedures in patrolling operations. A tactical application exercise and participation in physical fitness conditioning are required. Students perform various leadership roles and present classroom instruction. (F)

212 Leadership Practicum (2 hours)

Continuation of MILS 42-202 to examine advanced squad and platoon offensive and defensive operations, reaction to obstacles and leadership procedures in patrolling operations. A tactical application exercise and participation in physical fitness conditioning are required. Students perform various leadership roles and present classroom instruction. (S)

216 Individual Leadership Studies (2 hours)

Designed to develop within the student a knowledge of self, self-confidence and individual skills. Through experiential learning activities, students develop problem-solving and critical-thinking skills, and apply communication, feedback, and conflict-resolution skills. Builds upon the fundamentals introduced in MILS 42-116 and 126, this course delves into several aspects of communication and leadership theory. Focuses on critical "life skills" which enable the student's future success. Includes a major leadership and problem-solving case study which draws upon previous instruction. Prerequisite: MILS 42-116 and 126. To be taken concurrently with MILS 42-202. (F)

226 Leadership and Teamwork (2 hours)

Course focuses on self-development guided by knowledge of self and group processes. Experiential learning activities are designed to challenge students' current beliefs, knowledge and skills. Takes the approach of placing students in a wide variety of group exercises designed to emphasize various leadership competencies and insights. The instructor, acting as facilitator, helps guide student processing of the events to derive the leadership, group dynamics and problem-solving lessons that the exercises offer. Practical "life skills" are emphasized. Prerequisites: MILS 42-116, 126 and 216. To be taken concurrently with MILS 42-212. (S)

300 Leadership and Management I (3 hours)

Provides the student with an examination of ethics, career professionalism, attributes of leadership and selected light infantry tactical skills. Prerequisite: Advanced-course status, required to be taken concurrently with MILS 42-302. (F)

302 Leadership Practicum (2 hours)

Examines squad and platoon offensive and defensive operations, the patrol leader in patrolling operations, and a tactical application exercise is required. Students perform in various leadership roles and present classroom instruction. Prerequisite: Advanced-course status, required to be taken concurrently with MILS 42-300. (F)

310 Small Unit Leadership and Tactics (3 hours)

Course studies principles and fundamentals of military operations, the decision-making process, planning and execution of light infantry operations, and a thorough examination of military ethics. Prerequisite: MILS 42-300, advanced-course status, required to be taken concurrently with MILS 42-312. (S)

312 Leadership Practicum (2 hours)

Familiarization with military firearms, including assembly and disassembly, tactical communications and a field artillery request and application exercise is required. Prerequisite: Advanced-course status, required to be taken concurrently with MILS 42-310. (S)

400 Leadership and Management II (3 hours)

Study of the principles of decision making, the planning and conduct of unit training, the role of the military in the U.S., professional ethical standards, and the use of those standards in situations involving power, influence, and subordinate counseling. Prerequisite: Advanced-course status, required to be taken concurrently with MILS 42-402. (F)

402 Leadership Practicum (2 hours)

Practical applications in problem analysis, decision making, planning and organization, delegation and control, and development of interpersonal skills required for effective management. Participation in physical fitness conditioning and tactical application exercise required. Students perform in various leadership positions and present classroom instruction. Prerequisite: Advanced-course status, required to be taken concurrently with MILS 42-400. (F)

410 Army Management and Organizational Systems (3 hours)

Advanced study of leadership and management that examines administration at the company level and military justice and an overview of the obligations and responsibilities of an officer. Prerequisite: Advanced course status, required to be taken concurrently with MILS 42-412. (S)

412 Leadership Practicum (2 hours)

Practical applications in problem analysis, decision making, planning and organization, delegation and control, and development of interpersonal skills required for effective management. A tactical application exercise and participation in physical fitness conditioning are required. Students perform various leadership roles and conduct classroom instruction. Prerequisite: Advanced-course status, required to be taken concurrently with MILS 42-410. (S)

450 Independent Study in Military Science (1-5 hours)

Investigates selected leadership problems or topics on an individual or conference basis. Course may be repeated with a change in topic. Prerequisite: Consent of department chairperson.

Department of Natural Sciences

Chairperson: Mark Corson

Faculty: Peter Adam, Michael Bellamy, Angela Bickford, Kelsey Bowlin, Jeffrey Bradley, Himadri Chakraborty, Gregg Dieringer, David Easterla, Kurt Haberyan, Heidi Hensen, Michael Hull, Rafiq Islam, Aaron Johnson, Ahmed Malkawi, Mohammed Meziani, Natalia Omelchenko, John Pope, David Richardson, Shelley Riley, Renee Rohs, Karen Schaffer, John Shaw, Rená Smith, Kathleen Spears, Lisa Stobbe, Gretchen Thornsberry, Jeffry Thornsberry, Richard Toomey

Statement of Mission

Northwest Missouri State University focuses on student success—every student every day.

DEGREE PROGRAMS

The Department of Natural Sciences offers a wide range of programs leading to Bachelor of Arts and Bachelor of Science degrees in the area of biology, biochemistry, biology/psychology, botany, cell biology, chemistry, A.C.S. accredited chemistry, clinical laboratory sciences, earth science, ecology, environmental geology, environmental science, geology, marine biology, medicinal chemistry, molecular biology, nanoscale biology, nanoscale chemistry, nanoscale physics, pre-professional zoology, radiologic sciences, wildlife ecology and conservation, and zoology.

The Department also offers Bachelor of Science in Education degrees in the areas of biology, chemistry, unified science: chemistry, and unified science: earth science. The Department of Natural Sciences also offers a Bachelor of Science in Nursing Completion Degree.

In addition to the various degree programs, the Department of Natural Sciences provides guidance, information, and preparatory coursework on many career path areas including dental hygiene, engineering, occupational therapy, optometry, physical therapy, pharmacy, physicians assistant, and respiratory therapy.

Advanced Standing Requirement

A student qualifies for advanced standing as a biology major after the completion of 45 semester hours. In addition, all Biology majors and minors must complete the following classes with a grade of “C” or better: BIOL 04-112/113 General Botany and Laboratory and BIOL 04-114/115 General Zoology and Laboratory. All Biology majors and minors must also earn a grade of “C” or better in all biology course prerequisites prior to moving to a higher level course.

A student can receive advanced standing for the Bachelor of Science degree in Chemistry and A.C.S. accredited Bachelor of Science degree in Chemistry when he/she has earned a grade of “C” or better in MATH 17-120, CHEM 24-114/115 and 24-116/117. Requirements to achieve advanced standing for the Bachelor of Arts degree are a grade of “C” or better in MATH 17-118,

CHEM 24-114/115 and CHEM 24-116/117. All chemistry courses that are prerequisites to other chemistry courses must be passed with a grade of “C” or higher before a more advanced course may be taken. It is recommended that students take sequential courses in adjacent trimesters.

All geology courses that are prerequisites to other geology courses must be passed with grade of “C” or higher before a more advanced course may be taken.

DEPARTMENT POLICIES

Students enrolled in biology and chemistry laboratory courses are expected to sign a safety contract, purchase dissecting kits, laboratory coats and eye protection devices. In addition, students will be expected to purchase laboratory manuals and/or field guides to supplement the textbook.

Problem courses (BIOL 04-419, 429, 439, 449, 459, 469, 479, 489) supplement regular course offering. They may consist of acquisition of information from library sources, the actual pursuit of a research project, special courses on demand, or similar activities. The student is expected to work independently, but under the supervision of an instructor familiar with the area being studied. It is imperative that the student obtain written consent from the intended instructor prior to enrolling in the course. Written reports are due upon completion of the project and oral reports may be required. Credit is variable (1-3 hours) with a minimum of three to five hours per week expected for each credit hour, depending on the nature of the problem. A maximum of three hours is allowed to be applied toward a biology major or minor, but additional hours may be counted as general electives.

Current topics courses (BIOL 04-210, 510) may be repeated for additional experience, new material and progression of study. A maximum of eight credit hours is allowed to be applied toward a biology major or minor, but additional hours may be counted as general electives.

Special courses in marine science (marine botany, marine zoology, marine invertebrate zoology, estuarine and marsh ecology, marine mammals, marine ornithology, marine microbiology, marine vertebrate zoology and ichthyology, physical marine geology, chemical marine geology and marine chemistry) are available during the summer at the Gulf Coast Research Laboratory, Ocean Springs, Mississippi. Contact the Marine Biology advisor, Department of Natural Sciences, for information and arrangements by February 1, as applications are required due to limited enrollment.

All students desiring a biology degree must complete a minimum of 15 hours of biology coursework (BIOL 04-xxx) from the Natural Sciences Department.

All biology graduating seniors (majors and minors) are required to take the ETS subject matter test and provide the department with the test results prior to graduation approval. All secondary education majors are also required to take the PRAXIS II exam in their endorsement areas for state certification.

Test-Out Policy

Undergraduate students may test out of certain lower division courses in chemistry and physics. Examinations are only available during the first week of class.

Internship and Independent Study

Geology students may apply for no more than six credit hours of combined internship and independent study hours toward their major requirements.

Biology / 04

Bachelor of Science in Clinical Laboratory Sciences

In conjunction with approved hospitals and medical centers.

The curriculum leading to the Bachelor of Science in Clinical Laboratory Sciences degree emphasizes biology and chemistry. Minimum academic prerequisites are established by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) and are taken on the Northwest campus during the first three years along with other courses required by the University. The fourth year (senior year) is a structured educational program in an affiliated clinical laboratory. The clinical program is accredited through NAACLS. Upon satisfactory completion of the clinical program, a minimum of 30 hours of credit are granted and the student is awarded a B.S. in Clinical Laboratory Sciences degree. Acceptance into an affiliated program is competitive and will be determined by the quality of academic work completed by the student during the first three years of study. Admission to the clinical program is decided entirely by the hospitals. **Acceptance into the University program does not guarantee acceptance of the student by an affiliated clinical program.**

Students who already have a bachelor's degree and who wish to enter the field may do so by applying directly to the hospital having an approved program. Applicants who have completed minimum requirements seven or more years before application must update microbiology and biochemistry. If a B.S. in Clinical Laboratory Sciences degree is desired, then University requirements for the degree must also be filled.

Complete application deadlines vary with the clinical program. Programs should be contacted during the spring trimester prior to the year you want to start. As an example, application deadlines can vary from July 1 to October 15. Applications are processed through the program director/education coordinator of the clinical program.

Selection is done by each clinical program. Criteria include state of health, academic performance, and personal characteristics. Usually, a 2.5 minimum grade point average is required.

Enrollment is limited by the class size of each clinical program. Costs vary with each clinical program. Upon graduation, students are eligible to take a national certification examination. Passing the examination is not a condition for receiving the B.S. in Clinical Laboratory Sciences degree. Financial assistance varies with each clinical program. The student should contact each program and the Office of Scholarships and Financial Assistance.

B.S. in Clinical Laboratory Sciences Degree Requirements

	Semester Hours
General Education Requirements (See pages 66-68)	42
Institutional Requirements (See pages 68-69)	6
Science	45-46
Elective	0-1
Clinical Laboratory Sciences Courses at Approved Teaching Hospital or Clinic*	30
TOTAL MINIMUM ACADEMIC	124

*Some clinical programs do have early acceptance policies, and one can usually apply to these programs during the sophomore year. Early acceptance will guarantee the student a position after all pre-clinical coursework is completed provided all other criteria are satisfied.

Hospitals and officials in association with the Clinical Laboratory Sciences degree:

Des Moines, Iowa

Mercy College of Health Sciences Clinical Laboratory Science Program

Kyla Dippold, MS, MLS (ASCP), Program Chair and Assistant Professor

Kansas City, Mo.

St. Luke's Hospital of Kansas City—Clinical Laboratory Science Program

Jane Rachel, MA, MT (ASCP), Program Director

North Kansas City, Mo.

North Kansas City Memorial Hospital—School of Clinical Laboratory Science

Marisa K. James, MA, MT (ASCP), Program Director

Bachelor of Science in Clinical Laboratory Sciences

CIP: 511005

Required Courses	Semester Hours
CHEM 24-114/115 General Chemistry I and Laboratory	4
BIOL 04-102/103 General Biology and Laboratory	4
BIOL 04-140 General Microbiology	4
BIOL 04-310 Cell Biology (4) OR	
BIOL 04-440 Molecular Biology (4) OR	
MATH 17-114 General Statistics I (3)	3-4
BIOL 04-350 Genetics	3
BIOL 04-438 Human Physiology	4
BIOL 04-444 Immunology	4
Total Hours	26-27
Clinical Laboratory Sciences	30
In conjunction with approved hospitals and medical centers.	
Collateral Courses	
CHEM 24-116/117 General Chemistry II and Laboratory	5
CHEM 24-322/323 Analytical Chemistry and Laboratory	5
CHEM 24-342/343 Organic Chemistry I and Laboratory	5
CHEM 24-362/363 Elementary Biochemistry and Laboratory	4
Directed General Education Courses	
The following courses are to be taken to fulfill General Education requirements:	
BIOL 04-114/115 General Zoology and Laboratory	4
MATH 17-118 College Algebra	3
PHYS 25-112/113 General Physics II and Laboratory	4
General Education Requirements (less directed General Education courses)	31
Institutional Requirements	6
Elective	0-1
Total Degree Requirements	124

Completion Degree Program in Nursing, 53 hours: B.S.N.—No Minor Required

CIP: 513801

The curriculum leading to the Bachelor of Science in Nursing allows licensed nurses to complete a B.S.N. degree. As a liberal arts degree, the program includes the General Education and Institutional requirements, as well as upper-division nursing courses. Successful completion of the program results in the conferral of the B.S.N. degree.

Required Courses (38 hours)	Semester Hours
NURS 01-301 Theories and Models of Nursing	3
NURS 01-311 Health Care Delivery Systems	3
NURS 01-371 Pathophysiology	3
NURS 01-381 Intermediate Pharmacology	3
NURS 01-401 Leadership and Management in Nursing	5
NURS 01-411 Health Assessment	5
NURS 01-421 Community Nursing	5
NURS 01-431 Family and Child Nursing	5
NURS 01-481 Research Methods in Nursing	3
HPER 22-552 Health Promotion	3
Collateral Courses (12 hours)	
BIOL 04-140 General Microbiology	4
BIOL 04-236 Anatomy Allied Health OR BIOL 04-436 Human Anatomy	4
BIOL 04-238 Physiology Allied Health OR BIOL 04-438 Human Physiology	4
Electives (3 hours: choose one course)	3
HPER 22-554 Human Sexuality (3)	
NURS 01-452 Gerontological Nursing (3)	
NURS 01-454 Informatics in Nursing (3)	
General Education Requirements (See pages 66-68)	42
Directed General Education Courses	
BIOL 04-102/103 General Biology/Lab (4)	
CHEM 24-112/113 General Chemistry/Lab (4)	
MATH 17-114 General Statistics (3)	
PHIL 39-276 Introduction to Ethics: Bio-Medical (3)	
PSYC 08-103 General Psychology (3)	
SOC 35-101 General Sociology (3)	
Institutional Requirements (See pages 68-69)	6
Electives	23-24
TOTAL MINIMUM ACADEMIC	124-125

Completion Degree Program in Radiologic Sciences, 81 hours: B.S.–No Minor Required

CIP: 510911

Acceptance into an affiliated clinical program is competitive and will be determined by the quality of academic work completed by the student during the first two years of study. Admission to the clinical portion of the program is decided entirely by the affiliated medical center. Acceptance into the University does not guarantee acceptance of the student by an affiliated clinical program.

Required Courses (19 hours)	Semester Hours
BIOL 04-104 Medical Terminology	3
BIOL 04-140 General Microbiology	4
BIOL 04-236 Anatomy Allied Health	4
BIOL 04-238 Physiology Allied Health	4
CHEM 24-114/115 General Chemistry I and Laboratory	4
Radiologic Sciences (62 hours)	
*RAD 49-301 Radiographic Anatomy and Physiology I	2
*RAD 49-302 Clinical Education I	1
*RAD 49-303 Medical Imaging I	2
*RAD 49-304/305 Radiographic Positioning and Procedures I and Laboratory	3
*RAD 49-306 Clinical Education II	2
*RAD 49-307 Introduction to Radiologic Science	2
*RAD 49-308 Literature Review	1
*RAD 49-309 Radiographic Physics	2
*RAD 49-310/311 Radiographic Positioning and Procedures II and Laboratory	3
*RAD 49-312 Radiographic Anatomy and Physiology II	2
*RAD 49-313 Clinical Education II	2
*RAD 49-314 Image Evaluation	1
*RAD 49-315 Medical Imaging II	2
*RAD 49-316 Radiographic Physics II	2
*RAD 49-317 Radiographic Anatomy and Physiology III	2
*RAD 49-318/319 Radiographic Positioning and Procedures III and Laboratory	3
*RAD 49-401 Clinical Education IV	4
*RAD 49-402 Clinical Education V	2
*RAD 49-403 Medical Imaging III	2
*RAD 49-404 Pathology I	2
*RAD 49-405 Radiation Biology and Radiation Protection	2
*RAD 49-406 Radiographic Positioning and Procedures IV	2
*RAD 49-407 Radiographic Anatomy and Physiology IV	2
*RAD 49-408 Clinical Education VI	2
*RAD 49-409 Correctec	2
*RAD 49-410 Imaging Modalities	2
*RAD 49-411 Pathology II	2
*RAD 49-412 Quality Assurance	2
*RAD 49-413 Radiography Curriculum Review	2
*RAD 49-414 Cross Sectional Anatomy	2

*These courses are taught by the affiliated hospitals' schools of radiologic technology.

General Education Requirements (See pages 66-68)	42
Directed General Education Courses	
BIOL 04-102/103 General Biology/Lab (4)	
MATH 17-118 College Algebra (3)	
PHYS 25-110/111 General Physics I/Lab (4)	
PHIL 39-276 Introduction to Ethics: Bio-Medical (3)	
SOC 35-101 General Sociology (3)	
Institutional Requirements (See pages 68-69)	6
TOTAL MINIMUM ACADEMIC	129

MAJORS

Major in Biology, 37 hours: B.S.–Minor Required

CIP: 260101

Areas of Emphasis: Botany, Cellular/Molecular, Ecology, Environmental Science, General Biology, and Zoology

This degree program is designed to give the student the opportunity to study in any of several areas of biology. The core courses are required of all the students, and each area of emphasis has additional requirements specific for that emphasis. Additional courses in the area, to total 37 hours, will be selected with the advice and consent of the advisor. Core courses plus areas of emphasis must total 37 hours with approved biology electives.

Core Courses for a Major in Biology

	Semester Hours
BIOL 04-114/115 General Zoology and Laboratory	4
BIOL 04-310 Cell Biology	4
BIOL 04-350 Genetics	3
BIOL 04-376 Basic Ecology	4
BIOL 04-383 Biology Practicum	1
BIOL 04-491 Biological Science Seminar	1
CHEM 24-114/115 General Chemistry I and Laboratory	4

Total Hours **21**

Required Collateral Areas for a Major in Biology

PHYS 25-112/113 General Physics II and Laboratory	4
CHEM 24-116/117 General Chemistry II and Laboratory	5
CHEM 24-342/343 Organic Chemistry I and Laboratory	5
Additionally, the following are required for the Cellular/Molecular Emphasis:	
CHEM 24-344/345 Organic Chemistry II and Laboratory AND	5
CHEM 24-362/363 Elementary Biochemistry and Laboratory (4) OR	
CHEM 24-562/563 General Biochemistry and Laboratory (5)	4-5

Directed General Education Courses for a Major in Biology

BIOL 04-112/113 General Botany and Laboratory	4
PHYS 25-110/111 General Physics I and Laboratory	4
MATH 17-118 College Algebra	3
NOTE: MATH 17-120 Calculus replaces 17-118 for the Cellular/Molecular Emphasis; note Calculus prerequisite	4

Biology: Botany Emphasis

Required Courses	Semester Hours
Biology Core	21
BIOL 04-261 Local Flora	2
BIOL 04-318 Principles of Taxonomy and Evolution	4
BIOL 04-412 Plant Anatomy and Morphology	4
BIOL 04-430 Plant Physiology	4
BIOL 04-575 Methods in Plant Ecology	2
Total Hours	37

Biology: Cellular/Molecular Emphasis

Required Courses	Semester Hours
Biology Core	21
BIOL 04-140 General Microbiology	4
BIOL 04-440 Molecular Biology	4
BIOL 04-444 Immunology	4
BIOL 04-430 Plant Physiology OR BIOL 04-438 Human Physiology	4
Total Hours	37

Please note the collateral and directed general education requirements for the Cellular/Molecular Emphasis listed above.

Biology: Ecology Emphasis

Required Courses	Semester Hours
Biology Core	21
BIOL 04-261 Local Flora	2
BIOL 04-575 Methods in Plant Ecology	2
BIOL 04-577 Methods in Animal Ecology	2
One additional animal course above 300 level with advisor's consent	3
GEOL 27-114/115 General Earth Science and Laboratory OR GEOL 27-110/111 General Geology and Laboratory OR AGRI 03-234 Fundamentals of Soil Science	4
Advisor-approved biology electives above 300 level	3
Total Hours	37

Biology: Environmental Science Emphasis

Required Courses	Semester Hours
Biology Core	21
BIOL 04-420 Environmental Issues	4
BIOL 04-575 Methods in Plant Ecology OR BIOL 04-577 Methods in Animal Ecology	2
GEOL 27-110/111 General Geology and Laboratory OR GEOL 27-114/115 General Earth Science and Laboratory	4
Choose 6 hours from the following:	6

- AGRI 03-234 Fundamentals of Soil Science (4)
- BIOL 04-307 Environmental Internship (1-3)
- BIOL 04-474 Wildlife Management and Conservation (2)
- CHEM 24-322/323 Analytical Chemistry and Laboratory (5)

GEOL 27-340 Introduction to Hydrogeology (3)
 GEOL 27-360 Environmental Geology (4)
 GEOL 27-424 Geochemistry (3)
 GEOL 27-515 Environmental Regulations (2)
 Other advisor-approved electives

Total Hours 37

Biology: General Biology Emphasis

Required Courses Semester Hours

Biology Core 21

As equal a number of hours as possible in plant and animal biology are to be selected with the advice and consent of the advisor.* 16

*NOTE: Either BIOL 04-236 Anatomy Allied Health OR BIOL 04-436 Human

Anatomy can apply to the Emphasis; either BIOL 04-238 Physiology Allied Health OR BIOL 04-438 Human Physiology can apply to the Emphasis.

Total Hours 37

The following courses may be counted either as animal or plant courses:

BIOL 04-140 General Microbiology

BIOL 04-318 Principles of Taxonomy and Evolution

BIOL 04-420 Environmental Issues

BIOL 04-440 Molecular Biology

BIOL 04-474 Wildlife Management and Conservation

Biology: Zoology Emphasis

Required Courses Semester Hours

Biology Core 21

BIOL 04-312 Invertebrate Zoology 4

BIOL 04-322 Comparative Anatomy 4

+Biology Electives 8

Total Hours 37

+Advisor-approved electives (Choose 8 hours)

BIOL 04-130 Animal Anatomy and Physiology (4)

BIOL 04-236 Anatomy Allied Health (4)

BIOL 04-238 Physiology Allied Health (4)

BIOL 04-362 Mammalogy (4)

BIOL 04-364 Ornithology (4)

BIOL 04-366 Entomology (3)

BIOL 04-418 Vertebrate Histology (4)

BIOL 04-436 Human Anatomy (4)

BIOL 04-438 Human Physiology (4)

BIOL 04-460 Herpetology (4)

BIOL 04-474 Wildlife Management and Conservation (2)

BIOL 04-575 Methods in Plant Ecology (2)

BIOL 04-577 Methods in Animal Ecology (2)

NOTE: Either BIOL 04-236 Anatomy Allied Health OR BIOL 04-436 Human Anatomy can apply to the Emphasis; either BIOL 04-238 Physiology Allied Health OR BIOL 04-438 Human Physiology can apply to the Emphasis.

NOTE: Gulf Coast courses will count as biology electives along with CHEM 24-362/363 Elementary Biochemistry and Laboratory and CHEM 24-562/563 General Biochemistry and Laboratory.

**Unified Science Major in Biology, 60-61 hours: B.S.Ed.,
Secondary Program—No Minor Required (Certifies Grades 9-12,
Endorsement Area: Biology)**

CIP: 131316

Required Courses in Endorsement Area: Biology	Semester Hours
BIOL 04-114/115 General Zoology and Laboratory	4
BIOL 04-130 Animal Anatomy and Physiology	4
BIOL 04-140 General Microbiology	4
BIOL 04-310 Cell Biology	4
BIOL 04-318 Principles of Taxonomy and Evolution	4
BIOL 04-350 Genetics	3
*BIOL 04-419 Problems in General Biology (1-3) OR	
*BIOL 04-489 Problems in Biological Education (1-3)	1
BIOL 04-420 Environmental Issues	4
BIOL 04-491 Biological Science Seminar	1
BIOL 04-383 Biology Practicum	1
CHEM 24-114/115 General Chemistry I and Laboratory	4

* Only one credit hour is required, but may be taken for up to 3 hours credit.

Required Collateral Courses for the Unified Science Major	Semester Hours
CHEM 24-116/117 General Chemistry II and Laboratory	5
CHEM 24-242/243 Organic Chemistry and Laboratory OR	
CHEM 24-342/343 Organic Chemistry I and Laboratory	4-5
GEOL 27-212 Historical Geology	4
MATH 17-119 Trigonometry	2
PHYS 25-110/111 General Physics I and Laboratory	4
PHYS 25-112/113 General Physics II and Laboratory	4
SCED 28-550 History of Science and Technology	3
Total Hours in Major	60-61

Directed General Education Courses	Semester Hours
BIOL 04-112/113 General Botany and Laboratory	4
GEOL 27-114/115 General Earth Science and Laboratory	4
MATH 17-118 College Algebra	3
Professional Education Requirements	30
Including SCED 28-580 Methods in Secondary School Science (3)	

NOTE: Although not required, the department recommends that students take the following courses:
CHEM 24-135 Laboratory Safety and MATH 17-114 General Statistics I.

**Major in Biology Education, 55-57 hours: B.S.Ed., Secondary
Program—No Minor Required (Certifies Grades 9-12)**

CIP: 131322

Required Courses	Semester Hours
BIOL 04-114/115 General Zoology and Laboratory	4
BIOL 04-130 Animal Anatomy and Physiology (4) OR	
BIOL 04-430 Plant Physiology (4) OR	
BIOL 04-438 Human Physiology (4)	4
BIOL 04-140 General Microbiology	4

BIOL 04-310 Cell Biology	4
BIOL 04-318 Principles of Taxonomy and Evolution	4
BIOL 04-350 Genetics	3
BIOL 04-383 Biology Practicum	1
BIOL 04-419 Problems in General Biology (1-3) OR BIOL 04-489 Problems in Biology Education (1-3)	1-2
BIOL 04-420 Environmental Issues	4
BIOL 04-491 Biological Science Seminar	1
CHEM 24-114/115 General Chemistry I and Laboratory	4
CHEM 24-116/117 General Chemistry II Laboratory	5
CHEM 24-342/343 Organic Chemistry I and Laboratory	5
CHEM 24-362/363 Elementary Biochemistry and Laboratory (4) OR CHEM 24-562/563 General Biochemistry and Laboratory (5)	4-5
PHYS 25-110/111 General Physics I and Laboratory (4) OR PHYS 25-112/113 General Physics II and Laboratory (4)	4
SCED 28-550 History of Science and Technology	3
Directed General Education Courses	
BIOL 04-112/113 General Botany and Laboratory	4
GEOL 27-114/115 General Earth Science and Laboratory	4
MATH 17-118 College Algebra	3
Professional Education Requirements	30
Including SCED 28-580 Methods in Secondary School Science (3)	

NOTE: Although not required, the department recommends that students take the following courses:
CHEM 24-135 Laboratory Safety and MATH 17-114 General Statistics I.

Comprehensive Major in Marine Biology, 60 hours: B.S.—No Minor Required

CIP: 261302

Required Courses	Semester Hours
BIOL 04-114/115 General Zoology and Laboratory	4
BIOL 04-310 Cell Biology	4
BIOL 04-312 Invertebrate Zoology	4
BIOL 04-350 Genetics	3
*BIOL 04-351 Marine Science I: Oceanography	3
*BIOL 04-353 Marine Science I Lab	2
*BIOL 04-352 Marine Science II: Marine Biology	3
*BIOL 04-354 Marine Science II Lab	2
BIOL 04-376 Basic Ecology	4
BIOL 04-383 Biology Practicum	1
BIOL 04-491 Biological Science Seminar	1
**Approved electives above 300 level	5

* Taught at the Gulf Coast Research Laboratory each summer

**BIOL 04-362 Mammalogy and/or additional marine lab courses are recommended.

Collateral Courses

CHEM 24-116/117 General Chemistry II and Laboratory	5
CHEM 24-342/343 Organic Chemistry I and Laboratory	5
GEOG 32-365 Geographic Information Systems	3

MATH 17-114 General Statistics I	3
PHYS 25-110/111 General Physics I and Laboratory	4
PHYS 25-112/113 General Physics II and Laboratory	4
Directed General Education Courses	
BIOL 04-112/113 General Botany and Laboratory	4
CHEM 24-114/115 General Chemistry I and Laboratory	4
MATH 17-118 College Algebra (3) OR	
MATH 17-120 Calculus I (4)	3-4

NOTE: Although not required, students planning graduate study are encouraged to take MATH 17-120 Calculus I, BIOL 04-140 General Microbiology, and either GEOL 27-114/115 General Earth Science and Laboratory or GEOL 27-110/111 General Geology and Laboratory.

Comprehensive Major in Pre-Professional Zoology, 58 hours: B.S.—No Minor Required

CIP: 260101

Required Courses	Semester Hours
BIOL 04-114/115 General Zoology and Laboratory	4
BIOL 04-140 General Microbiology	4
BIOL 04-310 Cell Biology	4
BIOL 04-322 Comparative Anatomy	4
BIOL 04-350 Genetics	3
BIOL 04-418 Vertebrate Histology	4
BIOL 04-438 Human Physiology	4
BIOL 04-444 Immunology	4
BIOL 04-491 Biological Science Seminar	1
CHEM 24-114/115 General Chemistry I and Laboratory	4
Collateral Courses	
CHEM 24-116/117 General Chemistry II and Laboratory	5
CHEM 24-342/343 Organic Chemistry I and Laboratory	5
CHEM 24-344/345 Organic Chemistry II and Laboratory	5
CHEM 24-362 Elementary Biochemistry OR	
CHEM 24-562 General Biochemistry	3
PHYS 25-112/113 Physics II and Laboratory	4
Directed General Education Courses	
BIOL 04-112/113 General Botany and Laboratory	4
MATH 17-118 College Algebra	3
PHYS 25-110/111 General Physics I and Laboratory	4

Comprehensive Major in Pre-Professional Zoology—Chiropractic Emphasis, 58 hours: B.S.—No Minor Required

CIP: 260101

Required Courses	Semester Hours
BIOL 04-114/115 General Zoology and Laboratory	4
BIOL 04-350 Genetics	3
BIOL 04-436 Human Anatomy	4
BIOL 04-438 Human Physiology	4

Collateral Courses

CHEM 24-114/115 General Chemistry I and Laboratory	4
CHEM 24-116/117 General Chemistry II and Laboratory	5
CHEM 24-342/343 Organic Chemistry I and Laboratory	5
CHEM 24-344/345 Organic Chemistry II and Laboratory	5

Courses taken at approved chiropractic schools

Biochemistry I and Laboratory*	4
BIOL 04-140 General Microbiology*	5
BIOL 04-418 Vertebrate Histology*	4
Gross Anatomy I*	6
Neuroanatomy*	5

Directed General Education Courses

BIOL 04-112/113 General Botany and Laboratory	4
MATH 17-118 College Algebra	3
PHYS 25-110/111 General Physics I and Laboratory	4

*Course taken at chiropractic college with existing articulation agreement with Northwest.

Comprehensive Major in Wildlife Ecology and Conservation, 65 hours: B.S.—No Minor Required

CIP: 030601

Required Courses	Semester Hours
BIOL 04-114/115 General Zoology and Laboratory	4
BIOL 04-130 Animal Anatomy and Physiology	4
BIOL 04-261 Local Flora	2
BIOL 04-312 Invertebrate Zoology	4
BIOL 04-350 Genetics	3
BIOL 04-362 Mammalogy	4
BIOL 04-364 Ornithology	4
BIOL 04-366 Entomology	3
BIOL 04-376 Basic Ecology	4
BIOL 04-460 Herpetology	4
BIOL 04-474 Wildlife Management and Conservation	2
BIOL 04-491 Biological Science Seminar	1
BIOL 04-575 Methods in Plant Ecology	2
BIOL 04-577 Methods in Animal Ecology	2
AGRI 03- 234 Fundamentals of Soil Science	4
CHEM 24-114/115 General Chemistry I and Laboratory	4
Collateral Courses	
AGRI 03-382 Woody Landscape Plants	3
CHEM 24-116/117 General Chemistry II and Laboratory	5
GEOG 32-365 Geographic Information Systems	3
MATH 17-114 General Statistics I	3
Directed General Education Courses	
BIOL 04-112/113 General Botany and Laboratory	4
MATH 17-118 College Algebra	3
PHYS 25-110/111 General Physics I and Laboratory OR PHYS 25-112/113 General Physics II and Laboratory	4

Comprehensive Major in Wildlife Ecology and Conservation, 61 hours: B.A.—No Minor Required

CIP: 030601

Required Courses	Semester Hours
BIOL 04-114/115 General Zoology and Laboratory	4
BIOL 04-130 Animal Anatomy and Physiology	4
BIOL 04-261 Local Flora	2
BIOL 04-312 Invertebrate Zoology	4
BIOL 04-350 Genetics	3
BIOL 04-362 Mammalogy	4
BIOL 04-364 Ornithology	4
BIOL 04-366 Entomology	3
BIOL 04-376 Basic Ecology	4
BIOL 04-460 Herpetology	4
BIOL 04-474 Wildlife Management and Conservation	2
BIOL 04-491 Biological Science Seminar	1
AGRI 03- 234 Fundamentals of Soil Science	4
CHEM 24-114/115 General Chemistry I and Laboratory	4
Collateral Courses	
AGRI 03-382 Woody Landscape Plants	3
CHEM 24-116/117 General Chemistry II and Laboratory	5
GEOG 32-365 Geographic Information Systems	3
MATH 17-114 General Statistics I	3
Directed General Education Courses	
BIOL 04-112/113 General Botany and Laboratory	4
MATH 17-118 College Algebra	3
PHYS 25-110/111 General Physics I and Laboratory OR PHYS 25-112/113 General Physics II and Laboratory	4

Comprehensive Major in Biology/Psychology, 66-69 hours: B.S.—No Minor Required

CIP: 422706

This major allows students to complete individual programs of study arranged by advisors in both the Department of Natural Sciences and the Department of Behavioral Sciences. While requiring students to complete half their class work as advised by each department, the number of elective hours gives this 66-69 hour program of study flexibility that allows students to tailor the major to their individual and specific academic needs. This program provides interdisciplinary training for a future career and/or graduate level training in psychology, biology, allied health or related fields. Students are urged to see advisors in both departments at an early date to contract a program of study.

Directed General Education Courses

- BIOL 04-112/113 General Botany/Lab (4)
- CHEM 24-114/115 General Chemistry/Lab (4)
- MATH 17-114 General Statistics (3)
- PSYC 08-103 General Psychology (3)

Required Courses for Psychology	18
PSYC 08-223 Abnormal Psychology (3)	
PSYC 08-234 Introduction to Psychological Experimentation (3)	
PSYC 08-333 Developmental Psychology (3)	
PSYC 08-334 Experimental Psychology (3)	
PSYC 08-343 Biological Psychology (3)	
PSYC 08-443 Advanced Biological Psychology (3)	
Required Courses for Biology	8
BIOL 04-114/115 General Zoology/Lab (4)	
BIOL 04-350 Genetics (3)	
*BIOL 04-491 Biological Science Seminar (1)	
Biology Electives (12 hours from the following or other advisor approved courses)	12
BIOL 04-104 Medical Terminology (3)	
BIOL 04-140 General Microbiology (4)	
BIOL 04-301 Health Science Internship (1-3)	
BIOL 04-310 Cell Biology (4)	
BIOL 04-322 Comparative Anatomy (4)	
BIOL 04-418 Vertebrate Histology (4)	
BIOL 04-436 Human Anatomy (4)	
BIOL 04-438 Human Physiology (4)	
BIOL 04-440 Molecular Biology (4)	
BIOL 04-444 Immunology (4)	
Psychology Electives (6 hours from the following or other advisor approved courses)	6
PSYC 08-310 Cognitive Psychology (3)	
PSYC 08-323 Child and Adolescent Psychopathology (3)	
PSYC 08-335 Psychological Assessment (3)	
PSYC 08-344 Drugs, Brain and Behavior (3)	
PSYC 08-353 Psychology of Gender (3)	
PSYC 08-363 Psychology of Personality (3)	
PSYC 08-370 Applied Behavior Analysis (3)	
PSYC 08-383 Psychology of Aging (3)	
PSYC 08-438 Principles of Counseling (3)	
SOC 35-365 Social Psychology (3)	
Collateral Requirements	16-17
CHEM 24-116/117 General Chemistry II/Lab (5)	
CHEM 24-242/243 Organic Chemistry/Lab (4) OR	
CHEM 24-342/343 Organic Chemistry I/Lab (5)	
MATH 17-118 College Algebra (3)	
PHYS 25-110/111 General Physics I/Lab (4)	
Collateral Electives (choose two)	6-8
CHEM 24-344 Organic Chemistry II (3)	
CHEM 24-362/363 Elementary Biochemistry/Lab (4) OR	
CHEM 24-562 General Biochemistry (3)	
PHYS 25-112/113 General Physics II/Lab (4)	
Total Major Requirements	66-69

*Must take Biology ACAT in this course.

MINORS

Minor in Biology, 24 hours: B.S.

CIP: 260101

Required Courses	Semester Hours
*BIOL 04-112/113 General Botany and Laboratory	4
*BIOL 04-114/115 General Zoology and Laboratory	4
BIOL 04-350 Genetics	3
BIOL 04-491 Biological Science Seminar	1
CHEM 24-114/115 General Chemistry and Laboratory	4
Approved biology electives (two hours must be at 300 level)	8

*Cannot be used to fulfill any General Education requirement.

Minor in Biology, 21 hours: B.A.

CIP: 260101

Required Courses	Semester Hours
*BIOL 04-112/113 General Botany and Laboratory	4
*BIOL 04-114/115 General Zoology and Laboratory	4
BIOL 04-350 Genetics	3
BIOL 04-491 Biological Science Seminar	1
CHEM 24-114/115 General Chemistry I and Laboratory	4
Approved biology electives (two hours must be at 300 level)	5

*Cannot be used to fulfill any General Education requirement.

Minor in Biology Education, 31 hours: B.S. Ed., Secondary (Certifies 9-12)

CIP: 131322

Required Courses	Semester Hours
BIOL 04-112/113 General Botany and Laboratory	4
BIOL 04-114/115 General Zoology and Laboratory	4
BIOL 04-130 Animal Anatomy and Physiology	4
BIOL 04-140 General Microbiology	4
BIOL 04-310 Cell Biology	4
BIOL 04-318 Principles of Taxonomy and Evolution	4
BIOL 04-350 Genetics	3
BIOL 04-383 Biology Practicum	1
SCED 28-550 History of Science and Technology	3

Professional Education Requirements

SCED 28-580 Methods in Secondary School Science is the required subject field methods course.

NOTES: Although not required, the department recommends that students take the following courses: CHEM 24-135 Laboratory Safety and MATH 17-114 General Statistics I.

Interdisciplinary Minor in Environmental Science, 26 hours

CIP: 030104

Required Courses	Semester Hours
BIOL 04-114/115 General Zoology and Laboratory	4
BIOL 04-376 Basic Ecology	4
CHEM 24-114/115 General Chemistry I and Laboratory	4
GEOL 27-340 Hydrogeology	3
GEOL 27-360 Environmental Geology OR BIOL 04-420 Environmental Issues	4
GEOG 32-501 Conservation of Natural Resources	3
Advisor-approved electives (choose 4 hours):	4
AGRI 03-234 Fundamentals of Soil Science (4)	
BIOL 04-140 General Microbiology (4)	
BIOL 04-307 Environmental Internship (1-3)	
BIOL 04-474 Wildlife Management and Conservation (2)	
BIOL 04-575 Methods in Plant Ecology (2)	
BIOL 04-577 Methods in Animal Ecology (2)	
GEOG 32-361 Climatology (3)	
GEOL 27-424 Geochemistry (3)	
GEOL 27-515 Environmental Regulations (2)	
GEOL 27-530 Sedimentology (3)	
Other courses as approved by the advisor	
Directed General Education Courses	
BIOL 04-112/113 General Botany and Laboratory	4
GEOL 27-114/115 General Earth Science and Laboratory	4

NOTES: No biology course in the Environmental Science Minor may also be counted toward any biology major. Therefore, biology majors who select this minor must replace all biology courses in the minor with an equal number of hours in advisor-approved electives. At least eight of these replacement hours must be in biology courses.

This minor may not be paired with the Environmental Science Emphasis of the B.S. in Biology. If combined with the B.A. in Geology, the student must add an additional 4-hour course to achieve the 56-hour combined minimum number of hours required for the major plus the minor.

No systematic electives may count for both a major in geology or geography and this minor.

Chemistry / 24

MAJORS

**Comprehensive Major in Chemistry, A.C.S. Accredited, 69 hours:
B.S.–No Minor Required**

CIP: 400501

Required Courses	Semester Hours
CHEM 24-114/115 General Chemistry I and Laboratory	4
CHEM 24-116/117 General Chemistry II and Laboratory	5
CHEM 24-135 Laboratory Safety	2
CHEM 24-322/323 Analytical Chemistry and Laboratory	5
CHEM 24-342/343 Organic Chemistry I and Laboratory	5

CHEM 24-344/345 Organic Chemistry II and Laboratory	5
CHEM 24-522/523 Instrumental Analysis and Laboratory	4
CHEM 24-532/533 Physical Chemistry I and Laboratory	4
CHEM 24-534/535 Physical Chemistry II and Laboratory	4
CHEM 24-552 Advanced Inorganic Chemistry	3
CHEM 24-555 Inorganic Synthesis Laboratory	1
CHEM 24-562 General Biochemistry	3
CHEM 24-592 Chemistry Seminar	1
Chemistry electives from courses numbered above 400	3

Collateral Courses

MATH 17-114 General Statistics I	3
MATH 17-121 Calculus II	4
MATH 17-321 Multivariate Calculus	4
PHYS 25-230/231 Fundamentals of Classical Physics II and Laboratory	5
Departmental approved courses from the areas of business, modern language, statistics or *computer science	4

*CSIS 44-130 Computers and Information Technology is a prerequisite for programming courses.

Directed General Education Courses

MATH 17-120 Calculus I	4
PHYS 25-120/121 Fundamentals of Classical Physics I and Laboratory	5
Biological sciences: one course	4

Major in Chemistry, 54-58 hours: B.S.—No Minor Required

CIP: 400501

Areas of Emphasis: General, Biochemistry, and Medicinal Chemistry

This degree program is designed to give students the opportunity to study in chemistry with several areas of concentrations (emphasis) that allow students to tailor the major to their individual interests and specific academic needs. While the General emphasis provides students with a broader chemistry background, the Biochemistry emphasis will provide training for a future career and/or graduate level in training in biochemistry, cellular/molecular biology and biotechnology. The Medicinal Chemistry emphasis prepares students for a career in the pharmaceutical industry, regulatory government agency or graduate studies in Medicinal Chemistry/related discipline. This emphasis meets the requirements for pre-professional training in medicine, and may partially or completely fulfill pre-pharmacy requirements for Pharm D programs. The core courses are required of all students, and each emphasis area has additional specific requirements.

Core Courses for a Major in Chemistry

Semester Hours

CHEM 24-114/115 General Chemistry I and Laboratory	4
CHEM 24-116/117 General Chemistry II and Laboratory	5
CHEM 24-322/323 Analytical Chemistry and Laboratory	5
CHEM 24-342-343 Organic Chemistry I and Laboratory	5
CHEM 24-344/345 Organic Chemistry II and Laboratory	5
CHEM 24-592 Chemistry Seminar	1

Total Hours 25

Chemistry: General Emphasis, 54 hours

Required Courses	Semester Hours
Chemistry Core	25
CHEM 24-135 Laboratory Safety	2
CHEM 24-532/533 Physical Chemistry I and Laboratory	4
CHEM 24-534/535 Physical Chemistry II and Laboratory	4
CHEM 24-552 Advanced Inorganic Chemistry	3
MATH 17-114 General Statistics	3
MATH 17-121 Calculus II	4
PHYS 25-230/231 Fundamentals of Classical Physics II and Laboratory	5
Department approved electives chosen from physics, chemistry, mathematics, biology or *computer science	4
Total Hours	54

*CSIS 44-130 Computers and Information Technology is a prerequisite for programming courses.

Directed General Education Courses

MATH 17-120 Calculus I	4
PHYS 25-120/121 Fundamentals of Classical Physics I and Laboratory	5
Biological Sciences: choose one course	4

Chemistry: Biochemistry Emphasis, 55-56 hours

Required Courses	Semester Hours
Chemistry Core	25
CHEM 24-562/563 General Biochemistry and Laboratory	5
CHEM 24-450 Macromolecular Structure	4
BIOL 04-310 Cell Biology	4
BIOL 04-350 Genetics	3
BIOL 04-440 Molecular Biology	4
PHYS 25-112/113 General Physics II and Laboratory OR	
PHYS 25-230/231 Fundamentals of Classical Physics II and Laboratory	4-5
Approved electives from chemistry or biology at or above 300 level	6
Total Hours	55-56

Directed General Education Courses

BIOL 04-112/113 General Botany and Laboratory OR	
BIOL 04-114/115 General Zoology and Laboratory	4
MATH 17-120 Calculus I OR	
MATH 17-118 College Algebra	3-4
PHYS 25-110-111 General Physics I and Laboratory OR	
PHYS 25-120/121 Fundamentals of Classical Physics I and Laboratory	4-5

Chemistry: Medicinal Chemistry Emphasis, 57-58 hours

Required Courses	Semester Hours
Chemistry Core	25
CHEM 24-562 General Biochemistry	3
*CHEM 24-436 Medicinal Chemistry I	3
*CHEM 24-438 Medicinal Chemistry II	3
BIOL 04-140 General Microbiology	4
BIOL 04-310 Cell Biology	4
BIOL 04-350 Genetics	3

PHYS 25-112/113 General Physics II and Laboratory OR	
PHYS 25-230/231 Fundamentals of Classical Physics II and Laboratory	4-5
**Choose a minimum of two courses from the following:	8
BIOL 04-438 Human Physiology (4)	
BIOL 04-440 Molecular Biology (4)	
BIOL 04-436 Human Anatomy (4)	
CHEM 24-522/523 Instrumental Analysis and Laboratory (4)	
CHEM 24-534/535 Physical Chemistry II and Laboratory (4)	
CHEM 24-552/555 Advanced Inorganic Chemistry/Inorganic Synthesis Lab (4)	

Total Hours 57-58

*Online courses taken through University of Florida or other accredited institution.

**Note: Students applying to medical or pharmacy programs are encouraged to consult with their advisor and the school of interest to determine specific admission requirements and tailor their curriculum accordingly.

Directed General Education Courses

BIOL 04-112/113 General Botany and Laboratory OR	
BIOL 04-114/115 General Zoology and Laboratory	4
MATH 17-120 Calculus I OR	
MATH 17-117 Precalculus	4
PHYS 25-110-111 General Physics I and Laboratory OR	
PHYS 25-120/121 Fundamentals of Classical Physics I and Laboratory	4-5

Major in Chemistry, 30 hours: B.A.—Minor Required

CIP: 400501

Required Courses	Semester Hours
CHEM 24-114/115 General Chemistry I and Laboratory	4
CHEM 24-116/117 General Chemistry II and Laboratory	5
CHEM 24-322/323 Analytical Chemistry and Laboratory	5
CHEM 24-342/343 Organic Chemistry I and Laboratory	5
CHEM 24-344 Organic Chemistry II	3
CHEM 24-592 Chemistry Seminar	1
Chemistry electives from courses numbered above 300	7

Directed General Education Courses

MATH 17-118 College Algebra	3
PHYS 25-110/111 General Physics I and Laboratory OR	
PHYS 25-112/113 General Physics II and Laboratory	4
Biological sciences: one course	4

Unified Science Major in Chemistry, 63-64 hours: B.S.Ed., Secondary Program—No Minor Required (Certifies Grades 9-12, Endorsement Area: Chemistry)

CIP: 131316

Required Courses in Endorsement Area: Chemistry	Semester Hours
CHEM 24-114/115 General Chemistry I and Laboratory	4
CHEM 24-116/117 General Chemistry II and Laboratory	5
CHEM 24-135 Laboratory Safety	2

CHEM 24-322/323 Analytical Chemistry and Laboratory	5
CHEM 24-342/343 Organic Chemistry I and Laboratory	5
CHEM 24-362/363 Elementary Biochemistry and Laboratory OR CHEM 24-562/563 General Biochemistry and Laboratory	4-5
CHEM 24-499 Special Investigations in Chemistry	1
CHEM 24-534 Physical Chemistry II	3
CHEM 24-592 Chemistry Seminar	1
CHEM 24-370 Chemistry Practicum	1
Required Collateral Courses for the Unified Science Major	
BIOL 04-112/113 General Botany and Laboratory	4
BIOL 04-420 Environmental Issues	4
GEOL 27-212 Historical Geology	4
MATH 17-114 General Statistics I	3
MATH 17-121 Calculus II	4
PHYS 25-120/121 Fundamentals of Classical Physics I and Laboratory	5
PHYS 25-230/231 Fundamentals of Classical Physics II and Lab	5
SCED 28-550 History of Science and Technology	3
Total Hours in Major	63-64
Directed General Education Courses	
BIOL 04-114/115 General Zoology and Laboratory	4
GEOL 27-114/115 General Earth Science and Laboratory	4
MATH 17-120 Calculus I	4
Professional Education Requirements	30
Including SCED 28-580 Methods in Secondary School Science (3)	

Major in Chemistry Education, 56 hours: B.S.Ed., Secondary Program (Certifies Grades 9-12)

CIP: 131323

Required Courses	Semester Hours
CHEM 24-114/115 General Chemistry I and Laboratory	4
CHEM 24-116/117 General Chemistry II and Laboratory	5
CHEM 24-135 Laboratory Safety	2
CHEM 24-322/323 Analytical Chemistry and Laboratory	5
CHEM 24-342/343 Organic Chemistry I and Laboratory	5
CHEM 24-370 Chemistry Practicum	1
CHEM 24-499 Special Investigations in Chemistry	1
CHEM 24-534/535 Physical Chemistry II and Laboratory	4
CHEM 24-562/563 General Biochemistry and Laboratory	5
CHEM 24-592 Chemistry Seminar	1
Choose from the following chemistry electives:	
CHEM 24-344/345 Organic Chemistry II and Laboratory (5) OR	4-5
CHEM 24-532/533 Physical Chemistry I and Laboratory (4)	
Collateral Courses	
BIOL 04-420 Environmental Issues	4
MATH 17-114 General Statistics I	3
MATH 17-121 Calculus II	4
PHYS 25-120/121 Fundamentals of Classical Physics I and Laboratory	5
SCED 28-550 History of Science and Technology	3

Directed General Education Courses

BIOL 04-102/103 General Biology and Laboratory	4
GEOL 27-114/115 General Earth Science and Laboratory	4
MATH 17-120 Calculus I	4

Professional Education Requirements

Including SCED 28-580 Methods in Secondary School Science (3)	30
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MINORS

If the requirements for both the minor in Chemistry and the minor in Biochemistry have been met, the student must choose one of the minors.

Minor in Chemistry, 24 hours

CIP: 400501

Required Courses

	Semester Hours
*CHEM 24-114/115 General Chemistry I and Laboratory	4
CHEM 24-116/117 General Chemistry II and Laboratory	5
CHEM 24-322/323 Analytical Chemistry and Laboratory	5
CHEM 24-342/343 Organic Chemistry I and Laboratory	5
Chemistry electives from courses numbered above 300	5

Directed General Education Courses

MATH 17-118 College Algebra	3
PHYS 25-110/111 General Physics I and Laboratory OR	
PHYS 25-112/113 General Physics II and Laboratory	4

*Cannot be used to fulfill any General Education requirement.

Minor in Biochemistry, 27-28 hours

CIP: 260202

Students majoring in chemistry are not permitted to select this minor.

Required Courses

	Semester Hours
*CHEM 24-114/115 General Chemistry I and Laboratory	4
CHEM 24-116/117 General Chemistry II and Laboratory	5
CHEM 24-342/343 Organic Chemistry I and Laboratory	5
CHEM 24-344/345 Organic Chemistry II and Laboratory	5
CHEM 24-562/563 General Biochemistry and Laboratory	5

Collateral Courses

BIOL 04-310 Cell Biology (4) OR	
BIOL 04-350 Genetics (3)	3-4

Directed General Education Courses

MATH 17-118 College Algebra	3
BIOL 04-102/103 General Biology and Laboratory OR	
BIOL 04-112/113 General Botany and Laboratory OR	
BIOL 04-114/115 General Zoology and Laboratory OR	
AGRI 03-130 Plant Science	4

*Cannot be used to fulfill any General Education requirement.

NOTE:

- 1) Students with a Biology major: Cellular/Molecular Emphasis must take 5 hours of chemistry electives from 300-level or above courses, excluding CHEM 24-362/363.
- 2) Students with a comprehensive major in Pre-Professional Zoology must take 3 hours of chemistry electives from courses numbered 300 or above excluding CHEM 24-362/363.

Minor in Chemistry Education, 24-26 hours: B.S.Ed. (Certifies 9-12)

CIP: 131323

Required Courses	Semester Hours
CHEM 24-116/117 General Chemistry II and Laboratory	5
CHEM 24-135 Laboratory Safety	2
CHEM 24-342/343 Organic Chemistry I and Laboratory	5
CHEM 24-362/363 Elementary Biochemistry and Laboratory (4) OR CHEM 24-562/563 General Biochemistry and Laboratory (5)	4-5
CHEM 24-499 Special Investigations in Chemistry	1
CHEM 24-534/535 Physical Chemistry II and Laboratory (4) OR CHEM 24-322/323 Analytical Chemistry and Laboratory (5)	4-5
SCED 28-550 History of Science and Technology	3
Directed General Education Courses	
CHEM 24-114/115 General Chemistry I and Laboratory	4
MATH 17-114 General Statistics I	3
Professional Education Requirements	
SCED 28-580 Methods in Secondary School Science is the required subject field methods course.	

NOTE: Students with a non-science education major will also be required to take SCED 28-550 History of Science and Technology.

Geology / 27

MAJORS

Core Requirements for Majors in Geology	Semester Hours
GEOL 27-110/111 General Geology and Laboratory OR GEOL 27-114/115 General Earth Science and Laboratory	4
GEOL 27-212 Historical Geology	4
GEOL 27-220 Mineralogy	4
GEOL 27-420 Petrology	4
GEOL 27-498 Senior Seminar	1
Total Hours	17

Major in Geology, 31 hours: B.A.–Minor Required

CIP: 400601

Geology Major Core Requirements	17
GEOL 27-360 Environmental Geology	4
Geology electives (No more than 2 field trips)	10
Directed General Education Course	
CHEM 24-112/113 General Chemistry and Laboratory OR CHEM 24-114/115 General Chemistry I and Laboratory	4

**Comprehensive Major in Geology, 54-59 hours
(depending on area of concentration): B.S.—No Minor Required**

CIP: 400601

Areas of Concentration	Semester Hours
General Geology	55-59
Environmental Geology	54

General Geology Concentration 55-59 hours

Required Courses	Semester Hours
Geology Major Core Requirements	17
GEOL 27-440 Stratigraphy OR	
GEOL 27-530 Sedimentology	4
GEOL 27-450 Structural Geology	4
GEOL 27-540 Paleontology	4
Geology Summer Field Camp (approved through institution)	6
Required Geology Electives (one course from each group)	
Group I	3-4
GEOL 27-423 Economic Geology (4)	
GEOL 27-424 Geochemistry (3)	
GEOL 27-510 Geomorphology (3)	
GEOL 27-555 X-Ray Analysis (3)	
GEOL 27-560 Optical Mineralogy (3)	
Group II	3-4
GEOG 32-361 Climatology (3)	
GEOG 32-363 Remote Sensing (3)	
GEOL 27-335 Physical Oceanography (3)	
GEOL 27-340 Introduction to Hydrogeology (3)	
GEOL 27-360 Environmental Geology (4)	
GEOL 27-515 Environmental Regulations (2)	
Required Collateral Courses	
MATH 17-119 Trigonometry or any calculus course	2
Chemistry: One course with laboratory beyond the directed	
General Education course; choose from:	
CHEM 24-114/115 General Chemistry I and Laboratory (4) OR	
CHEM 24-116/117 General Chemistry II and Laboratory (5)	4-5
PHYS 25-110/111 General Physics I and Laboratory (4) AND	
PHYS 25-112/113 General Physics II and Laboratory (4)	
OR	
PHYS 25-120/121 Fundamentals of Classical Physics I and Laboratory (5) AND	
PHYS 25-230/231 Fundamentals of Classical Physics II and Lab. (5)	8-10
Directed General Education Courses	
MATH 17-118 College Algebra or any calculus course	3
CHEM 24-112/113 General Chemistry and Laboratory OR	
CHEM 24-114/115 General Chemistry I and Laboratory	4
BIOL 04-102/103 General Biology and Laboratory OR	
BIOL 04-112/113 General Botany and Laboratory OR	
BIOL 04-114/115 General Zoology and Laboratory	4

**Environmental Geology Concentration, 54 hours: B.S.–
No Minor Required**

Required Courses	Semester Hours
Geology Major Core Requirements	17
GEOL 27-340 Introduction to Hydrogeology	3
GEOL 27-360 Environmental Geology	4
GEOL 27-455 Geologic Field Methods OR Field Camp in Geology, Hydrogeology or Environmental Geology	3
Required Geology Electives (choose a combination to total 15 hours)	15
GEOL 27-326 Geology of the National Parks (3)	
GEOL 27-335 Physical Oceanography (3)	
GEOL 27-423 Economic Geology (4)	
GEOL 27-424 Geochemistry (3)	
GEOL 27-440 Stratigraphy (4)	
GEOL 27-450 Structural Geology (4)	
GEOL 27-510 Geomorphology (3)	
GEOL 27-530 Sedimentology (4)	
GEOL 27-540 Paleontology (4)	
GEOL 27-555 X-Ray Analysis (3)	
GEOL 27-560 Optical Mineralogy (3)	
Required Collateral Courses (choose a combination to total 12 hours)	12
AGRI 03-234 Fundamentals of Soil Science (4)	
BIOL 04-420 Environmental Issues (4)	
CHEM 24-242/243 Organic Chemistry and Laboratory (4)	
GEOG 32-201 Maps and Maps Interpretation (3)	
GEOG 32-207 GPS Fundamentals (3)	
GEOG 32-221 Economic Geography (3)	
GEOG 32-361 Climatology (3)	
GEOG 32-362 Cartography (3)	
GEOG 32-363 Remote Sensing (3)	
GEOG 32-365 Geographic Information Systems (3)	
GEOG 32-501 Conservation of Natural Resources (3)	
GEOG 32-522 Urban Geography (3)	
GEOG 32-562 Digital Cartography and GeoVisualization (3)	
GEOG 32-563 Digital Image Processing (3)	
GEOG 32-565 Advanced Geographic Information Systems (3)	
GEOL 27-515 Environmental Regulations (2)	
MATH 17-114 General Statistics I (3)	
Directed General Education Courses	
CHEM 24-112/113 General Chemistry and Laboratory OR CHEM 24-114/115 General Chemistry I and Laboratory	4

**Unified Science Major in Earth Science, 58 hours: B.S.Ed.,
Secondary Program–No Minor Required (Certifies Grades 9-12,
Endorsement Area: Earth Science)**

CIP: 131316

Required Courses in Endorsement Area: Earth Science	Semester Hours
GEOG 32-360 Dynamic and Synoptic Meteorology	3

GEOL 27-114/115 General Earth Science and Laboratory	4
GEOL 27-212 Historical Geology	4
GEOL 27-220 Mineralogy	4
GEOL 27-305 Practicum in Teaching Laboratory	1
GEOL 27-335 Physical Oceanography	3
GEOL 27-360 Environmental Geology	4
GEOL 27-420 Petrology	4
GEOL 27-498 Senior Seminar	1
GEOL 27-540 Paleontology	4
Required Collateral Courses for the Unified Science Major	
BIOL 04-112/113 General Botany and Laboratory	4
CHEM 24-116/117 General Chemistry II and Laboratory	5
MATH 17-119 Trigonometry	2
PHSC 40-122/123 Descriptive Astronomy and Laboratory	4
PHYS 25-110/111 General Physics I and Laboratory	4
PHYS 25-112/113 General Physics II and Laboratory	4
SCED 28-550 History of Science and Technology	3
Total Hours in Major	58
Directed General Education Courses	
MATH 17-118 College Algebra	3
BIOL 04-114/115 General Zoology and Laboratory	4
CHEM 24-114/115 General Chemistry I and Laboratory	4
Professional Education Requirements	30
Including SCED 28-580 Methods in Secondary School Science (3)	

MINORS

Minor in Geology, 24 hours

CIP: 400601

Required Courses	Semester Hours
GEOL 27-110/111 General Geology and Laboratory OR GEOL 27-114/115 General Earth Science and Laboratory	4
GEOL 27-212 Historical Geology	4
GEOL 27-220 Mineralogy	3
Required Geology Electives	13
(Must include one 400- or 500-level 3-5 credit course from Geology offerings and no more than one field trip)	
Directed General Education Course	
CHEM 24-112/113 General Chemistry and Laboratory OR CHEM 24-114/115 General Chemistry I and Laboratory	4

Minor in Earth Science Education, 22-23 hours

CIP: 131316

Required Courses	Semester Hours
GEOG 32-360 Dynamic and Synoptic Meteorology	3
*GEOL 27-114/115 General Earth Science and Laboratory	4
GEOL 27-212 Historical Geology	4

GEOL 27-305 Practicum in Teaching Laboratory	1
GEOL 27-335 Physical Oceanography	3
GEOL 27-360 Environmental Geology (4) OR GEOG 32-501 Conservation of Natural Resources (3)	3-4
PHSC 40-122/123 Descriptive Astronomy and Laboratory	4

*This course counts as a General Education course as well as a course in the minor area.

NOTES: This minor may be paired with a major in Geography, but not a major in Geology. If paired with a major in Geography, courses listed in both the major and minor may not count toward both. This minor will not certify to teach unless taken on a B.S.Ed. degree.

Students with a non-science education major will also be required to take SCED 28-550 History of Science and Technology.

Interdisciplinary Minor in Environmental Science, 26 hours

CIP: 030104

Required Courses	Semester Hours
BIOL 04-114/115 General Zoology and Laboratory	4
BIOL 04-376 Basic Ecology	4
CHEM 24-114/115 General Chemistry I and Laboratory	4
GEOG 32-501 Conservation of Natural Resources	3
GEOL 27-340 Hydrogeology	3
GEOL 27-360 Environmental Geology OR BIOL 04-420 Environmental Issues	4
Advisor-Approved Electives (choose 4 hours):	4
AGRI 03-234 Fundamentals of Soil Science (4)	
BIOL 04-140 General Microbiology (4)	
BIOL 04-307 Environmental Internship (1-3)	
BIOL 04-474 Wildlife Management and Conservation (2)	
BIOL 04-575 Methods in Plant Ecology (2)	
BIOL 04-577 Methods in Animal Ecology (2)	
GEOL 27-424 Geochemistry (3)	
GEOL 27-515 Environmental Regulations (2)	
GEOL 27-530 Sedimentology (3)	
GEOG 32-361 Climatology (3)	
Other courses as approved by the advisor	
Directed General Education Courses	
BIOL 04-112/113 General Botany and Laboratory	4
GEOL 27-114/115 General Earth Science and Laboratory	4

NOTES: No biology course in the Environmental Science Minor may also be counted toward any biology major. Therefore, biology majors who select this minor must replace all biology courses in the minor with an equal number of hours in advisor-approved electives. At least eight of these replacement hours must be biology courses.

This minor may not be paired with the Environmental Science Emphasis of the B.S. in Biology.

If combined with the B.A. in Geology, the student must add an additional 4-hour course to achieve the 56-hour combined minimum number of hours required for the major plus the minor.

No systematic electives may count for both a major in geology or geography and this minor.

Physics / 25

MINORS

Minor in Physics, 24 hours

CIP: 400801

Required Courses	Semester Hours
PHYS 25-120/121 Fundamentals of Classical Physics I and Laboratory	5
PHYS 25-230/231 Fundamentals of Classical Physics II and Laboratory	5
MATH 17-121 Calculus II	4
Physics electives from courses numbered above 300	10
Directed General Education Course	
MATH 17-120 Calculus I	4

Minor in Physics Education, 27 hours: B.S.Ed. (Certifies Grades 9-12)

CIP: 131329

Required Courses	Semester Hours
PHYS 25-120/121 Fundamentals of Classical Physics I and Laboratory	5
PHYS 25-230/231 Fundamentals of Classical Physics II and Laboratory	5
PHYS 25-350/351 Introduction to Modern Physics and Laboratory	4
MATH 17-121 Calculus II	4
SCED 28-550 History of Science and Technology	3
Physics electives from courses numbered above 300	6
Directed General Education Course	
MATH 17-120 Calculus I	4
Professional Education Requirement	
SCED 28-580 Methods in Secondary School Science is the required subject field methods course.	

NOTE: Students with a non-science education major will also be required to take SCED 28-550 History of Science and Technology.

Nanoscale Science / 48

DEGREE PROGRAM

The main objectives of the courses in the nanoscience program are to provide interdisciplinary training in biology, chemistry, physics and mathematics needed for the highly technical fields related to nanotechnology. The curriculum is composed of a core sequence required for all participants in the program as well as three emphasis tracks that allow students to focus on specific areas of interest.

MAJOR

Major in Nanoscience, 72 hours: B.S.—No Minor Required

CIP: 300101

Nanoscale Biology Emphasis

This is an interdisciplinary major in conjunction with the Departments of Natural Sciences, and Mathematics, Computer Science and Information Systems. Three emphasis areas are available for this major: Nanoscale Biology, Nanoscale Chemistry and Nanoscale Physics.

Required Core Courses	Semester Hours
BIOL 04-140 General Microbiology	4
BIOL 04-310 Cell Biology	4
BIOL 04-350 Genetics	3
BIOL 04-440 Molecular Biology	4
CHEM 24-114/115 General Chemistry I and Laboratory	4
CHEM 24-116/117 General Chemistry II and Laboratory	5
CHEM 24-135 Laboratory Safety	2
CHEM 24-342/343 Organic Chemistry I and Laboratory	5
CHEM 24-562/563 Biochemistry and Laboratory	5
MATH 17-114 General Statistics I	3
MATH 17-121 Calculus II	4
NANO 48-314 Nanoscale Science I	4
NANO 48-315 Nanoscale Science II	4
PHYS 25-230/231 Classical Physics II and Laboratory	5
Total Core Requirements	56

Nanoscale Biology Emphasis Required Courses

BIOL 04-444 Immunology	4
BIOL 04-511 Techniques in Biotechnology	4
CHEM 24-344/345 Organic Chemistry II and Laboratory	5
CHEM 24-450 Macromolecular Structures	3
Total Emphasis Hours	16

Directed General Education Courses

BIOL 04-112/113 General Botany and Laboratory	4
MATH 17-120 Calculus I	4
PHIL 39-274 Introduction to Ethics	3
PHYS 25-120/121 Classical Physics I and Laboratory	5

Nanoscale Chemistry Emphasis

This is an interdisciplinary major in conjunction with the Departments of Natural Sciences, and Mathematics, Computer Science, and Information Systems. Three emphasis areas are available for this major: Nanoscale Biology, Nanoscale Chemistry and Nanoscale Physics.

Required Core Courses	Semester Hours
BIOL 04-140 General Microbiology	4
BIOL 04-310 Cell Biology	4
BIOL 04-350 Genetics	3
BIOL 04-440 Molecular Biology	4
CHEM 24-114/115 General Chemistry I and Laboratory	4
CHEM 24-116/117 General Chemistry II and Laboratory	5
CHEM 24-135 Laboratory Safety	2

CHEM 24-342/343 Organic Chemistry I and Laboratory	5
CHEM 24-562/563 Biochemistry and Laboratory	5
MATH 17-114 General Statistics I	3
MATH 17-121 Calculus II	4
NANO 48-314 Nanoscale Science I	4
NANO 48-315 Nanoscale Science II	4
PHYS 25-230/231 Classical Physics II and Laboratory	5
Total Core Requirements	56

Nanoscale Chemistry Emphasis Required Courses

CHEM 24-344/345 Organic Chemistry II and Laboratory OR CHEM 24-322/323 Analytical Chemistry and Laboratory	5
CHEM 24-532/533 Physical Chemistry I and Laboratory	4
CHEM 24-534 Physical Chemistry II	3
CHEM 24-552/555 Advanced Inorganic Chemistry and Inorganic Synthesis Laboratory	4

Total Emphasis Hours **16**

Directed General Education Courses

BIOL 04-112/113 General Botany and Laboratory	4
MATH 17-120 Calculus I	4
PHIL 39-274 Introduction to Ethics	3
PHYS 25-120/121 Classical Physics I and Laboratory	5

Nanoscale Physics Emphasis

This is an interdisciplinary major in conjunction with the Departments of Natural Sciences, and Mathematics, Computer Science, and Information Systems. Three emphasis areas are available for this major: Nanoscale Biology, Nanoscale Chemistry and Nanoscale Physics.

Required Core Courses	Semester Hours
BIOL 04-140 General Microbiology	4
BIOL 04-310 Cell Biology	4
BIOL 04-350 Genetics	3
BIOL 04-440 Molecular Biology	4
CHEM 24-114/115 General Chemistry I and Laboratory	4
CHEM 24-116/117 General Chemistry II and Laboratory	5
CHEM 24-135 Laboratory Safety	2
CHEM 24-342/343 Organic Chemistry I and Laboratory	5
CHEM 24-562/563 Biochemistry and Laboratory	5
MATH 17-114 General Statistics I	3
MATH 17-121 Calculus II	4
NANO 48-314 Nanoscale Science I	4
NANO 48-315 Nanoscale Science II	4
PHYS 25-230/231 Classical Physics II and Laboratory	5
Total Core Requirements	56

Nanoscale Physics Emphasis Required Courses

CSIS 44-141 Computer Programming I	3
PHYS 25-332/333 Electronics and Laboratory OR PHYS 25-450/451 Computational Physics and Laboratory	4
PHYS 25-350/351 Introduction to Modern Physics I and Laboratory	4
PHYS 25-352 Modern Physics II	3
PHYS 25-479 Undergraduate Research	2

Total Emphasis Hours **16**

Directed General Education Courses

BIOL 04-112/113 General Botany and Laboratory	4
MATH 17-120 Calculus I	4
PHIL 39-274 Introduction to Ethics	3
PHYS 25-120/121 Classical Physics I and Laboratory	5

Science Education / 28

MINOR

**Minor in Middle School Science, 25 hours: B.S.Ed.,
Major in Middle School (Certifies Grades 5-9).
Additional concentration area is required.**

Required Courses	Semester Hours
*BIOL 04-112/113 General Botany and Laboratory OR	
*BIOL 04-114/115 General Zoology and Laboratory	4
CHEM 24-114/115 General Chemistry and Laboratory OR	
PHYS 25-110/111 General Physics and Laboratory OR	
PHYS 25-112/113 General Physics II and Laboratory	4
CHEM 24-135 Laboratory Safety	2
GEOL 27-114/115 General Earth Science and Laboratory	4
PHSC 40-102/103 The Physical Sciences and Laboratory	4
PHSC 40-122/123 Descriptive Astronomy and Laboratory	4
SCED 28-550 History of Science and Technology	3
Directed General Education Course	
BIOL 04-102/103 General Biology and Laboratory	4
Professional Education Requirement	
SCED 28-582 Methods in Middle School Science is included in Middle School major.	

*Cannot be used to fulfill any General Education requirement.

Course Descriptions

Biology / 04

102 General Biology (3 hours)

A general course in biology which provides students a broad understanding of the basic principles of biological science such as cells, energy production, photosynthesis, genetics, plant and animal physiology, ecology and diversity. Upon completion, students should be able to understand the intricate relationship between living organisms and their environment and more intelligently act upon important issues facing our society. Must co-register in BIOL 04-103. Three hours of lecture per week. (F, S, SS)

103 General Biology Laboratory (1 hour)

A two-hour laboratory which must be taken concurrently with BIOL 04-102 (F, S, SS)

104 Medical Terminology (3 hours)

Medical terms encountered in the anatomy, physiology and surgical procedures of the life support systems. (F, S)

110 Theory and Practice of Emergency Medical Techniques (4 hours)

Theory and clinical practice which allows one to gain and apply knowledge about the life support systems encountered in emergency medical

situations. Students will be presented symptoms, treatment, practical experience and use of emergency medical equipment. This course is approved and partially funded by the Missouri Bureau of Emergency Medical Services. (F)

111 Emergency Medical Techniques (2 hours)

A brief refresher of BIOL 04-110 which serves as a refresher course for those seeking to be re-licensed as emergency medical technicians. Funded in part by the Missouri Bureau of Emergency Medical Services. (F)

112 General Botany (3 hours)

A fundamental study of plants: life histories, structure, physiology, ecology and economic importance. Must co-register for BIOL 04-113. Prerequisites: BIOL 04-102/103 with a minimum grade of "C" or equivalent of two years of high school biology. Three hours of lecture per week. (F, S, SS)

113 General Botany Laboratory (1 hour)

A two-hour laboratory which must be taken concurrently with BIOL 04-112. (F, S, SS)

114 General Zoology (3 hours)

An introductory course on the life histories of animals taught using an evolutionary paradigm. Topics covered include taxonomy, diversity, anatomy, physiology, ecology, and reproductive strategies of major animal and protozoan clades. Must co-register for BIOL 04-115. Three hours of lecture per week. Prerequisites: BIOL 04-102/103 with a minimum grade of "C" or equivalent of two years of high school biology. (F, S, SS)

115 General Zoology Laboratory (1 hour)

Two-hour laboratory designed to supplement material taught in BIOL 04-114. Must be taken concurrently with BIOL 04-114. (F, S, SS)

130 Animal Anatomy and Physiology (4 hours)

Introductory course dealing with basic anatomy and physiology of major animal groups. This course is taught using a systems-based approach, with emphasis on how anatomy and physiology correlates with the ecology, behavior, and basic life history of animals. Three hours of lecture and two hours of laboratory per week. Prerequisites: BIOL 04-112/113 and 114/115 with a minimum grade of "C." (S)

140 General Microbiology (4 hours)

A study of the morphology, physiology and culturing of microorganisms. Studies on disease-producing organisms, the fundamentals of immunology, various laboratory techniques, and procedures and the applications of microbiology will be included. Two hours of lecture and four hours of laboratory per week. Prerequisites: BIOL 04-102/103 or 112/113 or 114/115 with a minimum grade of "C" and CHEM 24-114/115. Pre-nursing students may substitute CHEM 24-112/113. (F, S)

210 Current Topics in Biology (1-3 hours)

Each current topic is specifically designed to address a timely topic in biology. Repeatable for additional experience, new material and progression of study.

236 Anatomy Allied Health (4 hours)

An introduction to the anatomy of the human body, including cells, tissues, organs and organ systems. Comprehension is emphasized over memorization, but some basic terminology is also presented. This course is designed for beginning students in the allied health sciences, such as pre-nursing and pre-radiology. Prerequisites: BIOL 04-102/103 and CHEM 24-112/113 or 114/115. (F)

238 Physiology Allied Health (4 hours)

The study of human physiological processes from the perspective of an allied health professional. Topics include muscle, nervous, cardiovascular, respiratory, renal, gastrointestinal, reproductive and endocrine physiology. Physiological responses to important medications and patient nutrient status will be emphasized. Three hours of lecture and three hours of laboratory a week. Prerequisites: BIOL 04-102/103 and CHEM 24-112/113 or 114/115. (S)

261 Local Flora (2 hours)

A two-hour laboratory course designed to acquaint the student with plants of this region and their classification. Prerequisite: BIOL 04-112/113 and 114/115 with a minimum grade of "C." (F)

293 Medical Transcription and Medical Records Practicum (2 hours)

The practicum consists of the American Medical Association's Medical Transcription Course which is a programmed study and directed practice in the medical records department. The directed practice includes experiences in admitting procedures, dismissing procedures, insurance forms, coding

diseases and operations, medical record completion (inspecting charts for deficiencies), filing and computer data processing form completion. Two hours of lecture per week. (F, S)

301 Pre-Professional Health Science Internship (1-3 hours)

Each student will be supervised and be an active participant in an area of health care. A professional paper describing the supervised experience will be required. By permission only. Repeatable for additional experience, new material and progression of study. (F, S, SS)

303 Wildlife Ecology and Conservation Internship (1-3 hours)

Each student will be supervised and be an active participant in an area of wildlife ecology or conservation. A professional paper describing the supervised experience will be required, along with a program given to the department's 102 River Wildlife Club. May be repeated for a maximum of nine credit hours. Prerequisite: Permission of instructor. Repeatable for additional experience, new material and progression of study. (F, S, SS)

306 Undergraduate Research in Biology (1-3 hours)

This course is designed to allow students to become involved in undergraduate research projects directed by a departmental faculty member. The student will develop the project, write the proposal and present the results at a local, state or national meeting. Repeatable for additional experience, new material and progression of study. (F, S)

307 Environmental Internship (1-3 hours)

Students will be placed in a work setting and become an active participant in an environmental area. Sixty-four hours of on-site work plus a written report will be required. Prerequisite: Permission of instructor. Repeatable for additional experience, new material and progression of study. (F, S, SS)

310 Cell Biology (4 hours)

An introduction to the fundamentals of cellular structure and function. Cell physiology, molecular biology, cellular organelles, energy relationships and reproduction of cells are included. Three hours of lecture and three hours of laboratory per week. Prerequisites: BIOL 04-112/113 and 114/115 with a minimum grade of "C" and 8 hours of chemistry. Recommended prerequisites: CHEM 24-342/343 and either CHEM 24-362/363 or 562/563. (F)

312 Invertebrate Zoology (4 hours)

A systematic treatment of major invertebrate phyla, classes and other groups, including taxonomic, anatomical, physiological, embryological and ecological features. Two hours of lecture and two two-hour laboratories per week. Prerequisite: BIOL 04-112/113 and 114/115 with a minimum grade of "C." (S)

318 Principles of Taxonomy and Evolution (4 hours)

A study of the origin and diversity of life as well as both animal and plant classifications. Studies include contemporary systematic approaches, construction of keys, international rules of nomenclature, evolutionary principles, and origin of species. Two hours of lecture and four hours of laboratory per week. Prerequisites: BIOL 04-112/113 and 114/115 with a minimum grade of "C." (S, even years)

322 Comparative Anatomy (4 hours)

An advanced course designed to familiarize students with fundamental and in-depth aspects of anatomy, evolution, and functional morphology in vertebrate animals. Laboratory includes hands-on dissection and examination of all major body systems in selected vertebrates. Two hours of lecture and six hours of laboratory per week. Prerequisites: BIOL 04-112/113 and 114/115 with a minimum grade of "C" and PHYS 25-110/111 or permission of instructor. (F)

350 Genetics (3 hours)

An introduction to the fundamental facts and principles of inheritance including the physical, biochemical and cytological bases for Mendelian inheritance, selection and breeding, probability and human genetics. Two hours of lecture and two hours of laboratory per week. Prerequisites: BIOL 04-112/113, 114/115 with a minimum grade of "C" and/or permission of instructor. (F, S)

362 Mammalogy (4 hours)

A study of mammals with emphasis upon their classification, identification, evolution, life histories, ecology, habits, anatomy, physiology, aesthetic and economic values. One hour lecture and two three-hour laboratories per week. Prerequisite: BIOL 04-112/113 and 114/115 with a minimum grade of "C." (F)

364 Ornithology (4 hours)

A study of the habitats, life histories, structure, functions, evolution, ecology, classification and identification of the birds found primarily in this region, with emphasis upon their economic and

aesthetic values to humans. One hour lecture and two three-hour laboratories per week. Prerequisite: BIOL 04-112/113 and 114/115 with a minimum grade of "C." (S)

366 Entomology (3 hours)

An introduction to the world of insects: their structure and function, numbers, classification, life history, behavior, ecology and their relationship to humans. Two hours of lecture and one two-hour laboratory per week. Prerequisite: BIOL 04-112/113 and 114/115 with a minimum grade of "C." (F)

376 Basic Ecology (4 hours)

A basic study in ecological field techniques and ecological theory. Three hours of lecture and one three-hour laboratory per week. Prerequisites: BIOL 04-112/113 and 114/115 with a minimum grade of "C" or permission of instructor. (F)

383 Biology Practicum (1 hour)

Instruction and practical experience in development, teaching and the preparation of introductory biology laboratories. Coordinated by the bioscience coordinator. BIOL 04-483 may be taken for an additional practicum credit. One laboratory section per week. Prerequisites: Junior standing and four or more courses in biology or permission of instructor. Repeatable for additional experience, new material and progression of study. (F, S, SS)

412 Plant Anatomy and Morphology (4 hours)

A study of the development, structure and function of plant tissues and organs, as well as the form and structure of extinct plant groups found in the fossil record. Primary emphasis on vegetative and reproductive organs of gymnosperms and angiosperms. Two hours of lecture and four hours of laboratory per week. Prerequisites: BIOL 04-112/113 and 114/115 with a minimum grade of "C." (S, alt. years)

418 Vertebrate Histology (4 hours)

The study of vertebrate tissues and organs. Laboratory consists of a microscopic study of cells, tissues, organs and organ systems. Two hours of lecture and six hours of laboratory per week. Prerequisite: BIOL 04-322 with a minimum grade of "C." (S)

419 Problems in General Biology (1-3 hours)

Permission of instructor necessary. Repeatable for additional experience, new material and progression of study.

420 Environmental Issues (4 hours)

An overview of the science, politics and sociology of current environmental issues, including pollution, wastes, ozone depletion, acidic precipitation, greenhouse effect, deforestation, water use, energy and population. Prerequisites: BIOL 04-112/113 and 114/115 with a minimum grade of "C." Recommended prerequisites: CHEM 24-114/115, GEOL 27-110/111 or 114/115. Three hours of lecture plus one two-hour lab per week. (S)

429 Problems in Morphological-Anatomical Biology (1-3 hours)

Permission of instructor necessary. Repeatable for additional experience, new material and progression of study.

430 Plant Physiology (4 hours)

A study of the chemical and physical processes involved in the growth and functioning of plants. Three hours lecture and three hours laboratory per week. Prerequisites: BIOL 04-112/113 and 114/115 with a minimum grade of "C," CHEM 24-114/115 and 342/343. (S, even years)

436 Human Anatomy (4 hours)

The systematic study of human anatomy, including the skeletal, muscular, cardiovascular, digestive, respiratory, urinary, endocrine, reproductive, and integumentary systems. Three hours of lecture and two hours of laboratory per week. Prerequisites: BIOL 04-112/113 and 114/115 with a minimum grade of "C." Medical Terminology is recommended. (F)

438 Human Physiology (4 hours)

The study of the physiological processes of humans, including membranes, muscle, nervous, cardiovascular, respiratory, renal, gastrointestinal, endocrine and reproductive physiology. Three hours of lecture and three hours of laboratory per week. Prerequisites: BIOL 04-112/113 and 114/115 with a minimum grade of "C." An anatomy course is recommended. (F, S)

439 Problems in Molecular-Physiological Biology (1-3 hours)

Permission of instructor necessary. Repeatable for additional experience, new material and progression of study.

440 Molecular Biology (4 hours)

An advanced course that explores the molecular structures, processes, and regulatory mechanisms related to DNA, RNA, protein expression and function. Three hours of lecture and three hours of laboratory per week. Prerequisite: BIOL 04-350

with a minimum grade of "C." Recommended pre-requisites: BIOL 04-140 and 310. (S, odd years)

444 Immunology (4 hours)

Principles of immunology: to include antigen-antibody relationships, host-antigen interaction, immunocytology, humoral and cellular response mechanisms, and serologic reactions. Two hours of lecture and six hours of laboratory per week. Prerequisites: BIOL 04-112/113, 114/115 and 140 with a minimum grade of "C" or permission of instructor. (S)

449 Problems in Microbial Biology (1-3 hours)

Permission of instructor necessary. Repeatable for additional experience, new material and progression of study.

459 Problems in Genetical Biology (1-3 hours)

Permission of instructor necessary. Repeatable for additional experience, new material and progression of study.

460 Herpetology (4 hours)

Anatomy, physiology, taxonomy, distribution, life history and ecology of amphibians and reptiles, emphasizing those in Missouri. One hour of lecture and two three-hour laboratories per week. Prerequisite: BIOL 04-112/113 and 114/115 with a minimum grade of "C." (S)

469 Problems in Taxonomical Biology (1-3 hours)

Permission of instructor necessary. Repeatable for additional experience, new material and progression of study.

470 Readings in Ecology (2 hours)

Directed reading in ecology. Designed to acquaint the student with both historical and current developments in animal and plant ecology. Two hours of discussion per week. Prerequisites: BIOL 04-376 with a minimum grade of "C" and senior standing. Repeatable for additional experience, new material and progression of study. (S, odd years)

474 Wildlife Management and Conservation (2 hours)

A course designed to apply field and laboratory techniques to the management of game and non game wildlife resources; management emphasis will entail conservation practices with consideration for threatened, rare and endangered species. Professionally written papers are required. One hour of lecture and three hours of laboratory per week.

Prerequisites: BIOL 04-112/113, 114/115, 261, and 376 with a minimum grade of "C" and senior standing, or consent of instructor. (F)

478 Readings in Molecular Biology (2 hours)

Directed readings in advances and techniques in molecular biology. Prerequisites: BIOL 04-310 and 440 with a minimum grade of "C." Repeatable for additional experience, new material and progression of study. (F, alt. years)

479 Problems in Environmental Biology (1-3 hours)

Permission of instructor necessary. Repeatable for additional experience, new material and progression of study.

483 Advanced Biology Practicum (1 hour)

An advanced course in practical procedures of instruction and preparation in biological laboratories. A maximum of two semester hours in advanced biology practicum courses is allowed. Prerequisite: Successful completion of assigned course that the student teaches as lab assistant plus consent of instructor. Repeatable for additional experience, new material and progression of study. (F, S, SS)

489 Problems in Biological Education (1-3 hours)

Permission of instructor necessary. Prerequisites: BIOL 04-112/113 and 114/115 with a minimum grade of "C." Repeatable for additional experience, new material and progression of study.

491 Biological Science Seminar (1 hour)

Individual reports and group discussion of problems and current research in biological sciences. A maximum of two semester hours is allowed. Prerequisite: Senior standing in major or minor or permission of department chairperson. (F, S) Repeatable for additional experience, new material and progression of study.

500 Special Offerings (1-4 hours)

Repeatable for additional experience, new material and progression of study.

510 Current Topics in Biology (1-3 hours)

Each current topic is specifically designed to address a timely topic in biology. Repeatable for additional experience, new material and progression of study.

511 Techniques in Biotechnology (4 hours)

A studio course dedicated to hands-on experience with common techniques utilized in the field of biotechnology. Theory and practical experience will be provided for techniques in DNA isolation, manipulation, gene cloning, library screening, molecular detection, and protein expression. Two three-hour studio sessions per week with additional independent laboratory work required. Prerequisite: BIOL 04-350 with a minimum grade of "C." (F)

520 Genetic Modifications of Biotechnology Feedstocks (3 hours)

Classical and modern techniques in genetic improvement of plant species with an emphasis on industrially important chemicals or products. Three hours of lecture and discussion per week. Must be taken concurrently with one credit hour lab BIOL 04-521. Prerequisite: CHEM 24-510 or concurrently. (F)

521 Genetic Modifications of Biotechnology Feedstocks Laboratory (1 hour)

Classical and modern techniques in genetic improvement of plant species on industrially important chemicals or products. One hour laboratory which must be taken concurrently with BIOL 04-520. (F)

575 Methods in Plant Ecology (2 hours)

This course surveys field techniques for collection of data and analysis of plant communities. Emphasis is placed on methods of analysis of the plant community. Three hours of laboratory per week. Prerequisites: BIOL 04-376, MATH 17-114 highly recommended. (F)

577 Methods in Animal Ecology (2 hours)

This course will apply field techniques for the collection of data and analysis of animal communities. Emphasis is on methods of analysis and preparation of an environmental assessment of two animal communities. Four hours of laboratory per week. Prerequisite: BIOL 04-376 with a minimum grade of "C." (S, second block)

CLINICAL LABORATORY SCIENCES

The following senior-level courses, **designated CLS**, are taken by students in a hospital clinical laboratory internship program. They are taught by the hospitals' schools of clinical laboratory

sciences. They are not offered on campus by Northwest Missouri State University. The variation in credit is the result of differences in the prescribed programs offered by the hospitals.

CLS 401 Clinical Microbiology (6-9 hours)

The theory and laboratory study of pathogenic bacteria, viruses, rickettsiae, fungi and parasites. Includes specimen handling, methods of isolation, cultivation, diagnostic procedures, asepsis, environmental monitoring, medical significance and quality control.

CLS 403 Clinical Chemistry (6-10 hours)

Identification and quantitation of specific chemical substances in blood and body fluids by various analytical techniques, clinical correlation with diagnosis and treatment of disease, principles of instrumentation, toxicology, and quality control.

CLS 405 Clinical Hematology (4-7 hours)

Theory of blood cell formation, morphology of cellular constituents, disease states, homeostasis and coagulation testing. Techniques and instrumentation used to determine major hematological and clotting parameters will be included, along with quality control procedures.

CLS 407 Clinical Immunohematology (3-7 hours)

A study of the common blood group systems, principles and procedures for antigen-antibody detection, cross-matching, blood collection and preservation, the evaluation of transfusion reaction(s), clinical correlation of abnormalities and quality control.

CLS 409 Clinical Immunology (2-6 hours)

Covers characteristics of antigen-antibody function and interaction, principles and procedures of humoral and cellular immune responses, performances of serological procedures, clinical correlation of abnormalities and quality control.

CLS 411 Clinical Urinalysis (Microscopy) (1-3 hours)

A study of renal physiology and function in healthy and diseased states. Includes chemical and microscopic examination of urine, other excreta, and body fluids in relation to disease processes, along with quality control procedures.

CLS 413 Topics in Medical Technology (0-4 hours)

Subject matter may include the following: hospital orientation, laboratory management, radioisotope techniques, laboratory safety, special projects, special techniques, quality control procedures and seminars on various subjects deemed necessary by hospital personnel.

GULF COAST RESEARCH

The following courses are not taught on the Northwest campus, but at the accredited Gulf Coast Research Center.

351 Marine Science I: Oceanography (3 hours)

An introductory course in oceanography which integrates chemical, geological and physical oceanography to provide fundamentals of oceanography at Gulf Coast Research Laboratory. Prerequisites: College algebra and 8-9 hours of chemistry. (SS)

352 Marine Science II: Marine Biology (3 hours)

A general introduction to marine biology with emphasis on local fauna and flora at Gulf Coast Research Laboratory. Prerequisite: 8 hours of biology. (SS)

353 Marine Science Lab I (2 hours)

Field and laboratory exercises that accompany GC 351, consisting of various sampling techniques, analytical methods, data analyses, chart reading, and shipboard procedures. Must co-register in GC 351. (SS)

354 Marine Science Lab II (2 hours)

Field and laboratory exercises that accompany GC 353, consisting of various sampling techniques, species identification, data analyses, chart reading and shipboard procedures. Must co-register in GC 352. (SS)

541 Marine Botany (4 hours)

A survey based upon local examples of the principal groups of the marine algae and marine flowering plants, treating structure, reproduction, distribution, identification and ecology at Gulf Coast Research Laboratory. Prerequisite: 10 hours of biology, including botany. Upper-level undergraduate and graduate credit. (SS)

549 Marine Microbiology (5 hours)

Microbiology and advanced microbiology students are introduced to the role of the microorganisms in the overall ecology of oceans and estuaries at Gulf

Coast Research Laboratory. Prerequisite: General microbiology and environmental microbiology or consent of instructor. Upper-level undergraduate and graduate credit. (SS)

Chemistry / 24**112 General Chemistry (3 hours)**

Beginning course for those who did not take chemistry in high school. Must be taken concurrently with CHEM 24-113. Serves as a refresher course for science majors and satisfies the general laboratory physical science requirement. Involves a study of elements, compounds and fundamental chemical laws. Three hours of lecture and recitation per week. Prerequisite: High school algebra. (F, S, SS)

113 General Chemistry Laboratory (1 hour)

Beginning laboratory course which must be taken concurrently with CHEM 24-112 lecture. Two hours of laboratory and recitation. (F, S, SS)

114 General Chemistry I (3 hours)

Beginning course for science majors with a good high school background in chemistry. Must be taken concurrently with CHEM 24-115. This course covers fundamental chemical principles such as atoms, molecules, chemical reactions, stoichiometry, and gas laws as it progresses towards detailed study of quantum chemistry, periodic relationships, and molecular structure and properties. Three hours of lecture and recitation per week. Prerequisite: High school algebra. (F, S)

115 General Chemistry I Laboratory (1 hour)

Laboratory course which must be taken concurrently with CHEM 24-114. Three hours of laboratory and recitation. (F, S)

116 General Chemistry II (4 hours)

A continuation of CHEM 24-114. Must be taken concurrently with CHEM 24-117. Four hours of lecture and recitation. This course involves a study of kinetics, principles of equilibrium and thermodynamics. Prerequisite: CHEM 24-114/115 with a minimum grade of "C." (F, S)

117 General Chemistry II Laboratory (1 hour)

Laboratory course which must be taken concurrently with CHEM 24-116. One three-hour period of laboratory and recitation per week. (F, S)

135 Laboratory Safety (2 hours)

A comprehensive introduction to the protocols and practices for working safely in a modern chemistry laboratory. The course seeks to facilitate students' awareness of safe practices for chemical handling and disposal, potential hazards, emergency response and personal protection. Two hours of lecture/lab per week. Prerequisites: CHEM 24-114/115 with a minimum grade of "C." (S)

200 Special Offerings (1-4 hours)

Repeatable for additional experience, new material and progression of study.

211 Special Topics in Chemistry (1-3 hours)

In-depth study of special topics which may include environmental chemistry, atomic and molecular structure, kinetics, industrial chemistry, polymer chemistry, computer applications in the laboratory, surface chemistry and colloidal chemistry. Can be repeated with different topics. Prerequisites: CHEM 24-114/115 with a minimum grade of "C."

242 Organic Chemistry (3 hours)

An introductory course in general organic chemistry designed for students majoring in fields other than chemistry who desire a general course. The carbon compounds, together with their relations to the life processes, are covered in this course. Must be taken concurrently with CHEM 24-243. Three hours of lecture. Prerequisite: CHEM 24-112 or 114 with a minimum grade of "C." (F)

243 Organic Chemistry Laboratory (1 hour)

Laboratory course which must be taken concurrently with CHEM 24-242. Three hours of laboratory and recitation. (F)

322 Analytical Chemistry (3 hours)

This course involves a study of the theory, methods and techniques for the quantitative separation and determination of the amounts of materials present in certain natural and manufactured products. Three hours of lecture and recitation. Must be taken concurrently with CHEM 24-323. Prerequisites: CHEM 24-116/117 with a minimum grade of "C," and MATH 17-114. (F)

323 Analytical Chemistry Laboratory (2 hours)

Laboratory course which must be taken concurrently with CHEM 24-322. Two three-hour periods of laboratory and recitation per week. (F)

324 An Introduction to Forensic Science (3 hours)

This course covers the basic techniques used to analyze forensic evidence. Basic concepts of chemistry, biology, and physics are used to understand how forensic science techniques function. The interdisciplinary nature of forensic science problems is emphasized. Prerequisite: One year of college chemistry or permission of instructor.

342 Organic Chemistry I (3 hours)

This is a general course in organic chemistry for students majoring in chemistry. It must be taken concurrently with CHEM 24-343. Three hours of lecture and recitation. Prerequisite: CHEM 24-116/117 with a minimum grade of "C." (F)

343 Organic Chemistry I Laboratory (2 hours)

Laboratory course in organic chemistry which must be taken concurrently with CHEM 24-342. (F)

344 Organic Chemistry II (3 hours)

This is a continuation of CHEM 24-342. Three hours of lecture and recitation. Prerequisite: CHEM 24-342 with a minimum grade of "C." (S)

345 Organic Chemistry II Laboratory (2 hours)

This course involves a study of the qualitative determination of functional groups and identification of compounds by gas chromatography, infrared spectroscopy and nuclear magnetic resonance. Two three-hour laboratory periods per week. Prerequisite: CHEM 24-343 with a minimum grade of "C." (S)

362 Elementary Biochemistry (3 hours)

A non-rigorous treatment of selected aspects of biologically oriented chemistry. Emphasis will be on acquainting the student with many of the substances of which living organisms consist, with their interrelationships, and with some of the better known biochemical changes which they undergo. Must be taken concurrently with CHEM 24-363. Prerequisite: CHEM 24-242 or 342. (S)

363 Elementary Biochemistry Laboratory (1 hour)

This is a laboratory course to be taken concurrently with CHEM 24-362. One three-hour period per week will be used for laboratory amplification of topics presented in CHEM 24-362. (S)

364 Forensic DNA Science (3 hours)

Covers the theory and techniques used to analyze DNA in forensic evidence. Basic concepts

of chemistry and biology are used to understand how DNA analysis functions. Emphasis will be on collecting specimens, isolating and analyzing DNA, and statistical analysis to link the specimen to individual. Two hours of lecture and three hours of laboratory per week. Prerequisites: CHEM 24-242 or any general chemistry with permission of instructor.

370 Chemistry Practicum (1-3 hours)

The practicum provides students with experience in teaching a chemistry laboratory. Students will assist faculty with the preparation and instruction of chemistry labs. Can be repeated for new experience. (F, S)

400 Special Offerings (1-4 hours)

Repeatable for additional experience, new material and progression of study.

435 Chemistry Internship (1-3 hours)

Students with junior or senior standing with a major or minor in chemistry may enroll in an intern program (paid or unpaid) with a chemical or pharmaceutical company or for an academic research experience. Student must have advanced standing, permission of the instructor and department chairperson and must prepare a written proposal at the time of registration. A minimum of 50 hours of work per credit hour is required. Can be repeated for new experience. Prerequisite: Permission of instructor and department chairperson. (F, S, SS)

436 Medicinal Chemistry I (3 hours)

Students are shown how to predict the solubilities, structure-activity relationships, basic synthesis routes for selected structures, metabolism and pharmacological activity/potency of drug classes and individual members of classes based on the contribution of their functional groups to their structures. Prerequisite: CHEM 24-344 with a minimum grade of "C". (F, S, SS)

438 Medicinal Chemistry II (3 hours)

This is a continuation of CHEM 24-436. Prerequisite: CHEM 24-436 with a minimum grade of "C". (F, S, SS)

450 Macromolecular Structure (4 hours)

Covers modern methods that have defined the molecular basis for macromolecular interactions and their function in biochemistry. Emphasis focuses on the physical principles of macromolecular structure and interactions, and will describe modern methods. Prerequisites: CHEM 24-562/563. (S)

499 Special Investigations in Chemistry (1-3 hours)

Special projects and experiments in chemistry which are not included in the regular coursework. May be selected successively for one or more hours of credit per trimester to a maximum credit of three hours. A minimum of 50 hours of work per credit hour is required. Can be repeated for new experience. Prerequisite: Permission of instructor. (F, S, SS)

500 Special Offerings (1-4 hours)

Repeatable for additional experience, new material and progression of study.

522 Instrumental Analysis (2 hours)

A study of modern techniques and theories of analysis including an introduction to basic instrumental analysis. Must be taken concurrently with CHEM 24-523. Two hours of laboratory and recitation per week. Prerequisite: CHEM 24-322/323 with minimum grade of "C" (S, even years)

523 Instrumental Analysis Laboratory (2 hours)

Must be taken concurrently with CHEM 24-522. Two three-hour laboratory periods per week. (S, even years)

532 Physical Chemistry I (3 hours)

The study of atomic and molecular phenomena through the scrutiny and interpretation of the physical laws that govern the structure and behavior of matter as it exchanges energy within and between itself and its surroundings in the atomic and molecular domains. Topics include the foundation of quantum chemistry, atomic and molecular structure, spectroscopy, and computational chemistry. It is strongly suggested that CHEM 24-532 be taken prior to 534. Prerequisites: CHEM 24-116/117 with a minimum grade of "C"; PHYS 25-120 and MATH 17-121.

533 Physical Chemistry I Laboratory (1 hour)

Laboratory course in physical chemistry that must be taken concurrently with CHEM 24-532. (F)

534 Physical Chemistry II (3 hours)

The study of thermodynamic systems and processes and the rates at which chemical reactions occur through the scrutiny and interpretation of the physical laws that govern the structure and behavior of matter as it exchanges energy within and between itself and its surroundings in the macroscopic domain. Topics include thermochemistry, thermodynamics, equilibrium, solutions, gases,

chemical dynamics and chemical kinetics. Prerequisites: CHEM 24-532/533 with a minimum grade of "C", or permission of instructor. (S)

535 Physical Chemistry Laboratory II (1 hour)

Laboratory course in physical chemistry that must be taken concurrently with CHEM 24-534. (S)

552 Advanced Inorganic Chemistry (3 hours)

Modern aspects of inorganic chemistry, includes coordination chemistry, molecular orbital theory, group theory and catalysis, magnetic properties of elements and compounds. Three hours of lecture and recitation. Prerequisite: CHEM 24-532 with a minimum grade of "C" or concurrently. (S, odd years)

555 Inorganic Synthesis Laboratory (1 hour)

An introduction to fundamental methods and techniques used in the synthesis and manipulation of inorganic compounds. These techniques will include the synthesis, methods of purification and characterization of inorganic compounds. Prerequisite: CHEM 24-116/117 with minimum grade of "C" in both. (S, odd years)

562 General Biochemistry (3 hours)

An introductory course in biochemistry which deals with selected topics in the field. The description and functions of amino acids, proteins, fats, nucleic acids and certain carbohydrates will be discussed. Enzymes and their role in metabolic processes will be emphasized. Three hours of lecture and recitation per week. Prerequisite: CHEM 24-342 with a minimum grade of "C," or permission of instructor. (F)

563 General Biochemistry Laboratory (2 hours)

Experiments illustrating biochemical techniques and principles will be performed. Two three-hour laboratory periods per week. Prerequisite: CHEM 24-562 or concurrently. (F)

580 Special Topics (1-3 hours)

This is an in-depth study of special topics offered according to student need and interest. Topics include environmental chemistry, atomic and molecular structure, kinetics, industrial chemistry, polymer chemistry, computer applications in the laboratory, surface chemistry and colloidal chemistry. Can be repeated with different topics. Prerequisites: CHEM 24-342 and 532 or permission of instructor.

592 Chemistry Seminar (1 hour)

Students will prepare written and oral reports on a literature search of a chemistry topic. Prerequisite: CHEM 24-342. (F, S)

Geology / 27

110 General Geology (3 hours)

A study of Earth as a dynamic planet, with a focus on internal and external processes. Common themes include: earth materials, earthquakes, volcanism, mountain building, streams, groundwater, and surficial processes. When possible, these processes are placed in the context of human uses and other impacts. Three one hour lectures per week. GEOL 27-111 must be taken concurrently. (F, S, SS)

111 General Geology Laboratory (1 hour)

'Hands-on' laboratory instruction in identification of common minerals and rocks, the uses of topographic maps, surface and subsurface processes, and water and related resources. Laboratory methods may include physical identification, pen and paper analyses, and computer based data analyses. (F, S, SS)

114 General Earth Science (3 hours)

A general introductory survey of the earth sciences of physical geography, geology, oceanography, climatology and meteorology. The connections between the various components of the "earth system" will be analyzed. Recommended to fulfill General Education requirement. GEOL 27-115 must be taken concurrently. (F, S, SS)

115 General Earth Science Laboratory (1 hour)

This course give students a chance to apply, through written exercises, the concepts discussed in GEOL 27-114. (F, S, SS)

130 Information Technology and Science (3 hours)

Course studying the basics of computer systems and software used at Northwest as well as the professional world. Topics reviewed will include studies of PC-based computer systems, use of the NWMSU network system, effective use of Internet resources and common productivity software (such as office programs, suites, email, web-course) with particular emphasis on applications to science and technology. Three lecture hours each week. (SS)

212 Historical Geology (4 hours)

This course employs a study of deep time, important rock units, plate tectonics and the fossil and stratigraphic records to illuminate the physical and biological evolution of Earth. Special emphasis is placed on the formation and subsequent physical evolution of North America, and the origin and evolution of life as understood from evidence in the fossil record. The course consists of three lectures per week and concurrent enrollment in the weekly two-hour laboratory. Prerequisite: GEOL 27-110/111 or 114/115. (S)

214 Gemology (3 hours)

An introduction to gemology including description, identification, grading of gems and their substitutes. (alt. trimesters, alt. years)

220 Mineralogy (4 hours)

A survey of chemical and physical mineralogy including identification of minerals, structural grouping of minerals, occurrence of silicate minerals, as well as deposits and uses of nonsilicate minerals. Three lectures and one two-hour lab. Prerequisites: GEOL 27-110/111 or 114/115 and CHEM 24-112/113 or permission of instructor. (F)

305 Practicum in Teaching Laboratory (1 hour)

To assist faculty in beginning level laboratory situations in classes like GEOL 27-111, 115, 213, 220 and for preparation for teaching positions in graduate school. Prerequisites: Successful completion of the course, permission of the laboratory instructor and department chairperson and a major or minor in geology or geography. (F, S, SS)

320 Geology Field Trip (1-3 hours)

This course is designed to introduce students to the use of basic field investigation to understand geologic processes from evidence in the rocks. Field trip localities are selected to provide an introduction to minerals, rock types, fossils, structures, landforms, or other geologic phenomena that are not found locally. Prerequisite: GEOL 27-110/111 or 114/115 or permission of the instructor. Repeatable for new area of study. (F)

326 Geology of the National Parks (3 hours)

A study of the geologic features of the 38 U.S. National Parks including consideration of their causes and changes. Prerequisite: GEOL 27-110/111 or 114/115. (F)

335 Physical Oceanography (3 hours)

A study of the oceans including the physical properties of the oceans and marine geology. Prerequisite: Completion of general education science requirement. (F, alt. years)

340 Introduction to Hydrogeology (3 hours)

A study of practical hydrogeologic principles typically used in the environmental consulting industry. Topics studied cover the occurrence, movement, quality, contamination and management of groundwater. Two lecture hours and one two-hour laboratory session per week. Prerequisites: GEOL 27-110/111 or 114/115 and MATH 17-118. (S)

360 Environmental Geology (4 hours)

A study of geology focusing on the inter-relationship between man and his environment and resulting impacts to the Earth's systems. Topics investigated include natural processes as hazards, man's impact on earth resources as well as contemporary environmental issues. Three lecture hours and one two-hour laboratory session each week. Prerequisite: GEOL 27-110/111 or 114/115. (F)

415 Internship in Geology (1-6 hours)

Outreach efforts by students and faculty often generate internship opportunities with environmental consulting firms, natural resource companies and government agencies. Internship courses require approval of the instructor, department chairperson, and employer offering the opportunity along with a written proposal from the student at the time of registration. The student enrolls in the appropriate number of credit hours for the work load of the internship. Typically 160 work hours are worth 3 credit hours. Repeatable for additional experience. (F, S, SS)

420 Petrology (4 hours)

A study of igneous, sedimentary and metamorphic rocks including identification, mineral compositions, fabrics, textures, occurrences, genesis and classifications. Three lectures and one two-hour laboratory per week. Prerequisite: GEOL 27-220. (S)

423 Economic Geology (4 hours)

This course investigates the origin and distribution of metallic and industrial minerals in Earth's crust. Major types of ore deposits are discussed, with a focus on exploration, exploitation, and remediation. Where possible, deposits are discussed in the context of local, regional, and global economic and political impacts. Three one-hour lectures and one two-hour laboratory per week. Prerequisite: GEOL 27-220. (F, alt. years)

424 Geochemistry (3 hours)

This course focuses on theoretical and applied geochemical approaches to understanding geologic systems. Emphasis is placed on acid-base and solubility equilibria, and stable and radiogenic isotope chemistry, primarily as related to geochronology and the investigation of shallow crustal rocks. Prerequisites: GEOL 27-220. (F, alt. years)

440 Stratigraphy (4 hours)

A study of the principles and concepts used to study the stratigraphic sequence of rocks, including sedimentary environments, biostratigraphy and time-stratigraphic correlation. Three one-hour lectures and one two-hour lab. Prerequisite: GEOL 27-212. (F, alt. years)

450 Structural Geology (4 hours)

The study of the architecture of rock units of the crust of the earth insofar as it has resulted from deformation and the tectonic forces which produce them. Subject matter includes folds, faults, unconformities, rock fabric, geosynclines, continental drift and plate tectonics. Laboratory techniques utilize structure cross sections, projections, structure contour maps, geologic maps, isopach maps, strike and dip, stereo nets, construction techniques, etc. Five hours of meeting time per week. Prerequisites: GEOL 27-212 and 420 and one mathematics course with trigonometry. (S)

455 Geologic Field Methods (3 hours)

Basic geological surveying techniques will be studied in the field. Notebook procedures and reporting will be stressed. Prerequisite: Geology major or minor with 20 hours in geology. (SS, Alt. years)

498 Senior Seminar (1 hour)

A capstone course in Geology. A student will examine current geologic research results and techniques, investigate employment opportunities, and assess his/her fundamental understanding of geology. Prerequisites: Senior standing as a Geology, Environmental Geology or Unified Science in Earth Science major, and a GPA of at least 2.0 in the major. (F)

500 Special Offerings (1-4 hours)

One-time course offering in a timely area of geology or earth science. Repeatable for additional experience, new material and progression of study.

501 Special Topics in Geology (1-4 hours)

Will be offered according to student needs and interest. Each offering will be designed to incorporate

the latest information pertaining to a timely topic in geology. Topics may include rock and mineral origins and classifications, groundwater, energy, age of dinosaurs, fossils and the history of life, volcanoes and earthquakes and glacial geology. Prerequisite: One year of college-level science or permission of instructor. Repeatable for new area of study.

510 Geomorphology (3 hours)

A study of landforms, focusing on the description, recognition, classification and formation processes. Topics investigated include the origin and nature of geomorphologic processes shaping different landforms, along with the influence of geologic controls, climate and other factors impacting these processes. Two lecture hours per week. Prerequisite: GEOL 27-110/111 or 114/115. (S, alt. years)

515 Environmental Regulations (2 hours)

An introduction to federal and state regulations and major issues associated with the environment including air quality, groundwater quality and the disposal of hazardous waste. Two lecture hours each week. Prerequisites: GEOL 27-360 or BIOL 04-420 or GEOG 32-501 or permission of instructor. (S, alt. years)

520 Geology Field Trip (Advanced Level) (2 hours)

An advanced version of the introductory field course, this course combines basic field investigation with a short project that focuses on a feature of interest from the field trip area. Potential projects include thin section petrography and optical mineralogy, written descriptions of features of interest, reflective essays, or other projects as approved by the course instructor. Prerequisite: GEOL 27-212. Repeatable for new area of study. (F)

530 Sedimentology (4 hours)

A study of the production, transportation, deposition and lithification of sediments. To include comparisons of classifications, techniques of using sediments in environmental interpretations and laboratory techniques in sediment study. Three one-hour lectures and one two-hour laboratory. Prerequisite: GEOL 27-212. (F, alt. years)

540 Paleontology (4 hours)

A general study of fossils including classification of plants and animals, development and evolution of prehistoric life, paleontological techniques and use of fossils as time and ecological guides. Lab includes study and identification of the major fos-

sil groups. Emphasis is on invertebrate animals, with a general review also of microfossils, plants and vertebrates. Three one-hour lectures and one two-hour laboratory. Prerequisite: GEOL 27-212 or permission of instructor. (S)

555 X-Ray Analysis (3 hours)

Theory and application of x-ray diffraction. Consideration will be given to sample preparation, laboratory procedures and analysis of data. Prerequisite: GEOL 27-220 or permission of instructor. (S, alt. years)

560 Optical Mineralogy (3 hours)

A study of the optical properties of nonopaque minerals through the use of the petrographic (polarizing) microscope utilizing both oil immersion and thin section methods. Prerequisite: GEOL 27-220. (F, alt. years)

590 Seminar in the Earth Sciences (2 hours)

Seminar and studies of advanced topics in selected fields in geology and other earth sciences. Two hours per week in lecture, seminar or lab appropriate to the topics. Prerequisite: GEOL 27-110/111.

599 Special Investigation in the Earth Sciences (1-3 hours)

Independent studies in the earth sciences including but not limited to research and library studies. Enroll only with consent of department chairperson. Requires written proposal at time of registration. Repeatable for additional experience, new material and progression of study. (F, S)

Health Sciences / 49

The following junior-level and senior-level courses, designated RAD, are taken by students in the Radiologic Sciences, B.S. program. These courses are not offered on campus by Northwest Missouri State University, but are taught by the hospitals' schools of radiologic technology.

301 Radiographic Anatomy and Physiology (2 hours)

This course will introduce the students to the function and structure of the organizational levels and systems associated with the human body. An overview of the respiratory and digestive systems will be introduced to coincide with the chest and abdomen positioning phases of the procedures courses. The anatomy of the upper extremity will be a primary topic along with articulation classifications and fractures of the skeletal system.

302 Clinical Education I (1 hour)

A clinical course that focuses on procedures and functions in the radiology clinical setting. With direct supervision, the student will develop clinical skills through observation and assistance in general radiographic procedures of the chest, abdomen, and upper extremities. Limited competency testing is required during this semester.

303 Medical Imaging I (2 hours)

Concepts of radiological science including study of matter and energy, sources of radiation, x-ray properties, discovery of x-rays, basic radiation protection and the concept of the imaging team. Introduction to the x-ray tube, as well as prime radiographic factors and basic radiographic equipment.

304 Radiographic Positioning and Procedures I (2 hours)

Introduction to radiographic procedures, basic terminology, and topographical landmarks. Positioning, procedure, and image evaluation critique of the chest, abdomen and upper extremities will be performed. Students will use cognitive correlation of theory and practical application in the laboratory after didactic instruction. An overview of the respiratory and digestive systems will be introduced to coincide with the chest and abdomen positioning phases of this procedures class. The anatomy of the upper extremities will be presented along with various types of fractures associated with the bones of the upper body which will be included in the upper extremity positioning phase of this procedures class. Students will learn to apply basic patient care and critical thinking skills with trauma patients in this course. Must co-register for RAD 49-305.

305 Radiographic Position and Procedures I Lab (1 hour)

This course is designed to provide students with hands-on experience in a non-patient related clinical area. Radiographic Procedures lab will introduce the students to the function and structure of the different organizational levels and systems associated with the human body. The anatomy of the chest, abdomen and upper extremities will be presented along with various types of fractures associated with the upper extremities. Pathology and clinical findings will be discussed as well. Equipment manipulation, control panel maneuvers and table positioning, central ray angulations as well as image receptor placement and other medical imaging operations will be evaluated. Must co-register for RAD 49-304.

306 Clinical Education II (2 hours)

A clinical course that focuses on procedures and functions in the radiology clinical setting. With direct supervision, the student will develop clinical skills through participation and observation of studies of the lower extremity, digestive system, urinary system and biliary system. Prerequisite: Grade of "C" or better in RAD 49-302.

307 Introduction to Radiologic Science (2 hours)

This course will provide the student with an overview of radiology as a diagnostic tool and an allied health profession. Introduction to x-ray interaction, radiation protection, clinical education, patient communication and patient care are included in this course. Professional ethics and medical law overview complete this course.

308 Literature Review (1 hour)

This is a self-directed course which enables the student to research various technological and diagnostic advances within the field of radiology. Students will submit papers to present and/or projects to display at the annual society meeting in order to satisfy the course requirements. This course will allow the student to research into the branches of the field of radiology. Each student will select and research one of the following modalities for this course in literature review. The modality selections will range from Nuclear Medicine, Magnetic Resonance Imaging, Bone Densitometry, Diagnostic Radiography and Fluoroscopy, Radiation Therapy/Oncology, Positron Emission Tomography/PET CT, Mammography, Interventional Radiography, Cardiovascular Radiography and Ultrasonography.

309 Radiographic Physics (2 hours)

This course will cover the fundamentals of basic physics with an emphasis of how physics is correlated to radiation technology. Topics include basic science concepts, the study of the atoms, the production and emission of x-rays and their interactions with matter. Prerequisite: Grade of "C" or better in RAD 49-303.

310 Radiographic Positioning and Procedures II (2 hours)

Radiographic Positioning and Procedures will introduce the students to the function and structure of the different organizational levels and systems associated with the human body. The anatomy of the lower extremities and pelvis will be presented along with various types of fractures associated with the bones of the lower body. Procedures of

the digestive system, biliary system and genitourinary system will be demonstrated. Basic CT abdomen review and a recap of contrast review. Equipment manipulation, control panel maneuvers and table operation will be monitored by the instructor. Demonstration of radiographic positioning, central ray angulations as well as image receptor placement and other medical imaging operations will be evaluated. Must co-register for RAD 49-311. Prerequisites: Grade of "C" or better in RAD 49-304/305.

311 Radiographic Positioning and Procedures II Lab (1 hour)

This positioning and procedures lab course is designed to provide students with hands-on experience in a non-patient related clinical area. Radiographic Positioning and Procedures lab will introduce the students to the function and structure of the different organizational levels and systems associated with the human body. The anatomy of the lower extremities and pelvis will be presented along with various types of fractures associated with the bones of the lower body. Procedures of the digestive system, biliary system and genitourinary system will be demonstrated. Basic CT abdomen review and a recap of contrast review. Equipment manipulation, control panel maneuvers and table operation will be monitored by the instructor. Demonstration of radiographic positioning, central ray angulations as well as image receptor placement and other medical imaging operations will be evaluated. Must co-register for RAD 49-310. Prerequisites: Grade of "C" or better in RAD 49-304/305.

312 Radiographic Anatomy and Physiology II (2 hours)

Lower extremity anatomy will begin this course. An overview of the chemistry of life processes, chemical organization, bonding, organic and inorganic chemistry will be discussed. Size, shape and composition of cells as well as their function will be addressed. Sense organs that include the eye, ear and taste receptors, cell reproduction and division processes and genetic information will be covered. Tissue types and their locations and the integumentary system and membranes as well as the digestive, metabolism, nutrition and urinary tract anatomical structures and function will be a primary topic. This course is completed with the male and female reproductive systems. Prerequisite: Grade of "C" or better in RAD 49-301.

313 Clinical Education III (2 hours)

A clinical course that focuses on procedures and functions in the radiology clinical setting. With direct supervision, the student will develop clinical skills through participation of examinations to include the skull, sinuses, facial bones, and vertebral column. The student will have observation and limited participation in supplementary advanced imaging modalities and studies. The student will continue to expound on Clinical Education I and II exams. Prerequisite: Grade of "C" or better in RAD 49-306.

314 Image Evaluation (1 hour)

Seminar course designed to review radiographs of the thorax, vertebral column, abdomen, cranium, and extremities in regard to positioning, anatomy and technical factors for each image. Prerequisite: Completion of 2 semesters of radiology courses.

315 Medical Imaging II (2 hours)

This course is a continuation of the principles of Medical Imaging I. This imaging course will cover the principles of beam restriction, limiting and collimation, scatter radiation, minimizing patient dose, ESE, and the inverse square. The prime radiographic factors and image quality components of density, contrast, detail, and distortion are addressed. Radiographic grids structure and function as well as discussion of factors that affect image density and image quality will be also be included in this course. This imaging course will include a review of x-ray production and interaction with matter. X-ray film and screen properties which include construction, handling and storage and associated properties, sensitometry, automatic processing and silver recovery of radiographic film will be included. Prerequisite: Grade of "C" or better in RAD 49-303.

316 Radiographic Physics II (2 hours)

This course will continue covering the fundamentals of basic physics with an emphasis of how physics is correlated to radiation. Topics will include basic science concepts, the study of the atoms and the fundamentals of electromagnetism and the X-ray Imaging System. Additional topics include beam limitation, tomography and fluoroscopy. Prerequisite: Grade of "C" or better in RAD 49-309.

317 Radiographic Anatomy and Physiology III (2 hours)

The vertebral column, skull, sinus, and facial bone anatomy are presented. Radiographic images, models and diagrams will be utilized to reinforce learning. Ribs and sternum anatomy will also be included. Prerequisite: Grade of "C" or better in RAD 49-312.

318 Radiographic Positioning & Procedures III (2 hours)

Radiographic Positioning and Procedures will introduce the students to the function and structure of the different organizational levels and systems associated with the human body. Anatomy and positioning procedures for the ribs, sternum, sternoclavicular joints, cervical spine, thoracic spine, lumbar spine, sacrum, coccyx, sacroiliac joints, skull, facial bones, sinuses and nasal bones will be covered. Fractures and pathology associated with the above will also be discussed. Anatomy and positioning procedures for uncommon procedures of the upper and lower extremities, pelvis, spine, and head will be reviewed. Pediatric radiographic positioning and a study of immobilization will be taught in this course. Equipment manipulation, control panel maneuvers and table operation will be monitored by the instructor. Demonstration of radiographic positioning, central ray angulations as well as image receptor placement and other medical imaging operations will be evaluated. Must co-register for RAD 49-319. Prerequisites: Grade of "C" or better in RAD 49-310/311.

319 Radiographic Positioning and Procedures III Lab (1 hour)

This positioning and procedures lab course is designed to provide students with hands-on experience in a non-patient related clinical area. Radiographic Positioning and Procedures lab will introduce the students to the function and structure of the different organizational levels and systems associated with the human body. Anatomy and positioning procedures for the ribs, sternum, sternoclavicular joints, cervical spine, thoracic spine, lumbar spine, sacrum, coccyx, sacroiliac joints, skull, facial bones, sinuses and nasal bones will be covered. Fractures and pathology associated with the above will also be discussed. Anatomy and positioning procedures for uncommon procedures of the upper and lower extremities, pelvis, spine, and head will be reviewed. Pediatric radiographic positioning and a study of immobilization will be taught in this course. Equipment manipulation, control panel maneuvers and table operation will be monitored by the instructor. Demonstration of radiographic positioning, central ray angulations as well as image receptor placement and other medical imaging operations will be evaluated. Must co-register for RAD 49-318. Prerequisites: Grade of "C" or better in RAD 49-310/311.

401 Clinical Education IV (4 hours)

A clinical course with emphasis on supervised application and evaluation of procedures using image intensification, mobile radiography, and other diagnostic radiographic procedures. The student will have continued supervised application and evaluation of procedures involving interventional radiography and surgical suite examinations. The student will continue to expound on Clinical Education I, II and III exams. Prerequisite: Grade of "C" or better in RAD 49-313.

402 Clinical Education V (2 hours)

A clinical experience with limited supervision for continued emphasis in application and evaluation of procedures involving all aspects of radiology. The student will continue to expound on Clinical Education I, II, III and IV exams. Prerequisite: Grade of "C" or better in RAD 49-401.

403 Medical Imaging III (2 hours)

This course includes all aspects of digital imaging acquisition and display. Included are topics regarding understanding of the components, principles and operation of digital imaging systems. Factors that impact image acquisition, display, archiving and retrieval are discussed. Guidelines for selecting exposure factors and evaluating images within the digital system assist students to bridge between film based and digital imaging systems. Prerequisite: Grade of "C" or better in RAD 49-315.

404 Pathology I (2 hours)

Examination of pathologic conditions related to various radiologic procedures. Introduction to pathology is the study of significant diseases, which present radiologic findings. Studies will include the diagnosis, etiology, symptoms, treatment and radiographic correlations of pathologic conditions with relationship to cell pathology, inflammation, bone and joint disease, gastrointestinal system, respiratory, urinary system, male and female reproduction system. Students will learn how to select proper exposure factors for the pathology that is in existence and how the pathology will appear on radiographic images.

405 Radiation Biology and Radiation Protection (2 hours)

This course will continue covering the fundamentals of basic radiation biology as well as basic radiation safety theory. Biology topics will include the fundamental principles of radiation biology, molecular and cellular radiobiology and the early and late effects of radiation. Radiation protection topics will include health physics practices, considerations for design

of equipment and facilities, as well as procedures for ensuring the safety of radiation workers, patients, and members of the public.

406 Radiographic Positioning and Procedures IV (2 hours)

Radiographic and gross anatomy and physiology and radiographic image terminology pertinent to the systems of the body to include: hepatobiliary, urinary, myelography, mammography, arteriography, venography, and orthopedic radiography. Contrast media usage and contraindications will be discussed. Prerequisite: Grade of "C" or better in RAD 49-318/319.

407 Radiographic Anatomy and Physiology IV (2 hours)

This course reveals the structural and functional anatomy of the nervous system. To be included in are the organs, divisions and cells of the nervous system, nerve tracts, reflex arc, impulses and synapses. Divisions of the brain and spinal cord to include coverings and fluid spaces will be discussed. Cranial and spinal nerves of the peripheral nervous system and the functional and structural components of the autonomic nervous system will complete the central nervous system anatomy. Introduction to blood components, blood types and coagulation will be introduced. Anatomy of the heart, major blood vessels and physiology of the cardiovascular system as well as pathologic conditions associated with the above anatomical structures. The endocrine, lymphatic and immune systems will be discussed. Prerequisite: Grade of "C" or better in RAD 49-317.

408 Clinical Education VI (2 hours)

Course emphasizes the development of expertise in all radiographic procedures with indirect supervision in proven competency areas and direct supervision in other related radiology areas. The student will continue to expound on Clinical Education I, II, III, IV and V exams. Prerequisite: Grade of "C" or better in RAD 49-402.

409 Correctec (2 hours)

Correctec has developed numerous computer programs to help radiography students learn the content required to be successful technologists and to pass the nationally required examination, the American Registry of Radiologic Technologists (ARRT). Correctec incorporated the review materials into an online review course. The online review course individualizes the learning experience by giving immediate feedback and review of the subject being tested. Additionally, the course

is frequently updated to reflect the latest changes in terminology and content in the subject area. Students will submit units to instructor at specific intervals throughout the semester.

410 Imaging Modalities (2 hours)

This course is designed to offer the students information about numerous imaging modalities available in the field of radiologic technology.

411 Pathology II (2 hours)

Examination of pathologic conditions related to various radiologic procedures. Introduction to pathology is the study of significant diseases, which present radiologic findings. Studies will include the diagnosis, etiology, symptoms, treatment and radiographic correlations of central nervous system, cardiovascular, endocrine system, fluid and hemodynamic disorders and liver, pancreas, biliary systems, neoplasia, breast, skin and muscles. Students will learn how to select proper exposure factors for the pathology that is in existence and how the pathology will appear on radiographic images. Prerequisite: Grade of "C" or better in RAD 49-404.

412 Quality Assurance (2 hours)

Quality control and quality assurance in the radiology department. Test tools and equipment utilized to ensure appropriate images. State and federal guidelines which are applicable to film screen radiography as well as digital radiography equipment. Laboratory experiments will be conducted to reinforce didactic lessons.

413 Radiography Curriculum Review (2 hours)

The student will participate in testing modules provided by The College of St. Catherine's Developmental Testing Program for Radiography located in Minneapolis, MN. The tests are comparative to registry examination questions. The results of the tests submitted on behalf of the St. Luke's Hospital class will be compared to students' scores across the United States participating in the same type of testing program

414 Cross Sectional Anatomy (2 hours)

Study of cross sectional anatomy of the head, chest, abdomen and extremities with correlation to Computed Tomography (CT) and Magnetic Resonance Imaging (MRI). Prerequisite: Grade of "C" or better in RAD 49-407.

Nanoscale Science / 48

314 Nanoscale Science I (4 hours)

A course dedicated to the interface of chemistry and physics at the nanometer scale. Topics will focus on the relationship between nanoscale structure and macroscopic properties, nanoscale instrumentation and characterization, creation of materials and devices, and the role and perception of nanotechnology in society. The course consists of four hours of lecture and hands-on studio activities per week. Prerequisites: MATH 17-120, 121, CHEM 24-114/115, 116/117, PHYS 25-120/121, 230/231, CHEM 24-342 and junior standing (F, odd years)

315 Nanoscale Science II (4 hours)

A course dedicated to the interface of biology and physics at the nanometer scale. Topics will focus on the application of physical concepts to biological systems in the developing field of nanobiotechnology. Prerequisites: MATH 17-120, BIOL 04-112/113, 350, PHYS 25-120/121, 230/231 and junior standing. (S, even years)

Nursing / 01

The following nursing courses are taken only by students in the B.S.N. Completion Program, and many are not offered on the campus of Northwest Missouri State University.

301 Theories and Models of Nursing (3 hours)

A theoretical foundation that focuses on critical thinking skills and their application to the professional nurse. Emphasis is placed on exploration of various nursing theories as a framework to more effectively promote health and sound nursing decisions. Prerequisite: admission to R.N.-to-B.S.N. program.

311 Health Care Delivery Systems (3 hours)

The structure and function of health care delivery systems. Emphasis is placed on policy and insurance issues, and explores technology, access, and budgeting. The course seeks to enhance the administration and effectiveness of health care services. Prerequisite: NURS 01-301 (may be taken concurrently).

371 Pathophysiology (3 hours)

An introduction to the physiology of diseases. Prerequisite: Grade of "C" or better in NURS 01-301.

381 Intermediate Pharmacology (3 hours)

Further consideration of drug therapeutics in nursing. Important classes of drugs are emphasized, along with their impact on physiology and biochemistry. Drug interactions are explored. Prerequisite: Grade of "C" or better in NURS 01-301.

401 Leadership and Management in Nursing (5 hours)

Effective leadership and management for the BSN-level nurse. Emphasis is placed on resource management through utilization of critical thinking, problem solving, and decision making abilities. The course also explores the impacts of theory, practice, and environment (both internal and external) on leadership and management. Includes clinical experience. Prerequisites: Grades of "C" or better in NURS 01-301 and 311.

411 Health Assessment (5 hours)

A systematic approach to the holistic assessment of individuals and groups at all ages. Emphasis is placed on analysis and synthesis of data in order to identify and differentiate between normal and abnormal states of health. Students will apply knowledge and skills to clinical field experiences. Three hours of lecture and five hours of clinical experience per week. Prerequisites: Grades of "C" or better in NURS 01-371 and 381.

421 Community Nursing (5 hours)

Application of nursing concepts to the community environment. Emphasis is placed on identification of resources that facilitate health promotion and illness prevention. This course also explores community epidemiology in relation to the environment. Students will apply knowledge and skills to clinical practice. Three hours of lecture and five hours of clinical experience per week. Prerequisites: Grades of "C" or better in NURS 01-371 and 381.

431 Family and Child Nursing (5 hours)

Application of nursing concepts to the family, especially children. The course also includes the dynamics of family structure, member functions, communication and coping. Three hours of lecture and five hours of clinical experience per week. Prerequisite: Grade of "C" or better in NURS 01-411.

452 Gerontological Nursing (3 hours)

Special nursing considerations related to the aged population, including physical and psychological changes. Prerequisite: Grade of "C" or better in NURS 01-401.

454 Informatics in Nursing (3 hours)

The uses of computer technology in the nursing profession, focusing on data management, organization, and the development of metadata. Prerequisite: Grade of "C" or better in NURS 01-401.

481 Research Methods in Nursing (3 hours)

An introduction to the critical evaluation of nursing reports, including evidence-based nursing. Emphasis is placed on statistical validity and limitations, as well as the critique of methods, conclusions, and assumptions. The ability to apply conclusions to new situations is also developed. Prerequisites: MATH 17-114, NURS 01-411 and 421 with a minimum grade of "C" in each.

Physical Science / 40

The main objectives of courses in the physical science program are: (a) to provide service courses to meet the special needs of other science majors, teacher education majors and other groups of students; (b) to provide general education courses in physical science to meet science area requirements in general education for all degree programs; and (c) to provide special programs for teacher certification in science.

102 The Physical Sciences (3 hours)

This is an introductory course that uses an inquiry approach to help students gain an understanding of the scientific process and how science relates to the real world. This is accomplished through the study of selected topics from the fields of physics and chemistry. Students will be asked to use problem solving and higher order thinking skills in order to apply the concepts they have learned. A knowledge of and ability to use simple algebra is necessary. This course is primarily designed to meet elementary and middle school teacher certification content, but it will also satisfy the physical science general education requirement. Students who already have college credit in physics are not eligible to enroll in this course. Three hours of lecture and discussion per week. Must be taken concurrently with PHSC 40-103. (F, S, SS)

103 Physical Science Laboratory (1 hour)

A laboratory course which must be taken concurrently with PHSC 40-102. Two hours per week. (F, S, SS)

106 Computational Methods in Science (3 hours)

Methods used in the computational analysis, interpretation, and presentation of data generated from scientific inquiry. Topics covered will encompass, but will not be limited to, spreadsheets, graphical, and statistical analysis of data, concept mapping, use of databases, scientific writing, and symbolic calculation techniques. Recommend two years of high school algebra or competence through College Algebra (MATH 17-118). (S, SS)

122 Descriptive Astronomy (3 hours)

This is an introductory general education course in astronomy. Topics covered involve the descriptive study of the physical universe including the earth-moon system, the solar system, general stellar system, stellar structure and evolution, galactic systems and cosmological models. The laboratory work emphasizes basic techniques and instruments used in observational astronomy. Three hours of lecture per week. Must be taken concurrently with PHSC 40-123. (F, S)

123 Descriptive Astronomy Laboratory (1 hour)

This laboratory meets two hours each week and must be taken concurrently with PHSC 40-122. (F, S)

200 Special Offerings (1-4 hours)

Repeatable for additional experience, new material and progression of study.

299 Independent Study in the Physical Sciences (1-2 hours)

Independent study in areas of physical sciences not covered in the introductory courses. May be elected successively in one or two hours credit per trimester to a maximum credit of four hours. Can be repeated for new topics. Prerequisites: Introductory course in physical science and permission of instructor. (F, S)

389 Practicum in Physical Science (1-2 hours)

This practicum provides students with experience in assisting faculty members with instruction of physical science in classes and laboratories. Can be repeated for additional mastery. Prerequisite: Permission of instructor. (F, S)

400 Special Offerings (1-4 hours)

Repeatable for additional experience, new material and progression of study.

500 Special Offerings (1-4 hours)

Repeatable for additional experience, new material and progression of study.

Physics / 25**110 General Physics I (3 hours)**

This is a laboratory course in general physics designed to provide the necessary background in physics to fill general education requirements and to fill general physics needs for pre-professional programs. Major topics covered are structure and properties of matter, motion, mechanics, work, energy, momentum, elasticity, waves, temperature and heat. Three hours of lecture and discussion each week. Prerequisite: MATH 17-118 or permission of instructor. (F, SS)

111 General Physics I Laboratory (1 hour)

This laboratory meets two hours each week and must be taken concurrently with PHYS 25-110. (F, SS)

112 General Physics II (3 hours)

This is a continuation of PHYS 25-110. Major topics covered are electricity, electronics, optics, radioactivity, and atomic and nuclear structure. Three hours of lecture and discussion each week. Prerequisite: MATH 17-118 or permission of instructor. (S, SS)

113 General Physics II Laboratory (1 hour)

This laboratory meets a minimum of two hours each week and must be taken concurrently with PHYS 25-112. (S, SS)

120 Fundamentals of Classical Physics I (4 hours)

An introduction to classical kinematics, mechanics gravitation, energy, momentum, waves, heat and thermodynamics. Recommended for majors in science, mathematics and engineering. Four hours of lecture and discussion per week. Prerequisite: MATH 17-120 or concurrently. (F)

121 Fundamentals of Classical Physics I Laboratory (1 hour)

The laboratory meets a minimum of two hours each week and must be taken concurrently with PHYS 25-120. (F)

200 Special Offerings (1-4 hours)

Repeatable for additional experience, new material and progression of study.

211 Special Topics in Physics (1-3 hours)

An in-depth study of special physics topics. Can be repeated with different topics.

230 Fundamentals of Classical Physics II (4 hours)

A continuation of PHYS 25-120. Major topics include classical electricity, magnetism, electromagnetic waves, light and geometrical and physical optics. Four hours of lecture and discussion each week. Prerequisites: PHYS 25-120/121, MATH 17-121 or concurrently. (S)

231 Fundamentals of Classical Physics II Laboratory (1 hour)

This laboratory meets two hours each week and must be taken concurrently with PHYS 25-230. (S)

320 Classical Mechanics I (3 hours)

An introduction to classical mechanics. General topics include elements of Newtonian mechanics, motion of a particle in one dimension, motion of a particle in two and three dimensions, the motion of a system of particles, rigid bodies and gravitation. Three hours of lecture and discussion each week. Prerequisites: PHYS 25-120/121, MATH 17-121 or concurrently.

321 Classical Mechanics I Laboratory (1 hour)

This computer laboratory meets for a minimum of two hours each week. It is an introduction to computational methods as applied to solving differential and integral equations in mechanics. Prerequisites: PHYS 25-120/121, MATH 17-121, or concurrently.

322 Statics (3 hours)

Analysis of two- and three-dimensional force systems. Application of equilibrium principles to simple trusses, frames and machines. Additional topics chosen from distributed forces, centroids, friction and virtual work. Prerequisites: PHYS 25-120/121, MATH 17-121 or concurrently.

330 Electricity and Magnetism I (3 hours)

Classical electricity and magnetism including Coulomb's law, Gauss' law, Poisson's equation, charge-field potential differential and integral relationships, Biot-Savart law, Ampere's law, Lenz's law and vector properties of electric and magnetic fields. Three hours of lecture and discussion per week. Prerequisites: PHYS 25-230/231 and MATH 17-321.

331 Electricity and Magnetism I Laboratory (1 hour)

This laboratory meets a minimum of two hours each week and must be taken concurrently with PHYS 25-330. (F, even years)

332 Electronics (3 hours)

A study of the theory and applications of analog and digital electronics. Topics include transistors, operational amplifiers, TTL and CMOS logic gates and applications of these devices in various electronic circuits. Three hours of lecture and discussion each week. Prerequisite: PHYS 25-230/231. (F, odd years)

333 Electronics Laboratory (1 hour)

This laboratory meets a minimum of two hours each week and must be taken concurrently with PHYS 25-332. (F, odd years)

350 Introduction to Modern Physics (3 hours)

An introduction to the subjects of photo-electricity, relativity, quantum theory, x-rays, radioactivity, nuclear physics and cosmic radiation. Three hours of lecture and discussion each week. Prerequisites: PHYS 25-230/231, MATH 17-321 or concurrently. (F, odd years)

351 Introduction to Modern Physics Laboratory (1 hour)

This laboratory meets a minimum of two hours each week and must be taken concurrently with PHYS 25-350. (F, odd years)

352 Modern Physics II (3 hours)

A continuation of PHYS 25-350. Major topics covered are statistical physics, molecular structure, solid state physics and astrophysics. Three hours of lecture and discussion each week. Prerequisites: PHYS 25-350/351. (S, even years)

360 Quantum Mechanics (3 hours)

The philosophy and methods of selected topics from quantum mechanics. Topics include Schrodinger's equation, simple barrier problems, angular momentum, linear oscillator, hydrogen atom and elementary perturbation. Prerequisites: PHYS 350/351 or CHEM 24-532/533, MATH 17-321 or concurrently.

400 Special Offerings (1-4 hours)

This is a special, one-time offering. Topics include areas of physics not covered in regular courses. Repeatable for additional experience, new material and progression of study.

430 Optics (3 hours)

A study of modern optics, including reflection, refraction, interference, diffraction, polarization, lasers, holography, non-linear optics, optical detectors and modern applications. Three hours of lecture and discussion each week. Prerequisite: MATH 17-121.

431 Optics Laboratory (1 hour)

Laboratory meets at least two hours each week and must be taken concurrently with PHYS 25-430. (F, even years)

450 Computational Physics (3 hours)

Introduction to computational methods used to solve problems in physics. Numerical techniques for the analysis of experimental data and the solution of ordinary and partial differential equations will be studied. These numerical methods will be applied to the solution of a variety of problems that arise in classical physics. Visualization and simulation techniques will be studied and the power of these methods to enhance physical understanding will be emphasized. Prerequisites: PHYS 25-230/231 and CSIS 44-141 (S, odd years)

451 Computational Physics Laboratory (1 hour)

Laboratory meets at least two hours each week and must be taken concurrently with PHYS 25-450. (S, odd years)

479 Undergraduate Research (1-3 hours)

An independent research project done under supervision of a faculty member. The results of the research project are to be summarized in a paper or presentation at the discretion of the faculty member. Can be repeated for new experience. Prerequisite: Permission of instructor. (F, S, SS)

489 Physics Practicum (1-2 hours)

This practicum provides physics majors with experience in using, repairing and building equipment as well as experience in assisting physics faculty in instruction in classes and laboratories. Permission of instructor necessary. Physics minors only. (F, S)

499 Special Investigations in Physics (1-3 hours)

Special projects and special experiments in physics which are not included in the regular courses. May be elected successively in one or more hours of credit per trimester. Can be repeated for new experience. Permission of instructor necessary. (F, S)

500 Special Offerings (1-4 hours)

Repeatable for additional experience, new material and progression of study.

599 Selected Advanced Topics (1-4 hours)

Special investigation of experimental or theoretical areas which are not included in the regular courses. Often involves actual research projects. May be elected in successive trimesters. Can be repeated with different topic. Permission of instructor required. (F, S, SS)

Science Education / 28**380 Methods in Elementary School Science (3 hours)**

This course is designed to acquaint the prospective teacher with science subject matter and science curricular materials used in modern elementary school science programs. The course provides classroom experiences in the use of scientific equipment and material available in many elementary school science programs. Individualized and small group activities are provided to give experience in using a variety of methods in teaching science. Prerequisites: BIOL 04-102/103, and PHSC 40-102/103 or PHYS 25-110/111 or 112/113 with a minimum grade of "C." (F, S)

400 Special Offerings (1-4 hours)

Repeatable for additional experience, new material and progression of study.

500 Special Offerings (1-4 hours)

Repeatable for additional experience, new material and progression of study.

550 History of Science and Technology (3 hours)

This course will develop a conceptual framework for scientific and technological literacy. The goals of the course will relate to the acquisition of knowledge, the development of learning skills and the development of values and ideas. Characteristics of science, technology and society instruction will be stressed. Prerequisite: Science majors (15 hours of science recommended). (S)

580 Methods in Secondary School Science (3 hours)

This course is designed to acquaint prospective science teachers with the methods and materials needed in teaching science at the secondary level. The course provides individualized experiences related to the teaching of the subject fields each student has elected for his or her major or minor area. Prerequisite: Science major or minor admitted to the Teacher Education Program. (F)

582 Methods in Middle School Science (3 hours)

A course to assist prospective middle school science teachers with the methods and materials needed in teaching science at the middle school level. Prerequisites: Science majors or minors, EDUC 61-570, 15 hours of science. (F)

The Honors Program / H

Dean of the College of Arts and Sciences: Charles A. McAdams

Director of the Honors Program: Thomas M. Spencer

Honors Faculty: Joel Benson, Rebecca Dunnell, Matthew Engel, James Eiswert, Dawn Gilley, Tom Hardee, Brian Hesse, Bayo Oludaja, Brenda Ryan, Thomas Spencer, Linda Sterling, Jeffry Thornsberry, David Vlieger and Nancy Zeliff

Statement of Mission

The Honors Program provides motivated and talented students with an enriched educational experience. Through limited class size and close interactions with faculty, the program provides talented students with a deeper understanding of content and an opportunity to develop critical thinking and discussion skills that prepare them for a dynamic world. In the Honors Program, a commitment to learning is combined with a spirit of inquiry and a critical understanding of the responsibilities of global citizenship. By bringing together the ideas from diverse traditions of knowledge, the Honors Program helps prepare creative and innovative leaders to meet emerging challenges in our global community.

The Honors Program Curriculum

Northwest Missouri State University's General Education Requirements are outlined on pages 68-71. The Honors Program requires a minimum of 21 credit hours in Honors sections of General Education courses. Honors sections will be designated with an "H" in the course title as listed online and on the student transcript. By the 2011-2012 academic year, Honors sections existed for 16 different GenEd or Institutional Requirements courses: Freshman Seminar, Accelerated Composition, Fundamentals of Oral Communication, Statistics, Introduction to American Government, America: A Historical Survey, General Biology, General Geology, Introduction to Literature, Western Civilization II, Introduction to Philosophy, The Enjoyment of Music, Introduction to Geography, General Psychology, People and Cultures of the World, and Computers and Information Technology.

Honors Program Policies, Expectations and Requirements

The Honors Program is designed for motivated and capable students. During the first trimester, the Honors student typically enrolls in two Honors classes. These classes are sections of existing courses enhanced for the Honors students. Class size limits for Honors sections provide ample opportunity for students to express themselves and interact more with professors and classmates:

Honors sections will typically involve:

- more extensive reading and/or more ambitious laboratory work
- in-depth conversation
- connections within and among disciplines
- relationship of course material to a diverse global society

- challenging educational experiences beyond the classroom
- opportunities for research and capstone experiences

Eligibility and Admission

- To be considered for entrance into the Honors program, a first-time/entering student must have a minimum ACT composite score of 26 and a minimum high school GPA of 3.50.
- Students will be selected from among eligible applicants.

Program Continuation Requirements

- Honors students must maintain a 3.50 Northwest cumulative grade point average to remain in the Honors Program. If a student falls below a 3.50 GPA after the first academic year, the student is placed on academic probation in the Honors Program. If after the following academic year, the student has not regained a 3.50 cumulative GPA, the student will be suspended from the Honors Program. The suspended student can apply for readmission to the program once their Northwest cumulative GPA is at or above 3.50.

Graduation Requirements

To graduate with honors, a student must:

- complete at least 21 hours in Honors sections of the required General Education courses or through honors credit agreements
- maintain a 3.50 cumulative GPA

Co-Curricular Activities

- Special colloquia, field trips, etc. are available for enrichment and limited to Honors students.
- Honors students have the privilege of an early preregistration for classes.

HONORS PROGRAM

- Honors students have opportunities for special access to selected campus-wide events.
- Honors students participate in various activities such as research projects and service learning activities.
- Honors students receive special advisement by the director of the Honors Program and/or by Honors faculty.
- A special dinner is held for Honors graduates and their families.
- Students receive an Honors medal for graduation (transcript and diploma will carry the Honors designation).

Course Description

Inter-College / 77

390 Advanced Studies in Honors (3 hours)

The content of this upper-level standalone honors course will vary when offered. It may be repeated with a change in topic. (SS)

Melvin D. and Valorie G. Booth College of Business and Professional Studies

Dr. Gregory Haddock, Acting Dean

- Department of Agricultural Sciences
- Department of Business
- Department of Communication and Mass Media

Melvin D. and Valorie G. Booth

College of Business and Professional Studies

Acting Dean: Gregory Haddock

The Melvin D. and Valorie G. Booth College of Business and Professional Studies includes the Departments of Agricultural Sciences, Business, and Communication and Mass Media.

Statement of Mission

The overall mission of the Melvin D. and Valorie G. Booth College of Business and Professional Studies is to continue to expand and improve access to learning by developing partnerships with men and women so that, together, we can acquire appropriate knowledge and skills, apply that knowledge and skill to new situations, and to act accordingly. As a result of that mission, we prepare men and women for leadership careers in business, industry, education, government, broadcasting, publications, news reporting and public service. Four major areas of education are involved in the development process:

1. A foundation in general education in full recognition that as future organizational leaders, students should have a firm understanding of the relationships to social, economic, political and cultural trends.
2. A professional component that provides a broad understanding of the fundamentals through which a particular discipline operates.
3. An opportunity to specialize in a discipline relevant to a chosen career.
4. An understanding of trends in science and technology and how those areas influence social, economic, political and cultural trends.

Important objectives of the Melvin D. and Valorie G. Booth College of Business and Professional Studies are:

1. To provide professional assistance to public and private organizations throughout our region.
2. To engage in applied research activities with a particular emphasis on meeting the needs of public and private organizations within our region. Applied research is emphasized because of the needs of the State, the environment in which the college exists, the interests of the faculty and the mission of the University.

Continuing opportunities are made available to students to participate in meetings with business, industrial and public service leaders, as well as outstanding professionals from various disciplines. Participation in student organizations as well as business and government internships provide realistic opportunities for students to relate to future leadership roles.

Programs in the Melvin D. and Valorie G. Booth College of Business and Professional Studies offer courses leading to the Bachelor of Arts, Bachelor of Science, Bachelor of Science in Education, Master of Science in Education, Master of Science in Agriculture, Master of Business Administration, Master of Business Administration with Information Technology Management emphasis, and Master of Business Administration with Agricultural Economics Emphasis degrees.

Web-based programs leading to a Bachelor of Science with a major in business management and marketing are currently available. Additional programs are being developed.

Accreditation

Northwest Missouri State University, through its Melvin D. and Valorie G. Booth College of Business and Professional Studies, is nationally accredited by the Accreditation Council for Business Schools and Programs (ACBSP) for the offering of the following degree programs: (1) at the graduate level, for the Master of Business Administration (M.B.A.) degree; (2) at the undergraduate level, for the Bachelor of Science (B.S.) degree with majors in accounting, business economics, finance, management information systems, business technology, business education, business management, international business and marketing. These accredited programs are marked with a pound sign (#) in the departmental listings. The B.S. in Education degrees in Agricultural Education and Business Education are accredited by the National Council for Accreditation of Teacher Education and the Department of Elementary and Secondary Education.

Business Transfer Requirements

Any community college student or student from another baccalaureate degree-granting institution planning to transfer to Northwest Missouri State University and major in one of the business programs should place heavy emphasis on liberal arts courses during the first two years of study. However, many of these students will wish to include some business courses in their program and should select those courses from the following:

- College Algebra (3 semester hours)
- Statistics (3 semester hours)
- Computers and Information Technology (3 semester hours)
- Principles of Accounting (6 semester hours)
- Managerial Communication (3 semester hours)
- Macroeconomics (3 semester hours)
- Microeconomics (3 semester hours)
- Business Law (3 semester hours)
- Fundamentals of Finance (3 semester hours)
- Principles of Management (3 semester hours)
- Principles of Marketing (3 semester hours)

Any equivalent Northwest business course taken at another regionally-accredited institution will transfer, providing that at least 60 percent of the comprehensive major is completed at Northwest. Students minoring in general business must also complete 60 percent of those requirements at Northwest.

Special articulation agreements have been made with community colleges for the transfer of associate of applied science degrees. Further information may be requested from the Office of Admissions or the dean's office.

Common Professional Component Requirements for Accredited Business Programs

To ensure a common professional component among the accredited business programs, all students majoring in accounting, business economics, business education, business management, business technology, finance, international business, management information systems, and marketing are required to fulfill the following professional component requirements.

All students majoring in Public Accounting, Private Accounting, Business Economics, Business Management, Financial Services, Financial Computing, Corporate Finance, Financial Management, International Business, Management Information Systems or Marketing must earn a minimum grade of "C" in each Common Professional Component and required course.

General Education Courses	Semester Hours
*MATH 17-114 General Statistics I	3
*ECON 52-150 General Economics I (Macroeconomics)	3
Total General Education Requirements	6
Directed Institutional Requirement	
CSIS 44-130 Computers and Information Technology	3
Non-business Courses	
MATH 17-118 College Algebra	3
ECON 52-151 General Economics II (Microeconomics)	3
Total Non-business Requirements	6
Business Courses	
ACCT 51-201 Accounting I	3
ACCT 51-202 Accounting II	3
FIN 53-311 Business Law I	3
FIN 53-324 Fundamentals of Business Finance	3
MGMT 54-310 Managerial Communication	3
MGMT 54-313 Principles of Management	3
MGMT 54-315 Operations Management	3
MGMT 54-417 Organizational Policy and Decision-Making	3
MKTG 55-330 Principles of Marketing	3
MKTG 55-438 International Business	3
CSIS 44-317 Management Information Systems	3
Total Business Requirements	33

*These courses fulfill General Education requirements and are not counted toward the major requirements.

Courses listed under the appropriate major must be completed in addition to the above common professional component requirements.

Non-business students majoring in communications, mass media, advertising, interactive digital media, or economics are not required to fulfill the common professional component requirements.

Minors are available in business education, marketing and cooperative education, animal science, precision agriculture, economics, general business, agricultural science, agronomy, commercial agriculture, horticulture, broadcasting, journalism, advertising, interactive digital media, organizational communication, public relations, interpersonal communication and rhetoric.

Course Description

**Melvin D. and Valorie G.
Booth College of
Business and Professional
Studies / 76**

101 Freshman Seminar (1 hour)

Freshman seminar is designed to introduce students to Northwest Missouri State University.

Topics of exploration will include adjustment to University life, skills necessary to make the most of the University experience, General Education requirements, academic programs and advisement, career exploration, campus and community resources, taking advantage of cultural and extra-curricular events, and assuming responsibility for one's own University experience.

Department of Agricultural Sciences

Chairperson:

Faculty: Rod Barr, Lurinda Gilliland, Rego Jones, Arley Larson, George Kegode, Naveen Musunuru, Jamie Patton, Callie Walker, Thomas Zweifel

Statement of Mission

The Department of Agricultural Sciences at Northwest Missouri State University supports and enhances the mission of the University. Northwest is a coeducational, primarily residential, regional University offering a broad range of undergraduate and select graduate programs. The University's programs place special emphasis upon agriculture, business, and teacher education, as these professions contribute to the primary service region. In support of this mission, the Department of Agricultural Sciences currently offers seven majors, six minors, three master's degrees and a two-year farm operations certificate to complement the high quality, living-learning environment of Northwest for students interested in pursuing careers in agriculture.

DEGREE PROGRAMS

The courses in the Department of Agricultural Sciences are chosen with the aim of preparing students to take their place in the many and varied occupations directly or indirectly related to agriculture. It is possible for students to select an area of emphasis in preparation for a particular career field, to prepare for advanced study, to prepare for farming or to enter the teaching field as a teacher of agricultural education.

Majors are currently offered in Agricultural Business, Agronomy, Animal Science, Animal Science (Pre-Veterinary Option), Horticulture, Agricultural Education and Agricultural Science. Students at Northwest can select agricultural minors in Animal Science, Agricultural Science, Commercial Agriculture, Agronomy, Precision Agriculture, and Horticulture. Master's programs are offered leading to the following degrees: Master of Science in Agriculture, Master of Science in Education (Teaching Secondary Agricultural Education) and Master in Business Administration (MBA) with an area in Agricultural Economics.

All faculty members within the Department of Agricultural Sciences have earned a Ph.D. or have significant professional experience, and strive for excellence in teaching, scholarly activity, service and student support. The Agricultural Sciences department is a leader in applied research programs in alternative crops, marketing research and associated activities.

The Department of Agricultural Sciences places special emphasis on creating a climate that is conducive to learning. The faculty possess a genuine concern for the students as well as a high commitment to the educational achievement of their students. The department's goal is to educate students to successfully meet the challenges of a career in agriculture, while instilling a desire and curiosity for lifelong learning.

The department offers an excellent course curriculum for each major, undergraduate research op-

portunities, internship programs, a wide range of professional and social student organizations and hands-on experiences in living laboratories to expand students' horizons beyond the classroom.

Agriculture Major Requirements

When a student chooses agriculture as a major, he/she will also choose an area of specialization from those offered. An advisor will then be assigned and the student and advisor will select the courses needed to complete the major requirements. Courses are required for each major, but students may, with permission of the advisor and department chairperson, make substitutions or additions to their program. General requirements for the B.S. degree are found in the "Degree Requirements" section of this catalog.

- All agriculture students are required to take chemistry as part of their general requirements.

DEPARTMENT POLICIES

Requirements for Independent Study and Problems Courses

The independent study and problems courses for each area of specialization permit the student to explore a specific topic in depth. The 400-level course may: (1) use either primary or secondary research data or (2) cover course material the student was unable to schedule prior to the senior year. The 500-level course may use only primary research data or special problems assigned by the instructor.

A student may take no more than three hours of 400-level and three hours of 500-level of these courses during the undergraduate program. The student may not take both a 400- and 500-level of these courses during the same trimester.

The final report must be filed in the Department of Agricultural Sciences and the student is responsible for providing that copy.

Credit By Examination

The agriculture courses listed in the course descriptions preceded by an asterisk (*) are available to students for credit by examination. If a student feels he/she can test out of any of these courses, the student should talk to the instructor and the department chairperson.

Majors and Minors for Agriculture Students

Students majoring in agriculture are not permitted to minor in agricultural science. Students seeking multiple majors in agriculture are not permitted to use agricultural science as one of the majors. Students pursuing a major in agricultural science may not pursue a minor offered by the department. When an agriculture minor is chosen in lieu of the collateral field for a major, duplicate courses in the minor must have replacement coursework assigned by the advisor.

Transfer Credit

For Bachelor of Science degree students, only those junior/community college agriculture courses with a lower division equivalent at Northwest will be transferred toward a B.S. degree, with the exception of internships and those courses that are covered by a current articulation agreement. Up to six credits of employment experience, on-the-job training, or internships can be substituted for Northwest's AGRI 03-498 Agriculture Occupations Internship.

For Bachelor of Technology degree students completing a one- or two-year program at a junior/community college and who transfer to Northwest for a B.T. degree, most credits will transfer,

either as substitutes for equivalent courses at the freshman and sophomore level or as electives. Bachelor of Technology students must complete a residence emphasis of 24 hours. (See Bachelor of Technology degree requirements on pages 77-78.)

Students selecting a major/emphasis in agriculture from Northwest Missouri State University must complete a minimum of 24 credit hours in agriculture from Northwest's Department of Agricultural Sciences. Exceptions to this policy must be submitted in writing to the department chairperson for review by the Department Curriculum Committee.

MAJORS

Major in Agricultural Business, 37 hours: B.S.–Collateral Field Required

CIP: 010102

This program prepares the student to work in agriculturally-related industries. Students receive a solid background in business management principles as well as technical agriculture. It prepares the student for management positions in the areas of marketing, grain merchandising, insurance and banking sectors.

Required Courses	Semester Hours
*AGRI 03-102 Introductory Agricultural Economics	3
AGRI 03-150 Animal Science	4
AGRI 03-234 Fundamentals of Soil Science	4
AGRI 03-296 Seminar	1
AGRI 03-302 Agricultural Marketing OR MKTG 55-330 Principles of Marketing	3
AGRI 03-304 Farm Management and Record Analysis	3
AGRI 03-309 Basic Applied Futures Marketing	3
AGRI 03-407 Agricultural Finance OR FIN 53-324 Fundamentals of Business Finance	3
AGRI 03-503 Agricultural Law	3
Advisor-approved electives in agriculture or business	10
Total	37
Collateral Field Courses	
*MATH 17-114 General Statistics I	3
ACCT 51-201 Accounting I	3
ACCT 51-202 Accounting II	3
FIN 53-311 Business Law I	3
MGMT 54-310 Managerial Communication	3
MGMT 54-313 Principles of Management	3
MKTG 55-430 Sales and Sales Management	3
Total	21
Directed General Education Requirement	
MATH 17-118 College Algebra	3

*Cannot be used to fulfill any General Education requirement.

NOTE: Grade Requirement: Students must earn a grade of "C" or better in AGRI 03-102, Introductory Agricultural Economics. Students may have no more than seven hours of "D" in courses required by this major.

**Major in Agronomy, 36 hours: B.S.–Minor Required OR
Collateral Field Listed Below**

CIP: 011102

The agronomy curriculum provides fundamental training in crop and soil science. Students choosing to major in agronomy will be prepared to serve in crop consulting, environmental protection, land management, soil conservation, seed, fertilizer, agricultural chemical sales or related areas.

Required Courses	Semester Hours
AGRI 03-232 Crop Production	3
AGRI 03-234 Fundamentals of Soil Science	4
AGRI 03-296 Seminar	1
AGRI 03-330 Forage Crop Science	3
AGRI 03-336 Crop Physiology	3
AGRI 03-381 Applied Entomology	3
AGRI 03-432 Soil and Water Conservation	3
AGRI 03-440 Introduction to Precision Agriculture	3
AGRI 03-530 Soil Formation and Classification	3
AGRI 03-534 Plant Breeding	3
AGRI 03-434 Weed Science: Ecology and Control OR AGRI 03-582 Plant Diseases	3
AGRI 03-536 Soil Fertility	3
Advisor-approved electives in agriculture	1
Total	36

Collateral Field Courses (if no minor is selected)

*BIOL 04-112/113 General Botany and Laboratory OR BIOL 04-140 General Microbiology	4
BIOL 04-350 Genetics OR BIOL 04-376 Basic Ecology	3-4
*MATH 17-114 General Statistics I	3
GEOL 27-360 Environmental Geology OR GEOG 32-365 Geographic Information Systems	3-4
CHEM 24-242/243 Organic Chemistry and Laboratory OR CHEM 24-342/343 Organic Chemistry I and Laboratory	4-5
ENGL 10-315 Writing for the Professions	3
Total	20-23

Directed General Education Requirements

AGRI 03-130 Plant Science	4
CHEM 24-112/113 General Chemistry and Laboratory OR CHEM 24-114/115 General Chemistry I and Laboratory	4
MATH 17-118 College Algebra	3

*Cannot be used to fulfill any General Education requirement.

NOTE: Grade Requirement: Students must earn a grade of "C" or better in AGRI 03-130, Plant Science. Students may have no more than seven hours of "D" in courses required by this major.

Major in Animal Science, 38 hours: B.S.—Minor Required OR Collateral Field Listed Below

CIP: 010901

Courses have been selected to prepare the student in the areas dealing with the fundamentals of livestock production, including selection, reproduction, physiology, nutrition, marketing and general management. In addition to the courses dealing with basic principles, a number of elective courses are offered which give the student the opportunity to choose courses more closely related to his or her special interests.

Required Courses	Semester Hours
AGRI 03-150 Animal Science	4
AGRI 03-252 Livestock Evaluation	3
AGRI 03-296 Seminar	1
AGRI 03-309 Applied Futures Marketing	3
AGRI 03-352 Meat Science	3
AGRI 03-360 Principles of Animal Nutrition	3
AGRI 03-364 Anatomy of Domestic Animals	3
AGRI 03-366 Principles of Animal Breeding	3
AGRI 03-452 Beef Science	3
AGRI 03-454 Swine Science	3
AGRI 03-460 Advanced Animal Nutrition	3
AGRI 03-464 Physiology of Domestic Animals	3
AGRI 03-566 Genetics of Livestock Improvement	3
Total	38
Collateral Field Courses (Choose 20 hours)	
CHEM 24-242/243 Organic Chemistry and Laboratory	4
CHEM 24-362/363 Elementary Biochemistry and Laboratory	4
ACCT 51-201 Accounting I	3
MGMT 54-310 Managerial Communication	3
MGMT 54-313 Principles of Management	3
*BIOL 04-114/115 General Zoology and Laboratory	4
BIOL 04-350 Genetics	3
*MATH 17-114 General Statistics I	3
Directed General Education Requirements	
CHEM 24-112/113 General Chemistry and Laboratory OR	
CHEM 24-114/115 General Chemistry I and Laboratory	4
MATH 17-118 College Algebra	3

*Cannot be used to fulfill any General Education requirement.

NOTE: Grade Requirement: Students must earn a grade of "C" or better in AGRI 03-150, Animal Science. Students may have no more than seven hours of "D" in courses required by this major.

Comprehensive Major in Animal Science (Pre-Veterinary Option), 63 hours: B.S.—No Minor Required

CIP: 511104

This option is designed to prepare students for the pursuit of a degree in animal science and/or to meet the pre-professional requirements for a school of veterinary medicine.

Required Courses	Semester Hours
AGRI 03-150 Animal Science	4
AGRI 03-252 Livestock Evaluation	3

AGRI 03-296 Seminar	1
AGRI 03-352 Meat Science	3
AGRI 03-360 Principles of Animal Nutrition	3
AGRI 03-366 Principles of Animal Breeding	3
AGRI 03-452 Beef Science	3
AGRI 03-454 Swine Science	3
AGRI 03-460 Advanced Animal Nutrition	3
AGRI 03-566 Genetics of Livestock Improvement	3
BIOL 04-322 Comparative Anatomy	4
BIOL 04-438 Human Physiology	4
CHEM 24-116/117 General Chemistry II and Laboratory	5
CHEM 24-342/343 Organic Chemistry I and Laboratory	5
CHEM 24-362/363 Elementary Biochemistry and Laboratory	4
*PHYS 25-110/111 General Physics I and Laboratory	4
*PHYS 25-112/113 General Physics II and Laboratory	4
BIOL 04-418 Vertebrate Histology	4
Directed General Education Requirements	
CHEM 24-114/115 General Chemistry I and Laboratory	4
MATH 17-118 College Algebra	3

*Cannot be used to fulfill any General Education requirement.

NOTE: Grade Requirement: Students must earn a grade of “C” or better in AGRI 03-150, Animal Science. Students may have no more than seven hours of “D” in courses required by this major.

Major in Horticulture, 37 hours: B.S.–Minor Required OR Collateral Field Listed Below

CIP: 011103

A major in horticulture provides opportunity for study of vegetable and fruit production, turfgrass management, greenhouse and nursery management, and landscape design.

Several of the courses in the Horticulture major have prerequisites of AGRI 03-130 or BIOL 04-112/113 and AGRI 03-234. In addition, one course has a prerequisite of CHEM 24-112/113 or 24-114/115.

Required Courses Semester Hours

*AGRI 03-130 Plant Science	4
AGRI 03-234 Fundamentals of Soil Science	4
AGRI 03-296 Seminar	1
AGRI 03-380 Plant Propagation	3
AGRI 03-381 Applied Entomology	3
AGRI 03-582 Plant Diseases	3
Total	18
Horticulture courses chosen by student and advisor	19

Collateral Field Courses (if minor is not chosen)

Choose 24 hours from the following:

*GEOL 27-110/111 General Geology and Laboratory	4
GEOL 27-360 Environmental Geology	4
CHEM 24-242/243 Organic Chemistry and Laboratory	4
CHEM 24-342/343 Organic Chemistry I and Laboratory	5
CHEM 24-362/363 Elementary Biochemistry and Laboratory	4

BIOL 04-112/113 General Botany and Laboratory	4
BIOL 04-140 General Microbiology	4
BIOL 04-261 Local Flora	2
BIOL 04-350 Genetics	3
BIOL 04-376 Basic Ecology	4
BIOL 04-412 Plant Anatomy/Morphology	4
BIOL 04-430 Plant Physiology	4
BIOL 04-575 Methods in Plant Ecology	2
*MATH 17-114 General Statistics I	3

Directed General Education Requirement

MATH 17-118 College Algebra	3
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See advisor for placement in General Education Science requirements

*Cannot be used to fulfill any General Education requirement.

NOTE: Grade Requirement: Students must earn a grade of “C” or better in AGRI 03-130, Plant Science. Students may have no more than seven hours of “D” in courses required by this major.

**Comprehensive Major in Agricultural Education, 59 hours:
B.S.Ed., Secondary Program—No Minor Required
(Certifies Grades 9-12)**

CIP: 131301

The Major in Agricultural Education is designed to prepare teachers of agriculture for the secondary and adult levels in compliance with state certification requirements.

Required Courses	Semester Hours
**AGRI 03-102 Introductory Agricultural Economics	3
AGRI 03-112 Agricultural Mechanics	4
**AGRI 03-130 Plant Science	4
AGRI 03-150 Animal Science	4
AGRI 03-234 Fundamentals of Soil Science	4
AGRI 03-296 Seminar	1
AGRI 03-304 Farm Management and Record Analysis	3
Student must take <i>two</i> of the following:	
AGRI 03-232 Crop Production	3
AGRI 03-385 Greenhouse Crop Production	3
Horticulture elective	3
Advisor-approved electives in agriculture	16
Total	45

Required Courses in Agricultural Education

AGRI 03-320 Foundations of Agricultural Education	3
AGRI 03-420 Program Planning in Agricultural Education	3
AGRI 03-421 Conducting Supervised Agricultural Experience Programs	2
AGRI 03-422 Adult Education in Agriculture	2
AGRI 03-524 Teaching Agricultural Science Laboratories	2
AGRI 03-580 Methods in Teaching Agriculture	2

Total **14**

Directed General Education Requirement

CHEM 24-112/113 General Chemistry and Laboratory OR	
CHEM 24-114/115 General Chemistry I and Laboratory	4

**Can be used to fulfill General Education requirement.

Endorsement for Middle School Certification: Agriculture Certifies Grades 5-9 when completed with the Middle School Major

CIP: 131301

The completion of this endorsement meets the requirements for use with Missouri Middle School Certification, grades 5-9.

Required Courses	Semester Hours
AGRI 03-102 Introductory Agricultural Economics	3
AGRI 03-112 Agricultural Mechanics	4
AGRI 03-130 Plant Science	4
AGRI 03-150 Animal Science	4
AGRI 03-234 Fundamentals of Soil Science	4
AGRI 03-320 Foundations of Agricultural Education	3
Total	22

Comprehensive Major in Agricultural Science, 55 hours: B.S.–No Minor Required

CIP: 010000

Agricultural science prepares students for a wide variety of positions in agriculture and agriculturally-related occupations, as well as farm operations.

In addition to the courses listed below, a program to total 55 hours of agriculture courses is designed by the student and an advisor to meet the needs of each student.

Required Courses	Semester Hours
*AGRI 03-102 Introductory Agricultural Economics	3
*AGRI 03-130 Plant Science	4
AGRI 03-150 Animal Science	4
AGRI 03-234 Fundamentals of Soil Science	4
AGRI 03-296 Seminar	1
**Advisor-approved electives in agriculture	39
Total	55

**Students selecting a Comprehensive Major in Agricultural Science must complete a minimum of 9 credit hours in at least three of the agricultural areas: agricultural economics, agricultural mechanization, agricultural education, agronomy, animal science and horticulture. Each course may be counted in only one major area.

Directed General Education Requirements

CHEM 24-112/113 General Chemistry and Laboratory OR	
CHEM 24-114/115 General Chemistry I and Laboratory	4
MATH 17-118 College Algebra	3

*Cannot be used to fulfill any General Education requirement.

NOTE: Grade Requirement: Students must earn a grade of “C” or better in AGRI 03-102, Introductory Agricultural Economics, AGRI 03-130, Plant Science, and AGRI 03-150, Animal Science. Students may have no more than seven hours of “D” in courses required by this major.

MINORS

Minor in Agricultural Science, 24 hours

CIP: 020101

Required Courses	Semester Hours
*AGRI 03-102 Introductory Agricultural Economics	3
*AGRI 03-130 Plant Science	4
AGRI 03-150 Animal Science	4
AGRI 03-234 Fundamentals of Soil Science	4
Advisor-approved electives in agriculture	9

*Cannot be used to fulfill any General Education requirement.

NOTE: Grade Requirement: Students must earn a grade of "C" or better in AGRI 03-102, Introductory Agricultural Economics, AGRI 03-130, Plant Science, and AGRI 03-150, Animal Science.

Minor in Commercial Agriculture, 24 hours: B.S.

CIP: 010102

Required Courses	Semester Hours
*AGRI 03-102 Introductory Agricultural Economics OR	
ECON 52-151 General Economics II	3
ACCT 51-201 Accounting I	3
AGRI 03-302 Agricultural Marketing	3
AGRI 03-309 Applied Futures Marketing	3
AGRI 03-502 Agricultural Prices	3
Advisor-approved electives	9
Select 9 hours from the following courses:	
ACCT 51-202 Accounting II	3
FIN 53-324 Fundamentals of Business Finance	3
MGMT 54-313 Principles of Management	3
MKTG 55-430 Sales & Sales Management	3
AGRI 03-304 Farm Management and Record Analysis	3
AGRI 03-305 Rural Real Estate Appraisal	3
AGRI 03-407 Agricultural Finance	3
AGRI 03-503 Agricultural Law	3
AGRI 03-508 Agricultural Policy	3

*Cannot be used to fulfill any General Education requirement.

NOTE: Grade Requirement: Students must earn a grade of "C" or better in AGRI 03-102, Introductory Agricultural Economics.

Minor in Agronomy, 24 hours

CIP: 020402

Required Courses	Semester Hours
*AGRI 03-130 Plant Science	4
AGRI 03-232 Crop Production	3
AGRI 03-234 Fundamentals of Soil Science	4

AGRI 03-330 Forage Crop Science OR	
AGRI 03-292 Introduction to Agricultural Pesticides OR	
AGRI 03-432 Soil and Water Conservation	3
AGRI 03-336 Crop Physiology OR	
AGRI 03-534 Plant Breeding	3
AGRI 03-530 Soil Formation and Classification OR	
AGRI 03-536 Soil Fertility	3
AGRI 03-381 Applied Entomology OR	
AGRI 03-434 Weed Science: Ecology and Control OR	
AGRI 03-582 Plant Diseases	3
Advisor-approved electives in agronomy	1

*Cannot be used to fulfill any General Education requirement.

NOTE: Grade Requirement: Students must earn a grade of “C” or better in AGRI 03-130, Plant Science.

Minor in Animal Science, 22 hours

CIP: 020201

Required Courses	Semester Hours
AGRI 03-150 Animal Science	4
AGRI 03-252 Livestock Evaluation	3
AGRI 03-352 Meat Science	3
AGRI 03-360 Principles of Nutrition	3
AGRI 03-366 Principles of Animal Breeding	3
AGRI 03-452 Beef Science OR	
AGRI 03-454 Swine Science OR	
AGRI 03-470 Dairy Science	3
AGRI 03-566 Genetics of Livestock Improvement	3

NOTE: Grade Requirement: Students must earn a grade of “C” or better in AGRI 03-150, Animal Science.

Minor in Horticulture, 24 hours

CIP: 020403

Required Courses	Semester Hours
*AGRI 03-130 Plant Science	4
AGRI 03-234 Fundamentals of Soil Science	4
AGRI 03-380 Plant Propagation	3
AGRI 03-381 Applied Entomology	3
AGRI 03-582 Plant Diseases	3
Advisor-approved electives in horticulture	7

*Cannot be used to fulfill any General Education requirement.

NOTE: Grade Requirement: Students must earn a grade of “C” or better in AGRI 03-130, Plant Science.

Minor in Precision Agriculture, 24-25 hours*

CIP: 019999

This is an interdisciplinary minor in conjunction with Agriculture and Geography.

Several of the required and elective courses in this minor have a prerequisite of AGRI 03-130 or BIOL 04-112/113 and CHEM 24-112/113 or 114/115. In addition, several of the elective courses have a prerequisite of GEOL 27-110/111 or 114/115 and/or MATH 17-118. Students electing to take this minor should choose their general studies science courses to satisfy these prerequisites.

Required Courses	Semester Hours
AGRI 03-232 Crop Production	3
AGRI 03-234 Fundamentals of Soil Science	4
AGRI 03-440 Introduction to Precision Agriculture	3
AGRI 03-445 Applied Research in Precision Agriculture	3
GEOG 32-201 Maps and Map Interpretation	3
GEOG 32-207 GPS Fundamentals	3
GEOG 32-365 Geographical Information Systems	3
Advisor Approved Electives	3
AGRI 03-292 Introduction to Agricultural Pesticides (3)	
AGRI 03-381 Applied Entomology (3)	
AGRI 03-434 Weed Science: Ecology and Control (3)	
AGRI 03-530 Soil Formation and Classification (3)	
AGRI 03-536 Soil Fertility (3)	
AGRI 03-582 Plant Diseases (3)	
GEOG 32-362 Cartography (3)	
GEOG 32-363 Remote Sensing (3)	
GEOG 32-465 Introduction to Customized GIS (3)	
GEOG 32-562 Digital Cartography and Geo Visualization (3)	
GEOG 32-563 Digital Image Processing (3)	
GEOG 32-565 Advanced Geographic Information Systems (3)	
GEOL 27-340 Introduction to Hydrogeology (3)	
GEOL 27-360 Environmental Geology (3)	

*A three-hour advisor-approved elective may be substituted for Fundamentals of Soil Science (AGRI 03-234), if Fundamentals of Soil Science is required in the student's major.

NOTES: No courses may count for both a major in Geography or Agriculture and this minor. Substitution of required courses should be made with courses listed under advisor approved electives.

Consultation with an advisor is required to properly select electives for this minor.

TWO-YEAR CERTIFICATE PROGRAM**Farm Operation, 60 hours**

CIP: 019999

A two-year program designed to allow the student a highly concentrated course of study to prepare for farming or ranching.

Required Courses	Semester Hours
AGRI 03-102 Introductory Agricultural Economics	3
AGRI 03-130 Plant Science	4
AGRI 03-150 Animal Science	4
AGRI 03-234 Fundamentals of Soil Science	4
Advisor-approved electives in agriculture	30
Advisor-approved electives	15

Course Descriptions

Agriculture / 03

Agriculture courses preceded by an asterisk () are available to students for credit by examination.

AGRICULTURAL ECONOMICS

*102 Introductory Agricultural Economics (3 hours)

Principles of production, supply and demand are applied to economic problems of agriculture and agriculturally related industries. Emphasis is placed on understanding the theoretical underpinnings of decision analysis within the biological, institutional and structural parameters of the agricultural sector. (F, S, SS)

302 Agricultural Marketing (3 hours)

A course surveying the nature of production, the marketing system, and the market for farm products, market functions and institutions' commodity problems. Prerequisite: AGRI 03-102. (F)

304 Farm Management and Record Analysis (3 hours)

Economic principles applied to the organization and operation of farms, complete and partial budgeting, farm record analysis, farm financial management and problems involving farm decision-making. Prerequisite: AGRI 03-102 (F, S)

305 Rural Real Estate Appraisal (3 hours)

The classification and valuation of real estate using the sales, income, cost and productivity methods. Several field appraisals will be completed by the students. Prerequisites: AGRI 03-102 or ECON 52-151. (S, even years)

307 Farm Business Records (3 hours)

An application and examination of accounting principles applied to the issues and unique situations that occur in the agricultural industry. Double-entry accounting is emphasized. An accrual-adjusted system based on cash-basis accounting which is the most prevalent accounting system used in agricultural operations is utilized to provide more accurate information to measure profitability. Prerequisites: AGRI 03-304 and ACCT 51-201 or permission of instructor.

308 Agricultural Data Analysis (3 hours)

A study of the application of computers to agricultural problems and the utilization of the EDP Systems as a farm management tool. Prerequisites: MATH 17-118 and competency of institutional requirement for information technology. (S)

309 Applied Futures Marketing (3 hours)

A course designed to familiarize the students with the composition of the futures and cost markets, how the cash and futures markets are related, chart reading to determine trends, basis formations, hedging and speculation. (F, S)

404 Livestock Marketing (2 hours)

Economic analysis of marketing livestock products from the standpoint of producers, processors, distributors; also evaluation and pricing of meat animals. (S)

407 Agricultural Finance (3 hours)

Financial requirements of the individual farm firm, capital budgeting, principles of debt and equity fund acquisition, cash flow analysis and evaluation of credit needs. Farm credit institutions are studied. Prerequisite: AGRI 03-304. (F, SS)

408 Professional Farm Management (3 hours)

The effects of goals, values and resource availability upon management decisions. The farm production planning decisions will be determined by economic and financial analysis using a linear programming model. A long-run plan will be developed by each student. Other farm management computer applications are also covered. Prerequisite: AGRI 03-304. (F, odd years)

409 Independent Study in Agricultural Economics (1-3 hours)

For students who wish to intensify, enrich or specialize in the area of agricultural economics. Consent of instructor necessary. Course is repeatable with topic change for a total of 3 hours. (F, S, SS)

502 Agricultural Prices (3 hours)

A study of the factors affecting prices of agricultural products; longtime cyclical, seasonal and other price movements; sources of information relating to production and demand factors; government

activities as they relate to prices of agricultural products and problems of price analysis and forecasting. Prerequisites: AGRI 03-102 and 302. (S)

503 Agricultural Law (3 hours)

The farmer's legal setting, deeds, mortgages, leases, water and fencing rights, easements, estate planning and other aspects. (F)

504 Futures Trading (3 hours)

An advanced course designed to provide an in-depth treatment of how the futures market is used throughout the marketing chain from farm production to end product use. Includes extensive study of the more technical aspects of charting and how to use these techniques as price forecasting tools. Prerequisite: AGRI 03-309 or graduate standing. (S, even years, SS)

505 Agricultural Resource Economics (3 hours)

Physical, economic and institutional factors that affect the role of land in economic life; population and resource requirements; principles of land utilization; returns from land; land value; property rights and tenure rights; social controls and rural and urban land development. Prerequisite: AGRI 03-102. (F, odd years)

508 Agricultural Policy (3 hours)

An analysis and history of the current economic problems of agriculture with emphasis on the influence of governmental policies. A term paper will be required. Prerequisite: AGRI 03-102. (S, odd years)

509 Problems in Agricultural Economics (1-3 hours)

Studies in the area of agricultural economics. Consent of instructor necessary. Course is repeatable with topic change for a total of 3 hours. (F, S, SS)

598 Advanced Agricultural Applications of Computers and GPS (3 hours)

A study of the use of statistical analysis and mathematical models in the agricultural business decision-making process. Prerequisites: MATH 17-114 or 610 and CSIS 44-130 or AGRI 03-308. (S, odd years)

AGRICULTURAL MECHANIZATION

112 Agricultural Mechanics (4 hours)

Topics include hot and cold metal work, arc and oxy-acetylene welding, tool care and use, woodworking, concrete, engines and machinery management. (S)

***312 Agricultural Welding (2 hours)**

A course designed to combine the basic fundamentals of electric arc and oxyacetylene welding with application to actual farm conditions using farm machinery and materials. (SS)

419 Independent Study in Agricultural Mechanization (1-3 hours)

For students who wish to intensify, enrich or specialize in the study of agricultural mechanization. Consent of instructor necessary. Course is repeatable with topic change for a total of 3 hours. (F, S, SS)

510 Techniques in Agricultural Surveying (3 hours)

Water management on the farm as it relates to maintaining soil productivity. Includes surveying, design and layout of soil conservation engineering practices, such as waterways, diversions, terraces, farm ponds and drainage systems. (SS)

518 Agricultural Drainage and Irrigation (3 hours)

A study of the needs of drainage and irrigation in agriculture including the design and application of drainage and irrigation systems under various conditions. (F, even years) Prerequisite: AGRI 03-234.

519 Problems in Agricultural Mechanization (1-3 hours)

Studies in the area of specialization of agricultural mechanization arranged with a member of the faculty. Consent of instructor necessary. Course is repeatable with topic change for a total of 3 hours. (F, S, SS)

AGRICULTURAL EDUCATION

***320 Foundations of Agricultural Education (3 hours)**

A course dealing with the history and future of education in agriculture and what is included in an agricultural education program, with emphasis on leadership training and the FFA. Professional organizations are also included. (F)

420 Program Planning in Agricultural Education (3 hours)

Curriculum construction in agricultural education, preparation of audio-visual aids, summer programs and the development of departmental and FFA programs of activities. Prerequisite: AGRI 03-320. (F)

421 Conducting Supervised Agriculture Experience Programs (2 hours)

A course dealing with the experience program

requirements of students in high school agriculture. How to plan, organize, evaluate and carry out the SAE programs. (F)

422 Adult Education in Agriculture (2 hours)

A course dealing with adult education. Emphasis on establishment of young farmer and adult programs, determining needs, gathering resources and utilization of instructional skills with the adult student. (S)

429 Independent Study in Agricultural Education (1-3 hours)

For students who wish to intensify, enrich or specialize in the study of any aspect of agricultural education with members of the staff. Consent of instructor necessary. Course is repeatable with topic change for a total of 3 hours. (F, S, SS)

524 Teaching Agricultural Science Laboratories (2 hours)

Methods of teaching and maintaining an agricultural education program. How to plan the physical plant; select tools, equipment and supplies; organize course content and properly conduct and manage agricultural laboratories. (F)

525 Induction Year Beginning Teacher I (2 hours)

A continuing education course for the professional development of first-year teachers of agriculture. Course focuses on the pedagogical knowledge, skills, attitudes and managerial skills needed by beginning teachers of agriculture. (SS)

527 Induction Year Beginning Teacher II (2 hours)

A continuing education course for the professional development of second-year teachers of agriculture. Focus is on the pedagogical knowledge, skills, attitudes and managerial skills needed by beginning teachers of agriculture. (SS)

529 Problems in Agricultural Education (1-3 hours)

Studies in the areas of agricultural education with members of the staff. Consent of instructor necessary. Course is repeatable with topic change. (F, S, SS)

580 Methods in Teaching Agriculture (2 hours)

A course in the special methods and materials of teaching agriculture, with an emphasis on teaching problem solving and agriculture management. (S)

AGRONOMY

130 Plant Science (4 hours)

A survey course that covers fundamentals of structure, function and environmental interactions of higher plants. The application of science to the study and utilization of plants is examined. Three hours of lecture and a two-hour laboratory per week. (F, S)

232 Crop Production (3 hours)

A study of how current technology, along with principles of adaptation, development and culture are applied to the production of agronomic and other crops. Prerequisites: AGRI 03-130 or BIOL 04-112/113, or consent of instructor. (F)

234 Fundamentals of Soil Science (4 hours)

Characterization of soils as a natural resource emphasizing their physical, chemical, mineralogical, and biological properties in relation to plant growth, land-use management, soil and water quality, and food production. Prerequisites: CHEM 24-112/113 or 114/115 or permission of instructor. (F, S)

238 Techniques of Crop Scouting (1-2 hours)

A hands-on practical workshop course designed to provide the student with the primary skills needed to do soil sampling and pest identification. Pest management strategies and elemental GPS utilization will also be included. (S)

292 Introduction to Agricultural Pesticides (3 hours)

A study of pesticide use and principles of their regulation, application, efficacy and environmental fate. Prerequisite: CHEM 24-112/113 or 114/115 or consent of instructor. (S)

330 Forage Crop Science (3 hours)

A detailed study of the culture, storage and utilization of the principal forage crops. Prerequisite: AGRI 03-130 recommended. (S)

336 Crop Physiology (3 hours)

A study of the physiological, nutritional and ecological aspects of crop growth and management. Prerequisite: AGRI 03-130 or BIOL 04-112/113. CHEM 24-112/113 or 114/115 recommended. (F)

432 Soil and Water Conservation (3 hours)

Overview of national and global soil/water resources, historical and current soil erosion issues,

governmental conservation programs, agricultural management techniques to protect natural resources; use of erosion prediction equations in soil and water management. Prerequisite: AGRI 03-234. (S)

434 Weed Science: Ecology and Control (3 hours)

Study and evaluation of weed competition concepts and the current and evolving methods of weed management. Prerequisite: AGRI 03-130 or BIOL 04-112/113. (F, even years)

437 Soil Judging (1 hour)

Field experience in soil evaluation. Course may be repeated twice for a new experience for a total of 3 hours. Prerequisite: AGRI 03-234. (F, S)

***440 Introduction to Precision Agriculture (3 hours)**

Overview of precision agriculture technologies and techniques, including soil sampling, global positioning and remote sensing; discussion of environmental, economic and agronomic benefits/limitations of technologies/techniques. Prerequisite: AGRI 03-234. (F)

442 Practical Field Crops Evaluation (1 hour)

Experience and practice in identification, agronomic calculations, and applications of agronomic facts. Consent of instructor required. Prerequisite: AGRI 03-232. (S)

445 Applied Research in Precision Agriculture (3 hours)

Development and implementation of a practical research project in the application of precision agriculture technologies, such as GPS, GIS, and/or other agricultural technologies, to real world agricultural problems/situations. Project findings will be professionally presented to interested parties/faculty. Prerequisites: AGRI 03-440, GEOG 32-207 and 365.

449 Independent Study in Agronomy (1-3 hours)

For students who wish to intensify, enrich or specialize in the study of any aspect of agronomy under the direction of a staff member. Consent of instructor necessary. Course is repeatable with topic change for a total of 3 hours. (F, S, SS)

530 Soil Formation and Classification (3 hours)

Identification and evaluation of soil morphological characteristics; study of the form and dynamics of

soil bodies across the landscape and soil-forming factors and processes; introduction to pedological features used in Soil Taxonomy. Prerequisite: AGRI 03-234. (F)

534 Plant Breeding (3 hours)

A study of the improvement of agricultural plants by application of the principles of heredity. Prerequisite: AGRI 03-130 or BIOL 04-112/113. (S)

536 Soil Fertility (3 hours)

Principles of soil productivity and nutrients required for crop growth; fertilizer sources and nutrient reactions in soil; methods of fertilizer nutrient placement in major tillage systems; interpretation of soil tests and plant analyses for determining crop nutrient requirements. Prerequisite: AGRI 03-234. (S)

540 Grain Crops (3 hours)

This course uses systems concepts as the basis for studying humankind's most important crops. An integrative approach is taken in the examination of production processes, management strategies and environmental issues. Prerequisite: 12 hours of agriculture. (F, odd years)

549 Problems in Agronomy (1-3 hours)

Studies in the areas of agronomy arranged with members of the staff. Consent of instructor necessary. Course is repeatable with topics changing for a total of 3 hours. Prerequisite: AGRI 03-234. (F, S, SS)

ANIMAL SCIENCE

***150 Animal Science (4 hours)**

An introductory animal science course dealing with the meat, animal and dairy industry. Includes basic principles of selection, nutrition, reproduction, anatomy, physiology, management, and an overview of the livestock industry. (F, S)

252 Livestock Evaluation (3 hours)

Develop skills in selecting animals for specific uses and develop ability to explain decisions and to accurately describe their reasons. Work will include beef cattle, sheep, swine and goat. Prerequisite: AGRI 03-150. (F, S)

352 Meat Science (3 hours)

Muscle growth and composition, nutritional and health concerns, meat safety and advances in product development, preparation, and storage. Also carcass fabrication, processing and grading. Prerequisite: AGRI 03-150. (S)

358 Livestock Health and Disease Management (3 hours)

An overview of common farm animal diseases including diagnosis, prevention and management. Prerequisite: AGRI 03-150. (F)

360 Principles of Animal Nutrition (3 hours)

A study of the principles of animal nutrition and practical problems of feeding livestock. Prerequisite: AGRI 03-150. (F)

364 Anatomy of Domestic Animals (3 hours)

A study of the major anatomical systems of the ruminant, monogastric and fowl. Prerequisite: AGRI 03-150. (F)

365 Artificial Insemination (1-3 hours)

A study of artificial insemination techniques of domestic animals as related to reproductive anatomy, physiology and breeding management. Prerequisite: AGRI 03-150. (SS)

366 Principles of Animal Breeding (3 hours)

A study of the reproductive anatomy, endocrinology, physiology and management of domestic animals. Prerequisite: AGRI 03-150. (S)

450 Small Ruminant Science (3 hours)

Reproduction, physiology, nutrition and management of commercial and purebred sheep. Prerequisite: AGRI 03-150. (S)

452 Beef Science (3 hours)

Reproduction, physiology, nutrition and management of commercial and purebred beef cattle. Includes lab sessions. Prerequisite: AGRI 03-150. (F)

454 Swine Science (3 hours)

Reproduction, physiology, nutrition and management of commercial and purebred swine. Prerequisite: AGRI 03-150. (F)

455 Advanced Livestock Production Management (3 hours)

Management of livestock systems, including record keeping, health protocols, nutrition, reproduction and genetic selection. Prerequisite: AGRI 03-150 and consent of the instructor. (F, S)

460 Advanced Animal Nutrition (3 hours)

A study of the nutritive requirements of animals for maintenance, growth, lactation, reproduction, and other bodily functions. Intermediary metabolism of nutrients. Ration balancing for livestock at

various stages of production. Prerequisite: AGRI 03-360. (S)

464 Physiology of Domestic Animals (3 hours)

Physiology of the neuromuscular, circulatory, respiratory, digestive, endocrine, reproductive and excretory systems in domestic animals as related to their growth and production. Prerequisite: AGRI 03-150. (S)

469 Independent Study in Animal Science (1-3 hours)

For students who wish to intensify, enrich or specialize in the study of any area of animal science. Consent of instructor necessary. Course is repeatable with topic change for a total of 3 hours. (F, S, SS)

470 Dairy Science (3 hours)

Fundamentals of the dairy industry. Includes basic principles of nutrition, reproduction, milk production and management of dairy herds. Prerequisite: AGRI 03-150. (S)

***566 Genetics of Livestock Improvement (3 hours)**

Applications of genetics to the breeding and improvement of livestock. Prerequisite: AGRI 03-150. (F)

569 Problems in Animal Science (1-3 hours)

Advanced studies in an area of animal science arranged with a member of the faculty. Consent of instructor necessary. Course is repeatable with topic change for a total of 3 hours. (F, S, SS)

HORTICULTURE**380 Plant Propagation (3 hours)**

Principles and practices of sexual and asexual propagation of plants. Prerequisite: AGRI 03-130 or BIOL 04-112/113. (S)

381 Applied Entomology (3 hours)

A study of insects with special reference to taxonomy, life cycles, economic importance and management. (F)

382 Woody Landscape Plants (3 hours)

Description, use, adaptation, culture and classification of woody plants and cultivars. Prerequisite: AGRI 03-130 or BIOL 04-112/113. (F)

383 Landscape Design (3 hours)

Design and development of residential space.

Prerequisite: AGRI 03-130 or BIOL 04-112/113. (S, odd years)

385 Greenhouse Crop Production (3 hours)

The identification, propagation and culture of flowering potted plants, annual plants and tropical ornamentals. Prerequisite: AGRI 03-130 or BIOL 04-112/113. (F)

387 Greenhouse Management and Materials (3 hours)

A survey of methods and materials related to management of the greenhouse environment, including heat, light, ventilation, soil, fertilizer, irrigation and crop scheduling. Prerequisites: AGRI 03-130 or BIOL 04-112/113 and AGRI 03-234. (S)

388 Fruit and Vegetable Production (3 hours)

Fundamentals of fruit and vegetable crop production, with an emphasis on environmental factors influencing growth, development and quality. Prerequisites: AGRI 03-130 or BIOL 04-112/113, and AGRI 03-234. (S, even years)

483 Landscape Construction (3 hours)

Study of the design and installation of "hardscape" components in residential and commercial landscapes, including electrical lighting, water management systems, landscape structures, retaining walls, irrigation systems and the use of sustainable materials. (F, odd years)

485 Herbaceous Perennials (3 hours)

Course encompasses the identification, selection and culture of herbaceous perennials, biennials and ornamental grasses. Prerequisites: AGRI 03-130 or BIOL 04-112/113, and AGRI 03-234.

489 Independent Study in Horticulture (1-3 hours)

For students who wish to intensify, enrich or specialize in the study of any area of horticulture. The course requires the consent of the advisor and supervising staff member. Course is repeatable with topic change for a total of 6 hours. (F, S)

582 Plant Diseases (3 hours)

A study of diseases affecting ornamental and crop plants; their causes, nature, economic effects, epidemiology and control. Prerequisites: AGRI 03-130 or BIOL 04-112/113, and CHEM 24-112/113 or 114/115. (S)

583 Turfgrass Management (3 hours)

A study of the selection, establishment and main-

tenance of various turfgrasses with emphasis on nutrient and pest management. Prerequisite: AGRI 03-130 or BIOL 04-112/113. (S, even years)

585 Principles of Postharvest Agriculture (3 hours)

A study of the physical and physiological principles related to harvest, packaging, transportation, marketing, quality and safety of horticultural crops. Prerequisites: AGRI 03-130 or BIOL 04-112/113, and AGRI 03-234. (F, odd years)

589 Problems in Horticulture (1-3 hours)

Studies in the area of horticulture arranged with members of the staff. The course requires consent of the advisor and supervising staff member. Course is repeatable with topic change for a total of 3 hours. (F, S, SS)

AGRICULTURAL SCIENCE

296 Seminar (1 hour)

A course designed for presenting papers and discussion of problems as well as research in agriculture. (F, S)

393 U.S. Agriculture Travel Experience (3 hours)

Exploration of agronomic, horticultural, livestock and economic principles including sustainable and best management practices, agricultural marketing, food quality, and food safety as they apply to conventional and organic agricultural systems within the United States. Domestic travel required. Prerequisite: sophomore standing or permission of instructor.

498 Agriculture Occupations Internship (3-6 hours)

Supervised program of applied management practices, policies and procedures within areas of agricultural business occupations. Course may be repeated for additional experience, new material, and progression of study for a total of 6 hours. Prerequisite: Consent of advisor necessary. (F, S, SS)

590 International Agriculture Travel Experience (3 hours)

Exploration of agronomic, horticultural, livestock and economic principles including sustainable and best management practices, agricultural marketing, food quality, and food safety as they apply to conventional and organic agricultural systems abroad. International travel required. Prerequisite: sophomore standing or permission of instructor.

Department of Business

Chairperson: Stephen Ludwig

Faculty: Casey Abington, John Baker, Lisa Bishop, Ben Blackford, Terry Coalter, Ben Collier, Beth Goudge, Allison Hoffmann, David Johnson, Brenda Jones, Alfred B. Kelly, Cindy Kenkel, Chi Lo Lim, Janet Marta, J. Patrick McLaughlin, Jean Memken, Doni Mollus, Michelle Nance, Jeff Nickerson, Michael Northup, Doug Russell, Malinda Shanks, Tiebing Shi, Deborah Toomey, James L. Walker, Tekle Wanorie, Jason White, Rahl Wood

Accreditation

All degree programs in the Department of Business are ACBSP accredited (except the non-business major in economics and the Comprehensive Major in Merchandising of Textiles, Apparel and Furnishings).

Statement of Mission

The mission of the Department of Business is to advance knowledge through a balance of teaching, scholarly activity and service. The faculty in the department provide relevant and quality educational experiences for students which are intended to assist in lifelong learning. The department places great importance on developing each student's ability to think critically, to advance intellectually and to communicate effectively. Students majoring in one of the options offered by the department will have numerous opportunities and avenues to prepare them for ethical participation in the global arena of business and/or organizational life.

DEGREE PROGRAMS

The Department of Business offers programs leading to the Bachelor of Science degree. All majors must complete at least 34 hours of the comprehensive major from Northwest. Students must earn a grade of "C" or better in all Common Professional Component courses (all those listed on page 252) as well as all major courses. Students may select from the following comprehensive majors offered by this department: Accounting, Economics, Finance, Business Management, International Business, Marketing, and Merchandising of Textiles, Apparel, and Furnishings. Majors in Management Information Systems, Business Technology, and Business Education are offered by the Department of Mathematics, Computer Science and Information Systems.

Each major is designed to prepare students for their professional career choice by providing them with the critical thinking capabilities and communication skills required for success in today's business world. The variety of majors in the department permits the student a wide range of choices. These alternatives vary from the opportunities of entrepreneurship to the challenges of corporate positions. In addition, the focus of the major may be domestic or international in orientation. Thus, students will have numerous opportunities and avenues which will prepare them for participation in the world of business.

In addition, the Department of Business offers minors in Economics and General Business to students who major in another discipline. The minor in General Business permits students to

gain exposure to the principles and fundamental concepts of business while pursuing a non-business major.

Advanced Standing Requirement

To ensure students have the necessary tools to begin study in the selected major, the Department of Business requires that students must meet certain requirements before enrolling in advanced coursework. Students making application to major in a comprehensive major must achieve advanced standing. Failure to achieve advanced standing will prohibit the student from graduating with a degree granted by Northwest's Business Department.

To have achieved advanced standing, the student must:

1. Maintain at least a cumulative 2.00 GPA
2. Score at Level 1 or higher on all areas of the ETS Proficiency Profile
3. Earn at least a grade of "C" or better in **each** of the five courses listed below:

MATH 17-114 General Statistics I	3
MATH 17-118 College Algebra	3
ACCT 51-201 Accounting I	3
ECON 52-150 General Economics I	3
ECON 52-151 General Economics II	3

Total	15
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Students who have met this advanced standing requirement are official members of the department and can pursue any major course of their choosing. Students who have not successfully achieved advanced standing prior to becoming an academic senior *(90 or more academic credit hours) will be **prohibited from enrolling in any major course** until they have achieved advanced standing.

*In exceptional cases, a student not meeting the "90-hour rule" may appeal to the department's advanced standing committee.

Accounting / 51

MAJOR

Comprehensive Major in Accounting: B.S.—No Minor Required

CIP: 520301

Students choosing a Comprehensive Major in Accounting must take the common professional component courses outlined on page 252 plus receive a minimum grade of "C" in each of the major courses listed below for the public accounting track or private industry track.

The public accounting track is designed to prepare students for careers in public accounting and/or for taking the examination to become a Certified Public Accountant. Students wishing to take the CPA examination in Missouri, Nebraska, Iowa and Kansas must have 150 credit hours. The student should complete the public accounting track and continue with an additional 26 hours of coursework to be eligible to sit for the CPA examination. Most students will choose to take the MBA-accounting emphasis. (See Northwest Missouri State University *Graduate Catalog* and your advisor.)

The private industry track is designed to prepare students for careers in management accounting. With the addition of the course MGMT 54-316 Organizational Behavior and Theory as an elective, the private industry track is designed to prepare students for taking the examination to become a Certified Management Accountant.

Public Accounting Track

ACCT 51-301 Cost Accounting	3
ACCT 51-303 Tax Accounting I	3
ACCT 51-304 Tax Accounting II	3
ACCT 51-306 Intermediate Accounting I	3
ACCT 51-307 Intermediate Accounting II	3
ACCT 51-308 Accounting Information Systems	3
ACCT 51-401 Intermediate Accounting III	3
ACCT 51-403 Advanced Accounting	3
ACCT 51-404 Auditing	3
FIN 53-312 Business Law II	3
Total Public Accounting Track	30

Private Industry Track

ACCT 51-301 Cost Accounting	3
ACCT 51-303 Tax Accounting I	3
ACCT 51-304 Tax Accounting II	3
ACCT 51-306 Intermediate Accounting I	3
ACCT 51-307 Intermediate Accounting II	3
ACCT 51-308 Accounting Information Systems	3
ACCT 51-402 Advanced Cost Accounting	3
ACCT 51-403 Advanced Accounting	3
ACCT 51-404 Auditing	3
MGMT 54-316 Organizational Behavior and Theory	3
Total Private Industry Track	30

Economics / 52

Economics offers programs leading to the Bachelor of Science degree. Students may pursue a Comprehensive Major in Business Economics or a Major in Economics with selection of a minor area. Additionally, students who major in another discipline may complete a Minor in Economics. The major objective of the economics program is to equip students with the principles and methods of sound economic theory and the application of economic theory so that they are prepared for employment in the private or public sectors and for graduate study.

The economics courses also perform several service functions: (a) it provides students within the Melvin D. and Valorie G. Booth College of Business and Professional Studies with economic knowledge and skills needed for pursuit of successful careers in private business or public service and (b) through general education courses, it offers all students at the University an opportunity for economic education so that they become well-informed consumers and citizens who understand economic issues and policies.

MAJORS

Comprehensive Major in Business Economics: B.S.—No Minor Required

CIP: 520601

Students choosing a Comprehensive Major in Business Economics must take the common professional component courses outlined on page 252 plus fulfill the following major requirements:

Required Courses	Semester Hours
ECON 52-351 Macroeconomic Theory	3
ECON 52-352 Money, Credit, and Banking	3
ECON 52-353 Microeconomic Theory	3
ECON 52-450 International Economics	3
ECON 52-458 Forecasting Business Conditions	3
Electives	
Choose six hours from advisor-approved economics or business electives	6
Total Major Requirements	21

Major in Economics: B.S.—Minor Required

CIP: 450601

Students choosing a Major in Economics must take the following courses:

Directed General Education Course	Semester Hours
**MATH 17-114 General Statistics I	3
Required Courses	
MATH 17-118 College Algebra	3
*ECON 52-150 General Economics I (Macroeconomics)	3
ECON 52-151 General Economics II (Microeconomics)	3
ECON 52-351 Macroeconomic Theory	3
ECON 52-352 Money, Credit and Banking	3
ECON 52-353 Microeconomic Theory	3
ECON 52-450 International Economics	3
Electives (12 hours minimum) from the Directed Concentration areas below	12
Directed Concentration: Upper Division courses	
Economics courses (minimum of six hours)	
Advisor-approved electives from following areas:	
Mathematics (Calculus or more advanced courses)	
Finance	
Marketing	
Management	
Political Science	
Total Major Requirements	33

NOTE: A business minor is encouraged, but students should be careful not to double count minor courses and elective courses in the directed concentration. See your advisor.

**This course fulfills a General Education requirement and is not counted toward the major requirements.

*Cannot be used to fulfill any General Education requirement.

MINOR

Minor in Economics, 18 hours

CIP: 450601

Students choosing a Minor in Economics must take the following courses:

Required Courses	Semester Hours
*ECON 52-150 General Economics I (Macroeconomics)	3
ECON 52-151 General Economics II (Microeconomics)	3
Choose 12 hours of upper division economics electives:	12
Total Minor Requirements	18

*Cannot be used to fulfill any General Education requirement.

Finance / 53

MAJOR

Comprehensive Major in Finance: B.S.—No Minor Required

CIP: 520801

Finance directly affects the lives and well-being of every person and organization whether financial or non-financial, public or private, profit or non-profit. These individuals and organizations earn or raise money and spend or invest money. The processes and decision-making methods to carry out these activities are the purview of finance which has been defined as the art and science of managing money. The study of finance is concerned with the processes, institutions, markets and instruments involved in the transfer of money within and between individuals, businesses and governments. The major areas of finance can be divided into four broad categories: financial services, corporate finance, insurance and real estate. Financial services is concerned with the design and delivery of advice and financial products. Corporate finance is concerned with the duties of the financial managers within the business firm. Insurance and risk management deal with the various ways to handle risk and how to protect assets through appropriate insurance coverage. The goal of the finance faculty is to prepare graduates for all of the categories in the world of finance.

The financial services option is designed to prepare students for the financial services industry. This comprises the professions of brokerage, insurance, real estate and banking. In this business sector the students will need to understand the products customers purchase and how to relate this information to the customer.

The financial computing option will bring together course work in both finance and computer science. This area of finance lends itself to the use of many financial decision-making models which are constructed and manipulated with computer technology. This option will lead to employment where there is a need to process data for financial decision making.

The corporate finance option will provide the student with the tools to work within the corporate structure under the chief financial officer where accounting and financial information is used to make corporate decisions. The student will be able to communicate with both the financial and accounting personnel and identify the useful accounting information and financial models for decision making.

ACBSP accredited program

The financial management option will permit students to prepare for a position in management rather than a staff position in finance under the corporate treasurer. This option blends the knowledge of finance and management so the student will be prepared to make management decisions that require an understanding of finance. Almost all decisions in business require a balance of interests from all functional business areas using the decision-making process and the tools of finance to guide the corporation to the achievement of its goal.

Students choosing a Comprehensive Major in Finance must take the common professional component courses outlined on page 252 plus fulfill the following major requirements:

Option One: Financial Services, 24 hours

Required Courses	Semester Hours
ACCT 51-303 Tax Accounting I	3
ECON 52-352 Money, Credit, and Banking	3
FIN 53-320 Insurance and Risk	3
FIN 53-325 Investment Principles	3
FIN 53-327 Intermediate Financial Management	3
FIN 53-420 Financial Institutions	3
MKTG 55-430 Sales and Sales Management	3
Choose 3 hours from electives	3
ACCT 51-304 Tax Accounting II (3)	
ACCT 51-408 Managerial Accounting (3)	
FIN 53-326 Investment Management (3)	
FIN 53-422 Real Estate Management (3)	
Total Major Requirements	24

Option Two: Financial Computing, 24 hours

Required Courses	Semester Hours
FIN 53-325 Investment Principles	3
FIN 53-327 Intermediate Financial Management	3
FIN 53-420 Financial Institutions	3
FIN 53-421 Selected Cases in Finance	3
CSIS 44-211 Spreadsheet Applications	1
CSIS 44-212 Advanced Spreadsheets and Charting	1
CSIS 44-346 Database Applications	1
Choose one course:	3
CSIS 44-141 Computer Programming I (3)	
CSIS 44-149 Scientific Computing (3)	
Choose one course:	3
CSIS 44-333 Web Development (3)	
CSIS 44-343 Digital Communications (3)	
Approved electives in Finance or Computer Science	3
Total Major Requirements	24

Option Three: Corporate Finance, 24 hours

Required Courses	Semester Hours
FIN 53-325 Investment Principles	3
FIN 53-327 Intermediate Financial Management	3

FIN 53-420 Financial Institutions	3
FIN 53-421 Selected Cases in Finance	3
ACCT 51-301 Cost Accounting	3
ACCT 51-306 Intermediate Accounting I	3
ACCT 51-402 Advanced Cost Accounting	3
Approved electives in Finance or Accounting	3
Total Major Requirements	24

Option Four: Financial Management, 24 hours

Required Courses	Semester Hours
FIN 53-325 Investment Principles	3
FIN 53-327 Intermediate Financial Management	3
FIN 53-420 Financial Institutions	3
FIN 53-421 Selected Cases in Finance	3
MGMT 54-314 Human Resource Management	3
MGMT 54-316 Organizational Behavior and Theory	3
MGMT 54-318 Entrepreneurship OR	
MGMT 54-320 Negotiations	3
Approved electives in Finance or Management	3
Total Major Requirements	24

Management / 54

MAJORS

Comprehensive Major in Business Management: B.S.–No Minor Required

CIP: 520201

Students choosing a Comprehensive Major in Business Management must complete the common professional component courses outlined on page 252, and fulfill the following major requirements:

Required Courses	Semester Hours
MGMT 54-314 Human Resource Management	3
MGMT 54-316 Organizational Behavior and Theory	3
MGMT 54-318 Entrepreneurship	3
MGMT 54-320 Negotiations	3
MGMT 54-413 Business and Society	3
Students must take two of the following:	6
ECON 52-354 Labor Economics (3)	
MGMT 54-415 Intern in Management (3) OR	
MKTG 55-435 Intern in Marketing (3)	
MGMT 54-436 Multinational Management (3)	
MKTG 55-440 Business Study Abroad (3)	
Recommended Electives	3
300- or 400-level advisor-approved elective	
Total Major Requirements	24

Comprehensive Major in Management Information Systems: B.S.—No Minor Required

CIP: 521201

This major is housed under the Department of Mathematics, Computer Science and Information Systems. Students choosing a Comprehensive Major in Management Information Systems must take the Common Professional Component courses outlined on page 252 plus fulfill the following major requirements:

Required Courses	Semester Hours
CSIS 44-141 Computer Programming I	3
CSIS 44-241 Computer Programming II	3
CSIS 44-312 Information Technology Hardware and Software	3
CSIS 44-356 CCNA: Network Fundamentals	3
CSIS 44-411 Systems Analysis and Design	3
CSIS 44-418 Information Technology Project Management	3
CSIS 44-460 Database Systems	3
Choose one from the following electives:	3
CSIS 44-242 Data and File Structures (3)	
CSIS 44-333 Web Development (3)	
CSIS 44-358 CCNA: Routing Protocols and Concepts (3)	
CSIS 44-555 Network Security (3)	
CSIS 44-560 Advanced Topics in Database Systems (3)	
CSIS 44-563 Developing Web Applications and Services (3)	
Total Major Requirements	24

NOTE: Grade Requirement: Students must earn a grade of “C” or better in each of the CS and IS and Common Professional Component courses in this major. A major field assessment is required of all senior year students majoring in MIS.

Comprehensive Major in Business Technology: B.S.—No Minor Required

CIP: 520401

This major is housed under the Department of Mathematics, Computer Science and Information Systems. Students choosing a Comprehensive Major in Business Technology must take the Common Professional Component courses outlined on page 252 plus fulfill the following major requirements:

Required Courses	Semester Hours
CSIS 44-211 Spreadsheet Applications	1
CSIS 44-212 Advanced Spreadsheets and Charting	1
CSIS 44-312 Information Technology Hardware and Software	3
CSIS 44-320 Advanced Word Processing	1
CSIS 44-330 Presentation Graphics	1
CSIS 44-340 Digital Media	1
- CSIS 44-343 Digital Communications	3
CSIS 44-344 Desktop Publishing	3
CSIS 44-346 Database Applications	1
Advisor-approved elective	3

Choose one of the following emphasis areas for six hours 6

Interactive Digital Media Emphasis

CSIS 44-143 Script Programming I (3)

CSIS 44-333 Web Development (3)

OR

Management Emphasis

MGMT 54-314 Human Resource Management (3)

MGMT 54-316 Organizational Behavior and Theory (3)

OR

Networking Emphasis

CSIS 44-356 CCNA: Networking Fundamentals (3)

CSIS 44-358 CCNA: Routing Protocols and Concepts (3)

Total Major Requirements 24

**# Major in Business Education: B.S.Ed., Secondary Program—
No Minor Required (Certifies Grades 9-12)**

CIP: 131303

This major is housed under the Department of Mathematics, Computer Science and Information Systems. Students choosing a Major in Business Education must take the Common Professional Component courses totaling 48 hours outlined on page 252, plus fulfill the following major requirements:

Required Courses	Semester Hours
CSIS 44-320 Advanced Word Processing	1
CSIS 44-330 Presentation Graphics	1
CSIS 44-333 Web Development	3
CSIS 44-340 Digital Media	1
CSIS 44-343 Digital Communications OR	
CSIS 44-495 Internship in Computer Science/Information Systems	3
CSIS 44-344 Desktop Publishing	3
CSIS 44-584 Implementing Business and Marketing Education Programs	3
Total Major Requirements	15

CSIS 44-580 Methods of Teaching Business and Marketing is the required subject field methods course.

MINOR

Minor in General Business, 24 hours

CIP: 520101

Students choosing the Minor in General Business must take the following courses:

Required Courses	Semester Hours
ACCT 51-201 Accounting I	3
ACCT 51-202 Accounting II	3
ECON 52-151 General Economics II (Microeconomics)	3
FIN 53-311 Business Law I	3
FIN 53-324 Fundamentals of Business Finance	3

ACBSP accredited program

MGMT 54-310 Managerial Communication	3
MGMT 54-313 Principles of Management	3
MKTG 55-330 Principles of Marketing	3
Total Minor Requirements	24

Students with a comprehensive major in any business discipline requiring the common professional component are not permitted to minor in general business. This minor is intended for non-business majors.

Marketing / 55

MAJORS

Comprehensive Major in International Business: B.S.—No Minor Required

CIP: 521101

Students choosing a Comprehensive Major in International Business must take the common professional component courses outlined on page 252 plus fulfill the following major requirements:

Required Courses	Semester Hours
ECON 52-450 International Economics	3
MKTG 55-431 Logistics Management OR MKTG 55-434 Marketing Management	3
MKTG 55-437 International Marketing	3
MGMT 54-436 Multinational Management	3
International Experience	6

Six hours of business credit which may include courses of study and/or internship in a foreign country.

Exemptions from the foreign study requirement are available only with chairperson approval.

International students may choose to fulfill this requirement through internships or other business courses at Northwest.

Cultural Understanding	6
Students must complete six hours according to Option A or B (Option B required unless fluent in foreign language) based upon advisor direction.	

Option A – Global Political Economy

POLS 34-425 Transnational Politics (3)
POLS 34-305 Global Events and Trends (3)
OR

Option B – Foreign Language

Six hours above the introductory level in any modern language

Total Major Requirements	24
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Comprehensive Major in Marketing: B.S.—No Minor Required

CIP 521401

Students choosing a Comprehensive Major in Marketing must complete the common professional component courses outlined on page 252 and fulfill the following major requirements:

ACBSP accredited program

Required Courses	Semester Hours
MKTG 55-332 Promotion	3
MKTG 55-333 Consumer Behavior	3
MKTG 55-430 Sales and Sales Management	3
MKTG 55-432 Marketing Research	3
MKTG 55-434 Marketing Management	3
Student must take two of the following:	6
MGMT 54-415 Intern in Management (3) OR	
MKTG 55-435 Intern in Marketing (3)	
MKTG 55-331 Retailing (3)	
MKTG 55-431 Logistics Management (3)	
MKTG 55-440 Business Study Abroad (3)	
Recommended Electives	3
300- or 400-level advisor-approved elective	
Total Major Requirements	24

Comprehensive Major in Merchandising of Textiles, Apparel and Furnishings, 59-61 hours: B.S.–No Minor Required

Curriculum not yet approved. Refer to online catalog for Fall 2012 Board of Regents approved curriculum.

Course Descriptions

Accounting / 51

201 Accounting I (3 hours)

A beginning course in the principles and theory of accounting. (F, S, SS)

202 Accounting II (3 hours)

A continuation of ACCT 201, with the partnership and corporation as forms of business organizations emphasized. Prerequisite: ACCT 51-201 with a minimum grade of "C." (F, S, SS)

301 Cost Accounting (3 hours)

An introductory course in the principles and theory of cost accounting, with an emphasis on managerial decision support. The focus is on deriving accounting information from various costing systems, and preparation, interpretation, and analysis of various reports, including use of spreadsheets. Prerequisite: ACCT 51-202 with a minimum grade of "C." (F, S)

303 Tax Accounting I (3 hours)

A study of Federal income tax compliance and tax planning for individuals and small businesses. Prerequisite: ACCT 51-202 with a minimum grade of "C." (F, S, SS)

304 Tax Accounting II (3 hours)

A study of Federal income tax compliance and planning for partnerships, corporations, S corporations, estates and trusts. Prerequisites: ACCT 51-202 and 303 with a minimum grade of "C" in both. (S)

306 Intermediate Accounting I (3 hours)

An in-depth study of accounting procedures followed in the recording and controlling of assets and liabilities. Prerequisite: ACCT 51-202 with a minimum grade of "C." (F, S)

307 Intermediate Accounting II (3 hours)

A continuation of Intermediate Accounting I. Topics covered include investments, liabilities, income taxes, pensions, leases, contributed capital and the statement of cash flows. Prerequisite: ACCT 51-306 with a minimum grade of "C." (F, S)

308 Accounting Information Systems (3 hours)

This is a course designed to give students a basic understanding of accounting systems, systems design and the organization of accounting data.

Prerequisites: ACCT 51-306 with a minimum grade of "C" and CSIS 44-130. (S)

401 Intermediate Accounting III (3 hours)

Covers governmental and not-for-profit accounting, partnerships, earnings per share, accounting changes and error correction, and other miscellaneous accounting topics. Prerequisite: ACCT 51-306 with a minimum grade of "C." (S)

402 Advanced Cost Accounting (3 hours)

A course in management accounting designed for accounting majors. Emphasis is placed on collection and presentation of accounting information in a manner useful for decision-making, as well as how the electronic spreadsheet helps facilitate this process. Also includes a study of ethical considerations as they relate to managerial accounting. Prerequisite: ACCT 51-301 with a minimum grade of "C." (S)

403 Advanced Accounting (3 hours)

Provides a study of consolidated financial statements, and international accounting. Prerequisite: ACCT 51-307 with a minimum grade of "C." (F)

404 Auditing (3 hours)

A study of generally accepted auditing standards and procedures. Prerequisite: ACCT 51-307 with a minimum grade of "C." (F)

405 Intern in Accounting (1-3 hours)

Students with junior or senior standing who are accounting majors, with the permission of the department chairperson, may enroll in an intern program with an approved business firm. This course is repeatable for new experience. (F, S, SS)

408 Managerial Accounting (3 hours)

A study is made of interpretation of accounting data, and the controlling and planning of business activities through the use of that data. This is a course for non-accounting majors. Prerequisites: ACCT 51-202, MGMT 54-313, FIN 53-324 and MKTG 55-330. (F, S, SS)

409 Independent Study in Accounting (1-3 hours)

Students with junior or senior standing with an area of concentration in accounting, with the permission of a member of the accounting faculty, may enroll in an independent study in accounting. This course is repeatable with topics changing. (F, S, SS)

Economics / 52

130 Survey of Economics (3 hours)

This course is a one trimester survey of economics. Topics include scarcity and resource allocation; supply and demand; the nature of households and firms, and their interaction in markets; money and banking; gross domestic product determination; and government economic policies. (F, S, SS)

150 General Economics I (3 hours)

An introduction to the fundamental principles of macroeconomic analysis. The basic principles relating to aggregate supply and demand; the determination of national income, employment and price level; money and banking; monetary and fiscal policies; and alternative economic systems are studied. (F, S, SS)

151 General Economics II (3 hours)

An introduction to the fundamental principles of microeconomic analysis. The basic principles relating to the decision-making by the individual household and the individual firm under different market structures, the allocation of society's resources and international trade and balance of payments are studied. (F, S, SS)

351 Macroeconomic Theory (3 hours)

A study of the determination of aggregate income, employment and price level as well as the interactions of the various markets (goods, labor, money, and bonds) within the context of a general equilibrium model. Prerequisites: ECON 52-150 and 151. (S)

352 Money, Credit and Banking (3 hours)

A study of the history, theory and practice of money and banking. Commercial banking, central banking and monetary policy are discussed and their impact on the economy is examined within the framework of monetary theory. Prerequisite: ECON 52-150 (F, S)

353 Microeconomic Theory (3 hours)

An analysis of consumer choice, exchange, production and pricing under various market structures in a neoclassical context. Developing the tools of microeconomics and their application to real world situations are strongly emphasized. Prerequisites: ECON 52-150 and 151. (F)

354 Labor Economics (3 hours)

A study of economic theory and evidence related to labor supply and demand; the wage structure within the economy; labor's share of national

income; unemployment, human resource development, poverty and labor market discrimination; the economic effects of unions; and other issues related to the employment of human resources and labor-management relations. Prerequisites: ECON 52-150 and 151. (F)

361 Sports Economics (3 hours)

This course investigates questions relating to the contribution of professional and recreational sports to social welfare. The general objective of the course is to apply economic concepts and ideas to the sports industry. Prerequisite: ECON 52-151. (F)

362 Comparative Economic Systems (3 hours)

How market, mixed, planned and developing economic systems are organized and function to obtain major economic, political and social goals. Prerequisites: ECON 52-150 and POLS 34-102. (S)

425 Internship in Economics (1-3 hours)

Students who are economics majors may enroll, with the permission of the chairperson, in an intern program with an approved business or government firm. It is recommended the student be in the junior or senior year. This course is repeatable for new experience. (F, S, SS)

450 International Economics (3 hours)

A study of modern theories in international trade and finance and current trends and issues in international economic relations. Prerequisites: ECON 52-150 and 151. (F)

451 Econometrics (3 hours)

Foundations of econometrics. Analysis of linear regression, non-linear regression and computer simulation models. The problems of parameter estimation, verification and the prediction of economic magnitudes are studied. Prerequisites: ECON 52-150 and 151, MATH 17-114. (S, odd years)

458 Forecasting Business Conditions (3 hours)

A study of applied economics encompassing measurement, analysis and prediction of business conditions at the national, regional and industrial levels. Prerequisites: ECON 52-150, 151 and MATH 17-114 and 118. (S, even years)

459 Independent Study in Economics (1-3 hours)

Offered only by special arrangement and with consent of the instructor. This course is repeatable with topics changing. (F, S, SS)

Finance / 53

120 Personal Money Management (3 hours)

An introduction to the basic principles and practice of successful personal money management. The life cycle of personal financial planning and management will be discussed. (SS)

311 Business Law I (3 hours)

Fundamental principles of law in relation to the legal environment of business, including procedure and evidence, business ethics, court systems, contracts, torts, administrative law and constitutional law. (F, S, SS)

312 Business Law II (3 hours)

Fundamental principles of law in relation to business, including agency, negotiable instruments, secured transactions, bankruptcy, partnerships, corporations and other business entities. (F)

320 Insurance and Risk (3 hours)

A study of the principles of insurance, including the various types of insurance coverages such as home, auto, life and health, as well as principles of risk management. (S)

324 Fundamentals of Business Finance (3 hours)

A study of the financial structure of corporations, principles and techniques used in financial analysis and decision-making. Prerequisites: ACCT 51-202 and MATH 17-118 or consent of instructor. (F, S, SS)

325 Investment Principles (3 hours)

A study of the principles of investment and investment vehicles. Prerequisite: FIN 53-324. (F)

326 Investment Management (3 hours)

A course dealing with portfolio management and valuation theory. Prerequisites: FIN 53-324 and 325 with a minimum grade of "C" in each. (S, odd years)

327 Intermediate Financial Management (3 hours)

An in-depth study of financial theory and practices including such topics as capital structure, dividend

policy, capital budgeting, asset pricing and working capital management. Prerequisite: FIN 53-324. (S)

420 Financial Institutions (3 hours)

A course which deals with structure, functions, policies and decision-making within financial institutions. Prerequisites: FIN 53-324. (S)

421 Selected Cases in Finance (3 hours)

An advanced case study course dealing with the management of corporate finance. Prerequisites: FIN 53-327. (F)

422 Real Estate Management (3 hours)

A course designed to integrate the legal, economic and investment perspectives of real estate. The course includes a study of property rights, real estate transactions, real estate markets, real estate investment approaches and investment market valuation. (S, even years)

425 Intern in Finance (1-3 hours)

Students who are finance majors may enroll, with the permission of the chairperson, in an intern program with an approved business firm. This is recommended after completion of the junior year. This course is repeatable for new experience. (F, S, SS)

429 Independent Study in Finance and Insurance (1-3 hours)

Finance majors may, with approval, enroll in an independent study section. The approval must be received from the Business chairperson and should be received during the term preceding the enrollment. This course is repeatable with topics changing. (F, S, SS)

Management / 54

310 Managerial Communication (3 hours)

Designed to acquaint student with current knowledge and emerging trends in business communication. Emphasis on developing and improving business writing (letters, memoranda, reports) and oral presentation skills, understanding the importance of communication in organizations, developing skills needed in the job search and learning how to match specific communicative styles to various situations. Prerequisites: COM 29-102, ENGL 10-112 or 115. (F, S)

313 Principles of Management (3 hours)

An introduction to the field of management designed to give a basic understanding of the principles, concepts and functions of management within that social system called the information era. Successful management is dependent on fostering responsible and autonomous behavior, as authoritarian structures are being replaced by democratic processes evolving within modern organizations. Thus, successful management is studied as the processes and behavior of participative management. Prerequisite: Completion of a minimum of 30 academic hours. (F, S)

314 Human Resource Management (3 hours)

A study of objectives, functions and organization of typical human resource management, emphasizing job analysis, selection and placement; development and training; safety and health; employee relations; administration of wages and benefits; labor legislation; and personnel research. Prerequisite: MGMT 54-313. (F, S)

315 Operations Management (3 hours)

A study of the several areas of primary concern to the production manager including layout, work measurement, wage incentives, inventory control and quality control. The use of both qualitative and quantitative tools to aid in decision-making will be introduced. Prerequisites: MGMT 54-313, MATH 17-114 and 118. (F, S)

316 Organizational Behavior and Theory (3 hours)

The application of principles and concepts of the behavioral sciences and total quality management to the interpersonal relationships found within modern organizations. As quality management practices replace authoritarian structures with more democratic processes, a need to stress continuous improvement, self-regulation of work content and structure within a job, self-evaluation of performance, self-adjustment in response to work system variability, and participation in the setting of job goals or objectives are seen as the key to effective managerial behavior. Prerequisite: MGMT 54-313. (F, S)

318 Entrepreneurship (3 hours)

A course designed to aid the prospective small business owner in deciding whether or not to start or purchase a new business, becoming aware of

the pitfalls and failure, and understanding how various decisions might increase chances of success. Small businesses will be compared and contrasted with the larger corporation on several topics. Prerequisite: MGMT 54-313. (F)

320 Negotiations (3 hours)

A study of the theoretical and practical perspectives of the various negotiation process strategies and tactics found in the contemporary business and social setting. Emphasis will be placed on the preparation element of the negotiation process, distributive and integrative negotiation techniques, along with developing negotiation styles, relational trust building, power, persuasion and ethics, creativity and problem-solving in negotiations, multi-party and multi-cultural negotiations. Prerequisite: MGMT 54-313. (S)

340 Special Topics in Business (1-3 hours)

Provides concentrated study on a special topic in one of the areas in the Melvin D. and Valorie G. Booth College of Business and Professional Studies. Topics will vary. This course is repeatable for additional experience, new material and progression of study.

413 Business and Society (3 hours)

Economic, social, technological and ethical problems facing American business and its leaders in the 21st century. Prerequisites: MGMT 54-313 and senior standing. (F, S)

415 Intern in Management (1-3 hours)

Students with junior or senior standing, with the permission of the chairperson, may enroll in an intern program with an approved business concern. This course is repeatable for new experience. Prerequisites: MGMT 54-313 and a 2.5 GPA. (F, S, SS)

417 Organizational Policy and Decision-Making (3 hours)

A course designed to give students the opportunity to integrate information from the functional areas of an organization in the formation and implementation of organizational policy. Computer simulations will also be utilized to simulate organizational decision-making. Prerequisite: Senior standing, Econ 52-150 and 151, completion of all other common professional component courses. (F, S)

419 Independent Study in Management (1-3 hours)

A course to provide students with an opportunity to study a particular problem or pursue an inde-

pendent reading program. Must have permission of chairperson. This course is repeatable for further mastery. Prerequisite: MGMT 54-313. (F, S, SS)

436 Multinational Management (3 hours)

A course to provide an understanding of the operations of multinational corporations. It will concentrate on the decision making process as related to the planning, organizing and controlling of multinational operations. Specifically, this includes differences in operation overseas, political risks, international finance, trade and trade barriers, joint ventures, partnerships and human resource planning. Prerequisite: MGMT 54-313. (S)

440 Employment Strategy (1 hour)

A study of strategies in the employment seeking process. Topics include resumes, letters of application, interviewing, networking and research techniques. Prerequisite: Senior standing or consent of instructor.

Marketing / 55

330 Principles of Marketing (3 hours)

The study of determination and satisfaction of consumer wants or needs from a managerial perspective. Elements of this process include market research, demand analysis, product development, pricing, promotion and distribution. Prerequisite: Completion of a minimum of 30 academic hours. (F, S)

331 Retailing (3 hours)

A strategic approach to retailing which concentrates on planning to meet the objectives of the retail concept. Specifically this includes planning and organizing the retail firm, planning and managing merchandise, on-line retailing, understanding and communicating with the consumer, choosing a store location, developing store personnel, pricing retail merchandise and integrating and controlling the retail strategy. Prerequisite: MKTG 55-330. (F, S)

332 Promotion (3 hours)

A study of that element of the marketing mix that relates to persuasive communication with prospective stakeholders of the firm. Specifically this includes an analysis of advertising, personal selling, publicity, direct marketing, Internet marketing and sales promotion. Prerequisite: MKTG 55-330. (F, S)

333 Consumer Behavior (3 hours)

An interdisciplinary behavioral approach to understanding the consumer. Consideration is given to

consumer psychological, sociological and cultural processes as they relate to the development of marketing strategies. Prerequisite: MKTG 55-330. (F, S)

430 Sales and Sales Management (3 hours)

A study in the art of selling and the sales process in addition to the managerial aspects of sales management such as planning, organizing, staffing and supervising the sales effort. Prerequisites: MKTG 55-330 or AGRI 03-302. (F, S)

431 Logistics Management (3 hours)

An analysis of the physical distribution function in marketing with emphasis on channel structure and relationships, transportation, inventory analysis, warehousing, communication and information flow, and facility analysis as elements of an integrated system. Prerequisite: MKTG 55-330. (F)

432 Marketing Research (3 hours)

An analysis of the various methods and techniques available for collection and interpretation of data as they apply to marketing research. Prerequisites: MATH 17-114 and MKTG 55-330. (F, S)

434 Marketing Management (3 hours)

The major areas of marketing are examined from the viewpoint of the marketing executive. Emphasis is given to consumer analysis, market research, product planning, channels of distribution, promotion, pricing and the integration of the above in the development of the total marketing program. Requires a major team project, requiring comprehensive marketing analysis. Prerequisites: MKTG 55-330 and senior standing. (F, S)

435 Intern in Marketing (1-3 hours)

Students with junior or senior standing with the permission of the chairperson may enroll in an intern program with an approved business concern.

This course is repeatable for new experience. Prerequisites: MKTG 55-330 and a minimum 2.5 cumulative GPA. (F, S, SS)

437 International Marketing (3 hours)

An interdisciplinary approach to marketing in the international marketplace. Specifically, this course focuses on how to conduct cultural environment analysis, international market opportunity assessment, and international marketing strategy development and implementation based on economics, sociology and cross-cultural psychology. (F, S)

438 International Business (3 hours)

A course on the myths, misconceptions and misinformation prevailing in International Business, especially in the areas that affect us most—protectionism vs. free trade, balance of payments, deficits and surpluses, the European Union, WTO, problems unique to developing countries, changing trade patterns and reasons why, floating vs. fixed monetary systems, cultural differences and multinationals. (F, S)

439 Independent Study in Marketing (1-3 hours)

A course to provide students with an opportunity to study a particular problem or pursue an independent reading program or research program in marketing. This course is repeatable for further mastery. Must have permission of chairperson. (F, S, SS)

440 Business Study Abroad (1-6 hours)

Courses taken in a foreign country, which encompass a wide variety of business concepts and applications. May include internships taken abroad and special independent study projects. The number of hours assigned will be determined by the student's advisor and the department chair, based upon the rigor and length of the course or extent of the internship. This course is repeatable for new experience.

Department of Communication and Mass Media

Chairperson: David Shadinger

Faculty: Joy Dags, Lori Durbin, John Katsion, Fred Lamer, Jacquie Lamer, Jason Offutt, Bayo Oludaja, Jonathan Pluskota, Matthew Rouch, Jody Strauch, Doug Sudhoff, Brian Swafford, Matt Walker, Laura Widmer, Nathan Wilson

Staff: Marla McCrary, Will Murphy, Sarah Wayman

Statement of Mission

Northwest Missouri State University is a learning-centered community of scholars offering undergraduate and selected graduate programs. The University is committed to preparing broadly educated and engaged citizens for a world of constant change, applying information technology to improve learning processes, and promoting continuous improvement to enhance performance in all its activities. Northwest seeks to expand access to learning and promote research designed to address the needs of our students and stakeholders.

Communication / 29

The Bachelor of Arts in Communication and Bachelor of Science in Communication each have options for concentrated study in one of four areas: Public Relations (comprehensive, no minor required), Organizational Communication (comprehensive, no minor required), Interpersonal Communication (minor required), and Rhetoric (minor required).

The Public Relations options combine communication courses with appropriate coursework in management, marketing and mass communication to provide a broad preparation for various careers within the public relations field. No minor is required for these programs.

The Organizational Communication options augment the studies of communication theory and performance with courses in management, psychology and writing designed to prepare students for the myriad of careers within organizational communication.

The Interpersonal Communication options, allow students to pursue more traditional liberal arts degrees appropriate as broad foundations for professional pursuits or graduate study.

The Rhetoric options provide a solid foundation for the study of communication theory as well as preparation for graduate study in the field of communication.

The comprehensive Bachelor of Science in Education in Speech/Theatre (55 hours) prepares students to teach and direct speech and theatre in secondary schools. This major does not require a minor and, when completed under the B.S.Ed., Secondary Education Program, meets the State of Missouri teacher certification standards for grades 9-12.

The non-comprehensive Bachelor of Science in Education in Speech/Theatre (38 hours) requires a minor. This major, when completed under the B.S.Ed., Secondary Education Program, also meets the State of Missouri teacher certification standards for grades 9-12.

The minor in Communication is comprised of 24 hours. Minors are required to take the 15-hour communication core, and an additional 9 hours in an area of emphasis (Public Relations, Organizational Communication, Interpersonal Communication or Rhetoric).

A minor in Speech/Theatre Education (32 hours) is available to students majoring in another area. This minor, when completed under the B.S.Ed., Secondary Education Program, meets the State of Missouri teacher certification standards for grades 9-12.

The department also offers an endorsement in Speech/Theatre for students seeking Missouri Middle School (grades 5-9) certification. The middle school program is advised through the College of Education and Human Services.

Test-Out Policy

Test-out is available for COM 29-102, Fundamentals of Oral Communication. For further information, contact the director of the COM 29-102 program.

Please refer to the "Departmental Test-Out" information contained in the "Academic Policies" section of the catalog for policy information. Students should contact the department for additional details.

Portfolio Requirement

Successful completion of all communication degrees requires the presentation of an academic and professional portfolio during the student's senior year. Immediately upon declaring a communication major, the student must request a portfolio packet from his/her advisor.

Speech/Theatre Education Directing Requirement

All candidates for the B.S.Ed. degree with a secondary speech/theatre major or certifiable minor must demonstrate their ability to direct a complete theatrical presentation that is approved by and acceptable to department faculty. Opportunities for meeting this requirement will be discussed with the academic advisor and include lab series, second stage, and external venue shows. THEA 43-373 Directing must be successfully completed prior to attempting this requirement.

Advanced Standing Requirement

Students majoring in the communication programs must complete Freshman Seminar (1 hour), English Composition (6 hours), Oral Communication (3 hours), and Mathematics (3-4 hours) by the end of the sophomore year. A student must achieve a cumulative grade point average of 2.00 for all courses listed above. No departmental major may be enrolled in and pursue advanced departmental courses (numbered 300 or above) until these courses and the specific advanced standing requirements for the student's major are met.

Students seeking exemption, or who are not granted advanced standing in communication may appeal by submitting a written petition to the dean of the College of Business through the chair of the department.

Communication Majors

Students seeking a major or a minor in communication are expected to demonstrate a capacity to integrate principles of spoken and written communication and sufficient commitment to expand their knowledge in order to successfully pursue advanced study.

To achieve communication advanced standing a student must have completed at least six hours of 200-level courses or equivalent in communication.

Speech/Theatre Education Majors

Students seeking a major in speech/theatre education are expected to demonstrate a capacity to integrate, from the required communication and theatre core courses, principles of common formal language, process of seeing, and perception of content, as well as sufficient commitment to expand their knowledge in order to successfully pursue advanced study.

No speech/theatre education major may be enrolled in and pursue advanced communication or theatre courses (numbered 300 and above) until advanced standing has been granted. Speech/theatre education minors must complete the required communication and theatre core courses with a grade of “C” or better in all core courses prior to being enrolled in and pursuing advanced communication and theatre courses.

To achieve speech/theatre education advanced standing, a student (1) must have no grade lower than “C” in any communication or theatre core course and (2) must demonstrate his/her readiness for advanced communication and theatre courses by satisfactorily responding to written and oral questions related to the required communication and theatre core courses.

Speech/theatre education majors may apply for advanced standing during the trimester they are completing the required communication and theatre core courses. Transfer speech/theatre majors seeking to enroll in advanced communication or theatre courses must apply for advanced standing at the time of registration. There will be a review of each transfer student’s portfolio of work in the first week of their first term.

Core Requirements for Majors and Minors in Communication

Communication Core	Semester Hours
COM 29-210 Communication Theory	3
COM 29-230 Public Speaking	3
COM 29-232 Small Group Communication	3
COM 29-332 Propaganda and Persuasion	3
COM 29-335 Interpersonal Communication	3
Total Hours	15

MAJORS

Major in Communication: B.A.

The offering of this program is contingent upon State approval. First planned offering of this program is Fall 2012.

Public Relations Option, 54 hours—No Minor Required

Required Courses	Semester Hours
Communication Core	15
COM 29-260 Public Relations Techniques	3
COM 29-310 Communication Research Methods	3
COM 29-360 Principles of Public Relations	3
COM 29-460 Public Relations Problems: Cases, Concepts and Campaign	3
COM 29-469 Internship in Public Relations	3
COM 29-498 Senior Capstone	3

Cognate Courses

MCOM 20-130 Professional Media Writing	3
MCOM 20-333 Social Media Strategies	3
ENGL 10-315 Writing for the Professions OR ENGL 10-430 Writing for the Online Age OR ENGL 10-512 Publication Skills	3
MKTG 55-330 Principles of Marketing	3

Six hours from the following according to student's area of emphasis: 6

COM 29-420 Crisis Communication (3)	
COM 29-402 Current Topics in Communication (3) (may be repeated)	

Three hours from the following to support the student's area of emphasis: 3

MCOM 20-303 Introduction to Web Publishing (3)	
MCOM 20-313 Principles of Broadcast Advertising (3)	
MCOM 20-353 Principles of Print Advertising (3)	
COM 29-336 Nonverbal Communication (3)	
COM 29-341 Argumentation and Debate (3)	
COM 29-432 Organizational Communication (3)	
ACCT 51-201 Accounting I (3)	
MGMT 54-313 Principles of Management (3)	
MKTG 55-332 Promotion (3)	
MKTG 55-333 Consumer Behavior (3)	
MKTG 55-432 Marketing Research (3)	
Other courses as approved by advisor	

Suggested Multicultural/Diversity Institutional Requirement

COM 29-225 Intercultural Communication (3)	
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Organizational Communication Option, 54 hours—No Minor Required**Required Courses Semester Hours**

Communication Core	15
COM 29-225 Intercultural Communication	3
COM 29-240 Principles of Leadership	3
COM 29-310 Communication Research Methods	3
COM 29-325 Listening Behavior and Skills	3
COM 29-432 Organizational Communication	3
COM 29-467 Internship in Organizational Communication	3
COM 29-498 Senior Capstone	3

Three hours to be chosen from the following 3

COM 29-336 Nonverbal Communication (3)	
COM 29-341 Argumentation and Debate (3)	
COM 29-401 Special Topics (1-3)	

Cognate Courses

PSYC 08-313 Industrial and Organizational Psychology	3
ENGL 10-311 Advanced Composition OR ENGL 10-315 Writing for the Professions	3
MGMT 54-313 Principles of Management	3
MGMT 54-314 Human Resources Management	3

Three hours from the following 3

PSYC 08-363 Psychology of Personality (3)	
SOC 35-365 Social Psychology (3)	
MGMT 54-310 Managerial Communication (3)	

Interpersonal Communication Option, 33 hours–Minor Required

Required Courses	Semester Hours
Communication Core	15
COM 29-225 Intercultural Communication	3
COM 29-310 Communication Research Methods	3
COM 29-325 Listening Behavior and Skills	3
COM 29-341 Argumentation and Debate	3
COM 29-498 Senior Capstone	3
Approved electives	3

Rhetoric Option, 33 hours–Minor Required

Required Courses	Semester Hours
Communication Core	15
COM 29-225 Intercultural Communication	3
COM 29-310 Communication Research Methods	3
COM 29-341 Argumentation and Debate	3
COM 29-343 Rhetoric of American Issues*	3
COM 29-498 Senior Capstone	3
Approved electives	3

*COM 29-235 Introduction to Classical Rhetoric is a prerequisite

Major in Communication: B.S.

The offering of this program is contingent upon State approval. First planned offering of this program is Fall 2012.

Public Relations Option, 60 hours–No Minor Required

Required Courses	Semester Hours
Communication Core	15
COM 29-260 Public Relations Techniques	3
COM 29-310 Communication Research Methods	3
COM 29-360 Principles of Public Relations	3
COM 29-460 Public Relations Problems: Cases, Concepts and Campaign	3
COM 29-469 Internship in Public Relations	3
COM 29-498 Senior Capstone	3
Cognate Courses	
MCOM 20-130 Professional Media Writing	3
MCOM 20-333 Social Media Strategies	3
ENGL 10-315 Writing for the Professions OR	
ENGL 10-430 Writing for the Online Age OR	
ENGL 10-512 Publication Skills	3
MKTG 55-330 Principles of Marketing	3
Six hours from the following according to student's area of emphasis:	6
COM 29-420 Crisis Communication (3)	
COM 29-402 Current Topics in Communication (3) (may be repeated)	
Nine hours from the following to support the student's area of emphasis:	9
MCOM 20-303 Introduction to Web Publishing (3)	
MCOM 20-313 Principles of Broadcast Advertising (3)	
MCOM 20-353 Principles of Print Advertising (3)	
COM 29-336 Nonverbal Communication (3)	

COM 29-341 Argumentation and Debate (3)
 COM 29-432 Organizational Communication (3)
 ACCT 51-201 Accounting I (3)
 MGMT 54-313 Principles of Management (3)
 MKTG 55-332 Promotion (3)
 MKTG 55-333 Consumer Behavior (3)
 MKTG 55-432 Marketing Research (3)
 Other courses as approved by advisor

Suggested Multicultural/Diversity Institutional Requirement

COM 29-225 Intercultural Communication (3)

Organizational Communication Option, 60 hours–No Minor Required

Required Courses	Semester Hours
Communication Core	15
COM 29-225 Intercultural Communication	3
COM 29-240 Principles of Leadership	3
COM 29-260 Public Relations Techniques	3
COM 29-310 Communication Research Methods	3
COM 29-325 Listening Behavior and Skills	3
COM 29-432 Organizational Communication	3
COM 29-467 Internship in Organizational Communication	3
COM 29-498 Senior Capstone	3
Six hours to be chosen from the following	6
COM 29-336 Nonverbal Communication (3)	
COM 29-341 Argumentation and Debate (3)	
COM 29-401 Special Topics (1-3)	
Cognate Courses	
PSYC 08-313 Industrial and Organizational Psychology	3
ENGL 10-311 Advanced Composition OR	
ENGL 10-315 Writing for the Professions	3
MGMT 54-313 Principles of Management	3
MGMT 54-314 Human Resources Management	3
Three hours from the following	3
PSYC 08-363 Psychology of Personality (3)	
SOC 35-365 Social Psychology (3)	
MGMT 54-310 Managerial Communication (3)	

Interpersonal Communication Option, 36 hours–Minor Required

Required Courses	Semester Hours
Communication Core	15
COM 29-225 Intercultural Communication	3
COM 29-310 Communication Research Methods	3
COM 29-325 Listening Behavior and Skills	3
COM 29-341 Argumentation and Debate	3
COM 29-468 Internship in Speech Communication	3
COM 29-498 Senior Capstone	3
Approved electives	3

Rhetoric Option, 36 hours–Minor Required

Required Courses	Semester Hours
Communication Core	15
COM 29-225 Intercultural Communication	3
COM 29-310 Communication Research Methods	3
COM 29-341 Argumentation and Debate	3
COM 29-343 Rhetoric of American Issues*	3
COM 29-468 Internship in Speech Communication	3
COM 29-498 Senior Capstone	3
Approved electives	3

*COM 29-235 Introduction to Classical Rhetoric is a prerequisite

Core Requirements for Majors in Speech/Theatre Education

THEA 43-110 Theatre Foundations	3
THEA 43-210 Design Principles	3
THEA 43-225 Oral Interpretation and Textual Analysis	3
THEA 43-230 Acting	3
COM 29-210 Communication Theory	3
COM 29-230 Public Speaking	3
Total Hours in Speech/Theatre Education Core	18

MAJORS**Comprehensive Major in Speech/Theatre Education, 55 hours:
B.S.Ed.–No Minor Required (Certifies Grades 9-12)**

CIP: 131399

Required Courses	Semester Hours
Speech/Theatre Education Core Requirements	18
COM 29-133 Practicum in Debate and Forensics AND/OR COM 29-338 Advanced Practicum in Debate and Forensics	2
COM 29-232 Small Group Communication	3
COM 29-325 Listening Behavior and Skills	3
COM 29-332 Propaganda and Persuasion	3
COM 29-335 Interpersonal Communication	3
COM 29-341 Argumentation and Debate	3
THEA 43-305 Independent Practicum in Theatre	1
THEA 43-373 Directing	3
THEA 43-460 Creative Dramatics	3
Two hours of technical skills from:	2
THEA 43-211 Technical Skills: Scenery (2)	
THEA 43-212 Technical Skills: Costumes (2)	
THEA 43-213 Technical Skills: Electrics (2)	
Three hours of theatre history from:	3
THEA 43-407 History of Theatre I (3)	
THEA 43-408 History of Theatre II (3)	
Eight hours of approved speech communication, theatre, or mass communication electives (8)	

This major, when completed under the B.S.Ed., Secondary Program, meets Missouri teacher certification standards for speech/theatre secondary level.

Students must take COM 29-480 Methods in Teaching Speech/Theatre in the Secondary School as part of their professional education requirements.

Major in Speech/Theatre Education 38 hours: B.S.Ed.– Minor Required (Certifies Grades 9-12)

Required Courses	Semester Hours
Speech/Theatre Education Core Requirements	18
COM 29-133 Practicum in Debate and Forensics AND /OR COM 29-338 Advanced Practicum in Debate and Forensics	2
COM 29-332 Propaganda and Persuasion	3
COM 29-335 Interpersonal Communication	3
COM 29-341 Argumentation and Debate	3
THEA 43-305 Independent Practicum in Theatre	1
THEA 43-373 Directing	3

Two hours of technical skills from:

- THEA 43-211 Technical Skills: Scenery (2)
- THEA 43-212 Technical Skills: Costumes (2)
- THEA 43-213 Technical Skills: Electrics (2)

Three hours of theatre history from:

- THEA 43-407 History of Theatre I (3)
- THEA 43-408 History of Theatre II (3)

This major, when completed under the B.S.Ed. Secondary Program, meets Missouri teacher certification standards for speech/theatre secondary level.

Students must take COM 29-480 Methods in Teaching Speech/Theatre in the Secondary School as part of their professional education requirements.

MINORS

Minor in Communication, 24 hours

CIP: 090999

Required Courses	Semester Hours
Communication Core	15
Select one of three emphasis areas for an additional nine hours:	9
Interpersonal Communication Emphasis	
COM 29-225 Intercultural Communication (3)	
COM 29-325 Listening Behavior and Skills (3)	
COM 29-336 Nonverbal Communication (3)	
Organizational Communication Emphasis	
COM 29-225 Intercultural Communication (3)	
COM 29-240 Principles of Leadership (3)	
COM 29-432 Organizational Communication (3)	
Public Relations Emphasis*	
COM 29-260 Public Relations Techniques (3)	

- COM 29-360 Principles of Public Relations (3)
- COM 29-460 Public Relations Problems: Cases, Concepts and Campaigns (3)
- *Suggested Multicultural/Diversity Institutional Requirement
- COM 29-225 Intercultural Communication

Rhetoric Emphasis**

- COM 29-225 Intercultural Communication (3)
- COM 29-341 Argumentation and Debate (3)
- COM 29-343 Rhetoric of American Issues** (3)

**Directed General Education Requirement

- COM 29-235 Introduction to Classical Rhetoric

**Minor in Speech/Theatre Education, 32 hours
(Certifies Grades 9-12. See Professional Education Requirements.)**

CIP: 131324

Required Courses	Semester Hours
Speech/Theatre Education Core Requirements	18
COM 29-133 Practicum in Debate and Forensics	1
COM 29-335 Interpersonal Communication	3
COM 29-341 Argumentation and Debate	3
THEA 43-305 Independent Practicum in Theatre	1
THEA 43-373 Directing	3
Three hours from:	3
COM 29-325 Listening Behavior and Skills (3)	
COM 29-332 Propaganda and Persuasion (3)	
THEA 43-407 History of Theatre I (3)	
THEA 43-408 History of Theatre II (3)	

Students must take COM 29-480 Methods in Teaching Speech/Theatre in the Secondary School as part of their professional education requirements.

**Area of Endorsement in Speech/Theatre for the Middle School,
21 hours**

CIP: 131331

Certifies Grades 5-9 when completed with the Middle School major

Required Courses	Semester Hours
THEA 43-110 Theatre Foundations	3
THEA 43-230 Acting	3
THEA 43-373 Directing	3
THEA 43-460 Creative Dramatics	3
COM 29-210 Communication Theory	3
COM 29-230 Public Speaking	3
COM 29-341 Argumentation and Debate	3

The completion of the above requirements meets the Speech/Theatre Area of Endorsement for use with Missouri Middle School Certification, grades 5-9. Students must take COM 29-480 Methods of Teaching Speech/Theatre in the Secondary School. Advisement for Middle School Certification is provided by the Department of Professional Education in the College of Education and Human Services. See that section of this catalog.

Mass Communication / 20

The Department of Communication and Mass Media offers undergraduate programs in mass media, advertising and interactive digital media to prepare students for the converged media industry. The mass media major also allows students to learn a core set of production and critical thinking skills within a focused area of interest such as multimedia journalism, sports media, broadcast and production, and applied advertising. In harmony with the mission of the Melvin D. and Valorie G. Booth College of Business and Professional Studies, students majoring in the mass media degrees develop not only communication skills (verbal, written, listening and interpersonal) but also critical thinking skills and equipment and computer operation skills. Careful attention is given to achieving a balance between cognitive development and specific skills acquisition; therefore, students also develop a broad understanding and appreciation of the historical, theoretical and operational nature of the mass media.

In addition, students are encouraged at the very beginning of their University experience to become involved with a variety of hands-on activities with award-winning media outlets KZLX-LP, KXCV/KRNW-FM, KNWT-TV, *Northwest Missourian* newspaper, nwmissourinews.com (converged online news site), *Tower* yearbook and DVD supplement, *Framework Interactive* online magazine, fwinteractive.com and student media organizations. These experiences lead to a realistic view of professional working conditions. Students are further guided in the acquisition of appropriate time management, adaptation and teamwork skills.

Advanced Standing Requirement

Mass Media majors may not enroll in upper division mass communication courses (numbered 300 or above) prior to successful completion of the Department of Communication and Mass Media's advanced standing requirements:

1. Students must complete MCOM 20-110, 120 and 130 with a minimum grade of "C."
2. The student shall have an assigned major advisor from the Mass Media faculty.

General Education Assessment Requirement

Students must receive a score of at least 1 in two of the three test areas or they must retake the general education assessment test, an assessment given when the student reaches junior status. Students who do not reach this requirement will be notified by either their advisor or the department chairperson. It is the student's responsibility to arrange for retaking the general education assessment test.

DEGREE PROGRAMS

The Bachelor of Arts in Media Studies (31 hours) is designed to provide students with theoretical and applied knowledge and a liberal arts education through the requirements for the B.A. degree.

The Bachelor of Science in Mass Media (55 hours), in Advertising (61 hours), and in Interactive Digital Media (61 hours) are available to those seeking the B.S. degree. In addition to providing a comprehensive theoretical foundation within the discipline, these degrees provide extensive practical knowledge and experience.

A minor in Broadcasting (24 hours), a minor in Journalism (24 hours), a minor in Advertising (24 hours) and an interdisciplinary minor in Interactive Digital Media (24 hours) are available to students with majors in other academic disciplines.

MAJORS

Major in Media Studies, 31 hours: B.A.—Minor Required

CIP: 090100

Required Courses	Semester Hours
MCOM 20-120 Introduction to Mass Media	3
MCOM 20-130 Professional Media Writing	3
MCOM 20-221 Ethnographic Film Study	3
MCOM 20-220 Media Literacy	3
MCOM 20-303 Introduction to Web Publishing	3
MCOM 20-314 Communication Law and Ethics	3
MCOM 20-333 Social Media Strategies	3
MCOM 20-320 Theories of Mass Communication	3
MCOM 20-409 Media Business and Entrepreneurship	3
MCOM 20-412 Comparative Mass Media Systems	3
MCOM 20-416 Senior Seminar	1
Total Hours	31

Major in Mass Media, 55 hours: B.S.—No Minor Required

Areas of Emphasis: Applied Advertising, Broadcast and Production, Multimedia Journalism, Sports Media

CIP: 090100

Core Courses for a Major in Mass Media

Required Core Courses	Semester Hours
MCOM 20-110 Fundamentals of Electronic Media Production	3
MCOM 20-120 Introduction to Mass Media	3
MCOM 20-130 Professional Media Writing	3
MCOM 20-220 Media Literacy	3
MCOM 20-243 Media Design	3
MCOM 20-303 Introduction to Web Publishing	3
MCOM 20-314 Communication Law and Ethics	3
MCOM 20-320 Theories of Mass Communication	3
MCOM 20-409 Media Business and Entrepreneurship	3
MCOM 20-416 Senior Seminar	1
Total Core Hours	28

Mass Media: Applied Advertising Emphasis

Required Courses	Semester Hours
Mass Media Core	28
MCOM 20-230 Introduction to Media Advertising	3
MCOM 20-313 Principles of Broadcast Advertising	3
MCOM 20-333 Social Media Strategies	3
MCOM 20-343 Advanced Media Design	3
MCOM 20-353 Principles of Print Advertising	3
MCOM 20-430 Advanced Advertising Strategies OR MCOM 20-452 Internship	3
Advisor-approved elective	3

Six hours from the following:	6
MCOM 20-150 Journalism Practicum (Yearbook) (1)	
MCOM 20-151 Journalism Practicum (Newspaper) (1)	
MCOM 20-215 Radio Practicum (1)	
MCOM 20-216 Television Practicum (1)	
MCOM 20-322 Advanced Radio Practicum (2)	
MCOM 20-326 Advanced Television Practicum (2)	
MCOM 20-350 Advanced Journalism Practicum (Yearbook) (2)	
MCOM 20-351 Advanced Journalism Practicum (Newspaper) (2)	
Total Hours	55

Mass Media: Broadcast and Production Emphasis

Required Courses	Semester Hours
Mass Media Core	28
MCOM 20-111 Introduction to Broadcast Operations	3
MCOM 20-224 Introduction to Audio Production	3
MCOM 20-225 Video Production	3
MCOM 20-313 Principles of Broadcast Advertising	3
Three hours from the following:	3
MCOM 20-215 Radio Practicum (1)	
MCOM 20-216 Television Practicum (1)	
MCOM 20-322 Advanced Radio Practicum (2)	
MCOM 20-326 Advanced Television Practicum (2)	
Choose one of the following concentration areas for twelve hours:	12
Audio Concentration	
MCOM 20-329 Audio Technology and Recording (3)	
MCOM 20-406 Advanced Audio (Music) (3) OR	
MCOM 20-407 Advanced Audio (Post) (3)	
MCOM 20-490 Sound Design and Aesthetics (3)	
Advisor-approved electives (3)	
OR	
Video Concentration	
MCOM 20-330 Advanced Video Production (3)	
MCOM 20-417 Television Directing (3)	
MCOM 20-484 Digital Cinematography (3)	
Advisor-approved electives (3)	
Total Hours	55

Mass Media: Multimedia Journalism Emphasis

Required Courses	Semester Hours
Mass Media Core	28
MCOM 20-227 Reporting	3
MCOM 20-315 Broadcast Journalism	3
MCOM 20-327 Advanced Reporting	3
MCOM 20-333 Social Media Strategies	3
MCOM 20-352 Copy Editing	3
MCOM 20-355 Photojournalism	3

MCOM 20-357 Opinion Writing OR	
MCOM 20-358 Feature Writing	3
Advisor-approved electives	3
Three hours from the following:	3
MCOM 20-150 Journalism Practicum (Yearbook) (1)	
MCOM 20-151 Journalism Practicum (Newspaper) (1)	
MCOM 20-215 Practicum in Radio (1)	
MCOM 20-216 Practicum in Television (1)	
MCOM 20-322 Advanced Practicum in Radio (2)	
MCOM 20-326 Advanced Practicum in Television (2)	
MCOM 20-350 Advanced Journalism Practicum (Yearbook) (2)	
MCOM 20-351 Advanced Journalism Practicum (Newspaper) (2)	
Total Hours	55

Mass Media: Sports Media Emphasis

Required Courses	Semester Hours
Mass Media Core	28
MCOM 20-227 Reporting	3
MCOM 20-315 Broadcast Journalism	3
MCOM 20-327 Advanced Reporting	3
MCOM 20-345 Sports Broadcasting	3
MCOM 20-352 Copy Editing	3
MCOM 20-356 Sports Photography	3
MCOM 20-359 Sports Reporting	3
Advisor-approved electives	3
Three hours from the following:	3
MCOM 20-150 Journalism Practicum (Yearbook) (1)	
MCOM 20-151 Journalism Practicum (Newspaper) (1)	
MCOM 20-350 Advanced Journalism Practicum (Yearbook) (2)	
MCOM 20-351 Advanced Journalism Practicum (Newspaper) (2)	
Total Hours	55

Major in Advertising, 61 hours: B.S.—No Minor Required

CIP: 090903

Directed General Education Courses	Semester Hours
ECON 52-130 Survey of Economics OR	
ECON 52-150 General Economics I	3
MATH 17-114 General Statistics I	3
Required Courses	
MCOM 20-130 Professional Media Writing	3
MCOM 20-151 Journalism Practicum (Newspaper)	1
MCOM 20-230 Introduction to Media Advertising	3
MCOM 20-243 Media Design	3
MCOM 20-313 Principles of Broadcast Advertising	3
MCOM 20-333 Social Media Strategies	3
MCOM 20-343 Advanced Media Design	3
MCOM 20-351 Advanced Journalism Practicum (Newspaper)	2
MCOM 20-353 Principles of Print Advertising	3

MCOM 20-416 Senior Seminar	1
MCOM 20-430 Advanced Advertising Strategies OR MCOM 20-452 Internship	3
ACCT 51-201 Accounting I	3
ACCT 51-202 Accounting II	3
FIN 53-311 Business Law I	3
FIN 53-324 Fundamentals of Business Finance	3
MGMT 54-313 Principles of Management	3
MKTG 55-330 Principles of Marketing	3
MKTG 55-332 Promotion	3
MKTG 55-333 Consumer Behavior	3
MKTG 55-430 Sales and Sales Management	3
MKTG 55-432 Marketing Research	3
MKTG 55-438 International Business OR MCOM 20-450 Study Abroad	3
Total Hours	61

Comprehensive Major in Interactive Digital Media, 61 hours: B.S.—No Minor Required

CIP: 110801

New Media Concentration

This is an interdisciplinary major in conjunction with the Department of Fine and Performing Arts, the Department of Mathematics, Computer Science and Information Systems, and the Department of Communication and Mass Media. Three concentrations are available for this major: Computer Science Programming (Mathematics, Computer Science and Information Systems), New Media (Communication and Mass Media) and Visual Imaging (Fine and Performing Arts).

This major requires CSIS 44-130 Computers and Information Technology as a prerequisite course as required by course descriptions.

Required Core Courses	Semester Hours
ART 13-191 Introduction to Design	3
ART 13-207 Digital Photography OR MCOM 20-355 Photojournalism	3
ART 13-292 Introduction to Creative Electronic Imaging	3
ART 13-294 Letter Forms and Graphic Design	3
MCOM 20-120 Introduction to Mass Media	3
MCOM 20-243 Media Design	3
MCOM 20-303 Introduction to Web Publishing	3
MCOM 20-314 Communication Law and Ethics	3
CSIS 44-143 Script Programming I	3
CSIS 44-333 Web Development	3
CSIS 44-335 Script Programming II	3
MKTG 55-330 Principles of Marketing	3
Total Core Requirements	36
Required Courses for New Media Concentration:	
MCOM 20-110 Fundamentals of Electronic Media Production	3
MCOM 20-130 Professional Media Writing	3

MCOM 20-150 Journalism Practicum (Yearbook) OR	
MCOM 20-151 Journalism Practicum (Newspaper)	1
MCOM 20-230 Introduction to Media Advertising	3
MCOM 20-333 Social Media Strategies OR	
MCOM 20-452 Internship	3
MCOM 20-334 Multimedia Production	3
MCOM 20-343 Advanced Media Design	3
MCOM 20-354 Online Magazine Practicum	1
MCOM 20-409 Media Business and Entrepreneurship	3
MCOM 20-416 Senior Seminar	1

Choose one of the following courses: 1-6

MCOM 20-150 Journalism Practicum (Yearbook) (1)	
MCOM 20-151 Journalism Practicum (Newspaper) (1)	
MCOM 20-350 Advanced Journalism Practicum (Yearbook) (2)	
MCOM 20-351 Advanced Journalism Practicum (Newspaper) (2)	
MCOM 20-450 Study Abroad (1-6)	
MCOM 20-452 Internship (1)	

Total Concentration Hours 25

Concentration in Visual Imaging – see the Department of Fine and Performing Arts

Concentration in Computer Science Programming – see the Department of Mathematics, Computer Science and Information Systems

MINORS

Minor in Broadcasting, 24 hours

CIP: 090701

Required Courses	Semester Hours
MCOM 20-111 Introduction to Broadcast Operations	3
MCOM 20-120 Introduction to Mass Media	3
MCOM 20-220 Media Literacy	3
MCOM 20-224 Introduction to Audio	3
MCOM 20-225 Video Production	3
MCOM 20-313 Principles of Broadcast Advertising	3
MCOM 20-314 Communication Law and Ethics	3
MCOM 20-320 Theories of Mass Communication	3

Minor in Journalism, 24 hours

CIP: 090401

Required Courses	Semester Hours
MCOM 20-120 Introduction to Mass Media	3
MCOM 20-130 Professional Media Writing	3
MCOM 20-150 Journalism Practicum (Yearbook) OR	
MCOM 20-151 Journalism Practicum (Newspaper)	1
MCOM 20-227 Reporting	3
MCOM 20-243 Media Design	3

MCOM 20-314 Communication Law and Ethics	3
MCOM 20-320 Theories of Mass Communication	3
MCOM 20-350 Advanced Journalism Practicum (Yearbook) (2) OR MCOM 20-351 Advanced Journalism Practicum (Newspaper) (2)	2
MCOM 20-353 Principles of Print Advertising	3

Minor in Advertising, 24 hours

CIP: 090903

Required Courses	Semester Hours
MCOM 20-130 Professional Media Writing	3
MCOM 20-230 Introduction to Media Advertising	3
MCOM 20-243 Media Design	3
MCOM 20-303 Introduction to Web Publishing	3
MCOM 20-313 Principles of Broadcast Advertising	3
MCOM 20-314 Communication Law and Ethics	3
MCOM 20-333 Social Media Strategies	3
MCOM 20-353 Principles of Print Advertising	3

Minor in Interactive Digital Media, 24 hours

CIP: 110801

This is an interdisciplinary minor in conjunction with the Department of Fine and Performing Arts, the Department of Mathematics, Computer Science and Information Systems, and the Department of Communication and Mass Media.

This minor requires CSIS 44-130 Computers and Information Technology as a prerequisite course as required by course descriptions.

Required Courses	Semester Hours
ART 13-191 Introduction to Design	3
ART 13-292 Introduction to Creative Electronic Imaging	3
MCOM 20-243 Media Design	3
MCOM 20-303 Introduction to Web Publishing	3
CSIS 44-143 Script Programming I	3
CSIS 44-333 Web Development	3
Electives (Select any six hours from the following):	6
ART 13-120 Drawing (3)	
ART 13-207 Digital Photography (3)	
MCOM 20-334 Multimedia Production (3)	
CSIS 44-141 Computer Programming I (3)	
CSIS 44-335 Script Programming II (3)	

Course Descriptions

Communication / 29

101 Oral Communication for International Students (3 hours)

Designed to meet the needs of international students desiring to improve their oral communication skills. Will include conversational and formal presentation activities. Meets five times per week. Does not fulfill COM 29-102 requirement.

102 Fundamentals of Oral Communication (3 hours)

An overview of the theory and guided practice of the skills utilized in intrapersonal, interpersonal, group and public communication. The student will perform an interview, small group discussion, informative speech and persuasive speech. (F, S, SS)

133 Practicum in Debate and Forensics (1-4 hours)

Participation in intercollegiate debate and forensics activities. May be repeated for up to four hours for further mastery. (F, S)

152 Public Relations Practicum (1 hour)

Practice in the principles of public relations. Students will work on promotional materials or activities (i.e.: press releases and packets, backgrounders, fact sheets, promotional materials, etc.). (F, S)

200 Special Offerings (1-4 hours)

Courses offered on only one occasion or variable issue-oriented courses which have the content described in the title. Credit and prerequisites as announced. Repeatable with topics changing.

210 Communication Theory (3 hours)

This course will cover a variety of communication constructs and theories that provide much of the basic foundation for the discipline. Students will learn about theories relating to the different areas of study in communication (e.g. interpersonal, small group, organizational, rhetorical, and others). Satisfactory completion of the course is part of the requirements for Advanced Standing within the Department of Communication and Mass Media. (F)

225 Intercultural Communication (3 hours)

An analysis of how culture interacts with communication and an examination of issues and problems encountered when communicating across cultures. (F, S)

226 Principles of Interviewing (3 hours)

The study of interviewing principles for people-management skills. Provides the student with the opportunity to practice techniques appropriate for the following types of interviews: employment, orientation, goal-setting, problem-solving, appraisal and persuasion or selling. (F, alt. years)

230 Public Speaking (3 hours)

A study of the theory and principles of effective public speaking. The student will develop and present various types of public speeches with and without presentational aids. (F, S)

232 Small Group Communication (3 hours)

A study of group processes in the problem-solving setting. The focus is on problem solving, leadership, role development, cohesiveness and effective practitioners. Group participation outside the classroom will be expected. (F, S)

235 Introduction to Classical Rhetoric (3 hours)

An introduction to the development and theories of rhetoric. The focus is on the ancient Greeks and Aristotle's Rhetoric as well as the Romans including Cicero and Quintillian. (S, alt. years)

240 Principles of Leadership (3 hours)

An examination of the concept of leadership and its application in different aspects of modern society. The focus will be on techniques of leadership in decision-making and policy formulation and implementation. There will also be a discussion of leadership qualities necessary for the future. (S)

250 Voice and Diction (3 hours)

A study of the sound system of American English. Emphasis is placed on taxonomy of sounds using the International Phonetic Alphabet and on understanding the mechanisms of articulation, phonation and prosody as applied to broadcasting, theatre and speech pathology. Basic acoustics is introduced. (F, alt. years)

260 Public Relations Techniques (3 hours)

Introduction to the communication techniques of public relations including internal and external interpersonal communication networks and mediated communication. Recommended prerequisite: MCOM 20-130. (F, S)

310 Communication Research Methods (3 hours)

An introduction to the process of research and inquiry in the field of communication. This course surveys quantitative, qualitative and critical methodologies and provides students with tools to evaluate and conduct such studies. MATH 17-114 General Statistics is recommended as a directed General Education choice. Prerequisites: COM 29-102; and ENGL 10-111 and 10-112, or 10-115. (F, S)

325 Listening Behavior and Skills (3 hours)

An examination of listening behavior and its place in the communication process. The major interactive and perceptual processes involved in the reception of aural data are studied. Tests and exercises are presented to enable students to understand and improve their own listening skills. Prerequisite: COM 29-102. (S)

332 Propaganda and Persuasion (3 hours)

Exploration of the symbolic means of engineering consent, focusing on techniques that foster intolerance and bigotry. The course focuses on theories of symbolic manipulation and theories of persuasion, and on analyzing actual propaganda campaigns and persuasive campaigns. (S)

335 Interpersonal Communication (3 hours)

A study of the theories of interpersonal communication. Experiences in the development of communication, anxiety awareness, verbal confrontation, reinforcement and interpersonal trust are included. (F)

336 Nonverbal Communication (3 hours)

An analysis of the fundamental forms of nonverbal communication. Attention is given to the use of the body in conscious and unconscious gestures, proxemics, kinesics and axis, and the effect of these on the environment and culture of the individual. (S)

338 Advanced Practicum in Debate and Forensics (1-4 hours)

Participation in intercollegiate debate and forensics activities. Prerequisite: Junior or senior standing. May be repeated for up to four hours for further mastery. (F, S)

341 Argumentation and Debate (3 hours)

A study of the theory of argumentation, logical argument construction, argument refutation and cross

examination. The course involves the application of reflective thinking to problem solving. Students are given an opportunity to apply argumentation theory to law, scholarship, politics and business. (F)

343 Rhetoric of American Issues (3 hours)

A survey of famous American orators and issues. The rhetorical and historical contexts of selected speeches and issues are emphasized. Prerequisite: COM 29-235. (S, alt. years)

351 Normal Language Development (2 hours)

A study of the normal processes of developmental progression by which the child acquires the syntax, semantics, morphology and phonology of language. (SS)

352 Advanced Public Relations Practicum (1 hour)

Advanced practice in the principles of public relations. Students will work collaboratively to develop multiple relations oriented materials (i.e.: press releases and packets, backgrounders, fact sheets, promotional materials, etc.) and/or event related activities. (F, S)

360 Principles of Public Relations (3 hours)

An overview of public relations as practiced historically and in contemporary America. It provides a comprehensive foundation of theoretical and applied knowledge necessary to become a public relations practitioner. Prerequisites: COM 29-260 and MCOM 20-130. (S)

400 Special Offerings (1-4 hours)

Courses offered on only one occasion or variable issue-oriented courses which have the content described in the title. Credit and prerequisites as announced. Repeatable with topics changing.

401 Special Topics (1-3 hours)

Provides concentrated study in special areas within Speech Communication. Topics vary trimester to trimester. Prerequisites as announced. Repeatable with topics changing.

402 Current Topics in Communication (3 hours)

This course introduces students to areas of current importance in the communication field. It builds upon the theory and research introduced in previous courses and gives students a global perspective of communications practice. Prerequisites: Advanced standing or permission of the instructor.

May be repeated for credit with topics changing. (S, alt. years)

420 Crisis Communication (1-3 hours)

This course will prepare students to navigate the unique challenges communicators face during a crisis situation through the study of basic communication theory and practice, media relations, relevant laws and ethics, cross-cultural communication, international crisis communication, and communication coordination practices. (S, alt. years)

432 Organizational Communication (3 hours)

A study of the spoken communication process in business and organizational settings and the major concepts which influence organizational communication. Attention is directed toward the organizational elements, the communication system and improving organizational communication. (F)

460 Public Relations Problems: Cases, Concepts and Campaigns (3 hours)

A study of the rationale underlying public relations campaigns, achieving specific public relations goals and solving a wide variety of public relations problems. Prerequisite: COM 29-360. (F)

467 Internship in Organizational Communication (1-3 hours)

Allows students to gain practical experience by participating in on-site work with various types of organizational communication departments or organizations under the on-site supervision of an experienced business person. Consent of instructor required. Repeatable for new experience. (F, S, SS)

468 Internship in Speech Communication (1-3 hours)

Allows students to gain practical experience by participating in on-site work with various types of communication organizations under the on-site supervision of an experienced communication professional. Consent of instructor required. Repeatable for new experience. (F, S, SS)

469 Internship in Public Relations (1-3 hours)

Professional experience in public relations. The particular interests of the student are addressed through practical application with public relations practitioners. Prerequisites: Senior standing in public relations and consent of instructor. Repeatable for new experience. (F, S, SS)

480 Methods of Teaching Speech/Theatre in the Secondary School (3 hours)

A preparation for meeting the special problems of teaching speech and theatre in the secondary school. This course includes a formal presentation of the student's professional portfolio. Prerequisite: Senior standing. (F)

495 Independent Study in Communication (1-2 hours)

Repeatable with topics changing.

498 Senior Capstone (3 hours)

Designed to prepare the communication student to enter the post-college world in the communication field, this course summarizes communication trends, research techniques, discipline-oriented writing and presentation skills, including an emphasis on application to team-based projects. Prerequisite: Must meet the current departmental cut score(s) on the current standardized general education test(s) (contact the department office for specific information), and have the permission of the department chair in order to enroll. (F)

499 Senior Seminar (1 hour)

Designed to prepare the speech communication student to enter the post-college world of advanced study of the communication field, this course summarizes communication trends, research techniques, discipline-oriented writing skills and presentation skills. This course includes a formal presentation of the student's professional portfolio. Prerequisite: Must meet the current departmental cut score(s) on the current standardized general education test(s) (contact the department office for specific information), and have the permission of the department chair in order to enroll. (F, S)

500 Special Offerings (1-4 hours)

Courses offered on only one occasion or variable issue-oriented courses which have the content described in the title. Credit and prerequisites as announced. Repeatable with topics changing.

537 Independent Study in Speech (1-2 hours)

Repeatable with topics changing.

538 Independent Study in Speech Education (1-2 hours)

Repeatable with topics changing.

539 Independent Study in Speech Media (1-2 hours)

Repeatable with topics changing.

553 Language, Speech, and Hearing of the Exceptional Child and Adult (3 hours)

A study for the special education teacher in the identification and referral of exceptional individuals with communication disorders. Topics include the development, characteristics and disorders of language, speech and hearing in the exceptional individual. Focus is on establishing interactions that are supportive of communicatively handicapped individuals in special education programs. (F, SS)

566 Special Topics in Speech Science (1-4 hours)

Repeatable with topics changing.

567 Special Topics in Contemporary Issues (1-4 hours)

Repeatable with topics changing.

568 Special Topics in Rhetoric (1-4 hours)

Repeatable with topics changing.

581 Philosophical Bases of Speech Education (3 hours)

An examination of the historical and philosophical bases for teaching speech in the secondary school.

Mass Communication / 20**110 Fundamentals of Electronic Media Production (3 hours)**

This course will acquaint the student with techniques and equipment to produce audio and video content, as well as web pages. Convergence, distribution methods and standard industry practices are also covered. (F, S)

111 Introduction to Broadcast Operations (3 hours)

An introduction to the operation of radio and television equipment for professional broadcast situations. Includes control room procedures as well as a study of FCC rules and regulations. (F, S)

120 Introduction to Mass Media (3 hours)

Overview of the history of the media, social responsibilities of the journalist and issues facing the media today. (F)

130 Professional Media Writing (3 hours)

The course will prepare students for media writing, with special emphasis on AP style, news judgment and a thorough review of grammar. (F, S)

150 Journalism Practicum (Yearbook) (1 hour)

Laboratory practice working on the *Tower* student yearbook. This course is repeatable for a new, advanced or expanded experience. (F, S)

151 Journalism Practicum (Newspaper) (1 hour)

Laboratory practice working on the *Northwest Missourian* student newspaper. This course is repeatable for a new, advanced or expanded experience. (F, S)

215 Practicum in Radio (1 hour)

Practical experience on the staff of campus station KZLX-LP. Additionally, there are six areas of work: underwriting, production, promotions, sports, news and music. This course is repeatable for a new, advanced or expanded experience. Prerequisites: MCOM 20-111. (F, S)

216 Practicum in Television (1 hour)

Practical experience on the staff of campus station KNWT-TV. The areas of work include the use of television equipment and preparation of programs. The course is repeatable for a new, advanced or expanded experience. Prerequisite: MCOM 20-111. (F, S)

220 Media Literacy (3 hours)

This course will concentrate on media content and emphasize critical analysis and the ability to look at many sides of a topic that concerns the globally-aware citizen. Media Literacy will analyze information, values, technology and the underlying messages conveyed via mass media. The course examines the accuracy of messages and explores how media shapes views of politics, culture and society. (F, S)

221 Ethnographic Film Study (3 hours)

A study of international cinema from a multicultural standpoint. The course will focus on some predominant themes common to many world cultures, themes such as war, liberation, immigration and racism. (F, S)

224 Introduction to Audio (3 hours)

A study of the basic theoretical and practical elements in audio production. Performance, equipment, program productions and editing are covered. Lecture and laboratory. Prerequisite: MCOM 20-111 or consent of the instructor. (F)

225 Video Production (3 hours)

Basic theory and practice in television production. Lighting, video cameras, picture aesthetics, television audio and post-production, including non-linear editing, are covered. Prerequisite: MCOM 20-111 or consent of the instructor. (S)

227 Reporting (3 hours)

Comprehensive preparation in identifying, gathering, structuring and styling news. Prerequisite: MCOM 20-130. (F)

230 Introduction to Media Advertising (3 hours)

This introductory course will examine the foundations, concepts, strategies and operations of the advertising industry. This course will examine the real world of advertising and present the breadth as well as depth of the field. (F, S)

243 Media Design (3 hours)

Study of newspapers, magazines and corporate publications with a concentration on production and design using computers. (F, S)

300 Special Offerings (1-4 hours)

Courses which are offered on only one occasion or variable issue-oriented courses which have the content described in the title. Credit and prerequisites as announced. This course is repeatable for a new, advanced or expanded experience.

302 Special Topics (1-3 hours)

Courses will be occasionally offered on a one-time or issue-oriented basis. Credit and prerequisites as announced. See individual semester course offerings for details. Course can be repeated for a new, advanced or expanded experience for a total of up to 9 semester hours.

303 Introduction to Web Publishing (3 hours)

An introduction to the concepts and strategies of using the Internet to communicate to an audience. Students will analyze different types of web sites and why they are built, and examine common site features and good site design and content practices. (F, S)

313 Principles of Broadcast Advertising (3 hours)

A study of the techniques of selling, developing and maintaining sales accounts for broadcast stations. Also covers the psychology, ethics and criticism of broadcast advertising as well as practice in writing and research for commercial production. (F, S)

314 Communication Law and Ethics (3 hours)

A study of the legal aspects of the mass media, particularly libel, obscenity, prior restraint, licensing, privacy, copyright, FCC regulations and First Amendment issues. Also, the course will include examination of media ethics and responsibility. Prerequisite: Advanced standing. (F, S)

315 Broadcast Journalism (3 hours)

A study of journalism in the electronic media and the writing style for broadcast news. The use of audio and video in reporting the news is also studied. Prerequisite: MCOM 20-120, 130 and 227. (F)

320 Theories of Mass Communication (3 hours)

Comprehensive examination of historical and contemporary theories of mass communication and the development of mass communication research. Prerequisite: Advanced standing. (F, S)

322 Advanced Practicum in Radio (2 hours)

Advanced experience including leadership positions on the staff of campus station KZLX-LP. This course is repeatable for a new, advanced or expanded experience. Prerequisites: Advanced standing and MCOM 20-215. (F, S)

326 Advanced Practicum in Television (2 hours)

Advanced experience on the staff of campus station KNWT-TV. The work includes advanced production, directing and/or management. This course is repeatable for a new, advanced or expanded experience. Prerequisites: Advanced standing and MCOM 20-216 and 225. (F, S)

327 Advanced Reporting (3 hours)

Theory and practice of reporting for a variety of media. Students will develop important skills in interviewing, computer-assisted reporting and in covering special beats. Students will continue to develop their ability to correctly use Associated Press broadcast and print style. Students will produce content for newspaper, television and online coverage. Prerequisites: MCOM 20-227 and 315. (S)

329 Audio Technology and Recording (3 hours)

An examination of audio technology and recording techniques as they apply to studio production. Students will explore the theory of audio technology from the past to the present through studio and live multi-track recording, editing, and mixing sessions. Lecture and laboratory. Prerequisite: MCOM 20-224. (S)

330 Advanced Video Production (3 hours)

Advanced study and development of television production skills. Specific areas of study include electronic field production, post production, lighting and set design. Prerequisites: Advanced standing and MCOM 20-225. (F, alt. years)

333 Social Media Strategies (3 hours)

Social Media Strategies is the study and application of social media tools and theories as they apply to development of a social media strategy as employed by media and/or creative organizations. Prerequisite: Advanced standing. (F, S)

334 Multimedia Production (3 hours)

This course will examine the types, processes and applications of multimedia content. Emphasis will be on the production of interactive presentations. Prerequisites: MCOM 20-243 and 303. (F, S)

343 Advanced Media Design (3 hours)

Study of advanced design techniques and principles used for print and multimedia design. Various software packages, design trends and readability issues will be examined. Prerequisite: MCOM 20-243. (F)

345 Sports Broadcasting (3 hours)

Sports Broadcasting will apply the student's current multimedia journalism skills and experience to the specialized field of sports coverage. The student will explore the history of broadcast sports coverage as well as the direction in which the field is headed. He or she will critically review journalistic ethics as they apply to sports coverage. The student will use interviewing, writing, audio and video as storytelling tools. The student will also develop basic skills associated with sports play-by-play. Prerequisite: MCOM 20-315. (S)

350 Advanced Journalism Practicum (Yearbook) (2 hours)

Advanced laboratory practice working on the *Tower* student yearbook. This course is repeatable for a new, advanced or expanded experience. Prerequisites: Advanced standing and MCOM 20-150. (F, S)

351 Advanced Journalism Practicum (Newspaper) (2 hours)

Advanced laboratory practice working on the *Northwest Missourian* student newspaper. This course is repeatable for a new, advanced or expanded experience. Prerequisites: Advanced standing and MCOM 20-151. (F, S)

352 Copy Editing (3 hours)

Theory and practice of news processing, i.e. copy editing, coaching, grammar and news structure. Prerequisite: MCOM 20-227. (SS)

353 Principles of Print Advertising (3 hours)

Emphasis on writing, designing and producing advertisements for newspapers and magazines, including study and application of current advertising techniques. Prerequisites: Advanced standing and MCOM 20-243. (F)

354 Online Magazine Practicum (1 hour)

This practicum offers students an opportunity to work in the areas of feature writing, magazine design, feature/documentary photography, circulation, advertising, sales and marketing. This course is repeatable for a new, advanced or expanded experience. Prerequisite: Advanced standing. (F, S)

355 Photojournalism (3 hours)

This is an introductory course in visual journalistic communication that will help students develop the photographic skills needed to become successful at producing images and recognizing what makes a good photograph in terms of content, composition and technical quality. Instruction will progress from basic camera operation and the news "one shot" to more comprehensive visual storytelling that may incorporate video or other multimedia components. (S)

356 Sports Photography (3 hours)

This course will concentrate heavily on covering sports events here on campus and also in the area. Various sports will first be examined and example photos will be viewed in class. Students will then be expected to photograph and file photos under realistic deadline situations. Students will also be introduced to web-based multimedia production methods for the sports website. Prerequisite: Advanced standing. (F)

357 Opinion Writing (3 hours)

Opinion Writing emphasizes writing and critical thinking in the development of institutional and personal editorials and columns for newspapers

and other print media. The mission, obligation and history of opinion writing and the editorial page will be covered, along with correct and effective use of the English language to produce persuasive, argumentative, explanatory and informational editorials. Current issues will serve as springboards for comment. Prerequisite: MCOM 20-227. (S)

358 Feature Writing (3 hours)

Writing and revising articles for magazines, writing queries, personality sketches and educational features. Prerequisite: Advanced standing. (S)

359 Sports Reporting (3 hours)

Comprehensive preparation in identifying, gathering, structuring and styling sports news in a variety of formats. Prerequisite: MCOM 20-227. (S)

400 Special Offerings (1-3 hours)

Courses which are offered on only one occasion or variable issue-oriented courses which have the content described in the title. Credit and prerequisites as announced. This course is repeatable for a new, advanced or expanded experience.

406 Advanced Audio–Music (3 hours)

An advanced study of the theories and techniques used in the production of music. Students engage in recording, editing and production of advanced multi-track sessions for music. Topics include the theories of overdubbing, natural sound environments, audio cues and spatial relationship of various sound sources. Lecture and laboratory. Prerequisite: MCOM 20-329. (F, alt. years)

407 Advanced Audio–Post (3 hours)

An advanced study of the theories and techniques used in the production of sound for post-production. Students engage in the recording, editing, and productions of advanced multi-track sessions for video and motion picture. Topics include the theories of overdubbing, ADR, Foley, natural sound environments, audio cues, and spatial relationship of various sound sources. Lecture and laboratory. Prerequisite: MCOM 20-329. (F, alt. years)

409 Media Business and Entrepreneurship (3 hours)

An examination of the organization, operation and policies of both media organizations and independent media content producers. Students will focus on content evaluation; planning and budgeting; government regulation; and legal, ethical and censorship concerns from the perspective of the media manager/entrepreneur. Prerequisite: Advanced standing. (F)

412 Comparative Mass Media Systems (3 hours)

A study of foreign and international mass media systems in terms of structure, financing and content. Topics include the impact of political and cultural institutions on shaping media systems, international telecommunications organizations and mass media and developing nations. Prerequisite: Advanced standing. (F, alt. years)

416 Senior Seminar (1 hour)

Designed to be the capstone experience for broadcasting and journalism majors, this course examines media trends and practices and further prepares students for advanced study in the media field. Emphasis will be placed on portfolio/tape development and research, writing and presentation skills. Prerequisites: Advanced standing and senior status. (F, S)

417 Television Directing (3 hours)

Practice in the planning, casting, rehearsing and production of a television program from the perspective of a television director. Attention will be given to advanced production techniques as well as to the aesthetic and persuasive capabilities of the medium. Prerequisites: Advanced standing and MCOM 20-330. (S, alt. years)

429 Advanced Problems in Broadcasting–Independent Study (1-3 hours)

Research in an area of broadcasting which is of particular interest to the advanced student capable of individual, directed study. Independent studies must be approved by a faculty supervisory committee. This course is repeatable for a new, advanced or expanded experience. Prerequisites: Advanced standing and consent of instructor. (F, S, SS)

430 Advanced Advertising Strategies (3 hours)

A capstone course which will apply advertising principles to an actual advertising campaign. Students will form an advertising agency to create a complete advertising campaign, including situational analysis, segment identification, campaign objectives and strategies, budgeting, and creative strategies. Campaign collateral, including print, broadcast and Internet advertisements will be developed by the students and presented to the client. Prerequisites: Senior status; MCOM 20-230, 243; and two of the following: MCOM 20-303, 313, 343, 353; MKTG 55-330. (F, S)

450 Mass Communication Study Abroad (1-6 hours)

Courses taken in a foreign country, which complement Mass Communication studies. The number of hours assigned is contingent upon course rigor, and will be determined by the student's advisor and department chair. Course can be repeated for a new, advanced or expanded experience for a total of up to 6 hours. (F, S, SS)

452 Internship (1-3 hours)

Individual mass communication interests of the student are addressed through practical application through a media outlet appropriate for the student's area of concentration. Advisement required. This course is repeatable if the internship is with a different company or a different position within the previous company. Prerequisite: Advanced standing. (F, S, SS)

459 Independent Study in Journalism (1-3 hours)

Research in the area of journalism which is of particular interest to the advanced student capable of individual, directed study. Independent studies must be approved by a faculty supervisory committee; forms are available in the office manager's office. This course is repeatable for a new, advanced or expanded experience. Prerequisites: Advanced standing and consent of instructor. (F, S, SS)

484 Digital Cinematography (3 hours)

An in-depth study of the finer points of cinematography. Camera functions, lenses, advanced lighting techniques, contrast principles, advanced picture composition, camera movement and cinematography techniques and philosophies are covered. Prerequisite: MCOM 20-330 or 417. (S, alt. years)

490 Sound Design and Aesthetics (3 hours)

The culminating course in audio production, Sound Design and Aesthetics examines audio aesthetics and final stages of audio production through practical experience. Students take on the role of a producer and demonstrate their mastery of recording theories and practices. Topics include advanced mixing, mastering, multi-channel sound design, audio aesthetics and experimental sound. Prerequisite: MCOM 20-406 or 407. (S)

499 Field Experience in Mass Media (6-12 hours)

This course will offer an opportunity to gain practical experience in the field of mass media. The experience should include a minimum of 300 hours of hands-on supervised practical experience over a 12-16 week period. The experience will be directed and supervised by an approved mass communication professional as well as a department supervisor. Field experiences must be approved by a faculty supervisory committee; forms are available in the office manager's office. This course is repeatable for a new, advanced or expanded experience. Prerequisite: Department consent. (F, S, SS)

500 Special Offerings (1-4 hours)

Courses which are offered on only one occasion or variable issue-oriented courses which have the content described in the title. Credit and prerequisites as announced. This course is repeatable for a new, advanced or expanded experience.

The College of Education and Human Services

Dr. Joyce Piveral, Dean
Director, Teacher Education

- Department of Behavioral Sciences
- Department of Health and Human Services
- Department of Professional Education
- Career Education
- Horace Mann Laboratory School
- Phyllis and Richard Leet Center for Children and Families

College of Education and Human Services

“Teaching is our passion.....Learning is our profession.”

Dean: Joyce Piveral

The College of Education and Human Services includes the Departments of Behavioral Sciences; Health and Human Services; Professional Education; the Horace Mann Laboratory School; and the Phyllis and Richard Leet Center for Children and Families.

The college contributes to all facets of education within the University by providing courses which assist students in fulfillment of the General Education courses; offerings leading to the completion of B.A., B.S., and B.S.Ed. degrees; and elective coursework.

The professional preparation programs in the College of Education and Human Services and the Professional Education Unit are accredited by the Missouri State Board of Education (2014) and the National Council for Accreditation of Teacher Education (NCATE).

Vision Statement

The vision of the College of Education and Human Services is to provide highly competent professionals who are lifelong learners, reflective thinkers and ethical leaders exemplifying the ideas of literacy, scholarship and social justice in a diverse and ever-changing world.

Mission Statement

The mission of the College of Education and Human Services is to create learning communities in which students and professionals develop partnerships with families, communities, schools, businesses and other public agencies to assist students in acquiring knowledge, skills and values critical to a democratic society. As a result, we prepare students for leadership careers in business, industry, education, government, recreation, public service and health and wellness.

The goals of the college are to:

- Provide students a strong knowledge base in general education.
- Provide opportunities for specialization through majors and minors.
- Provide opportunities to develop values and ethics within the academic discipline.
- Provide opportunities for students and faculty to collaborate in research
- Provide services to the community and surrounding region.
- Provide opportunities for continuing and graduate education.

Vision Statement for the Professional Education Unit

The Northwest Missouri State University Professional Education Unit prepares highly effective, ethical, professional educators who possess the knowledge, skills and professional dispositions in order to embrace the responsibility for the learning of all children in a diverse and dynamic society.

Mission Statement for the Professional Education Unit

The Northwest Missouri State University Professional Education Unit will be a catalyst for education excellence by preparing PreK-12 professional educators who apply best practices to positively impact learning.

Our Pledge:

Based upon our vision and mission, the Northwest Missouri State University Professional Education Unit serves education candidates as our primary focus in order to develop professionals who:

- Possess the requisite level of knowledge, skills, and professional dispositions;
- Model integrity and professionalism;
- Promote social justice, the inherent worth of each individual, and the ideals of a democratic society;
- Facilitate an educational environment that embraces diversity;
- Collaborate and build partnerships with educational professionals, students, parents, communities, and other social agencies; and
- Use technology in a meaningful, purposeful, and authentic manner.

Continuous Improvement and Program Quality

The Professional Educational Unit (PEU) organizational structure is designed to maximize input from and empowerment of the entire education community. Cross-functional teams of college faculty, PreK-12 faculty, and students function to ensure continuous study and improvement of programs and processes around issues of importance to the college, such as technology integration, a curriculum representative of our nation's diversity and consistent evaluation of assessment data on program performance.

One source of input for program improvement is gathered from Culture of Quality comment cards provided throughout the University and available online at the Northwest website for use in bringing issues of importance to the attention of the appropriate administrator. Students may use these cards to share comments, suggestions or complaints regarding an office, department, program or activity in the University community. All Culture of Quality comment cards relating to teacher preparation are compiled for reporting of issues and opportunities for program or process improvements to the Council on Teacher Education.

Teacher Education Resources

Professional Education	Cheryl Malm, Assistant Director
Educational Field Experiences	Vickie Miller, Director
Horace Mann School	Jill Baker, Director
Teacher Certification	Kim Hullinger, Certification Officer
Teacher Education Student Services (TESS)	Amy Wilson, Coordinator
Alternative Certification	Coordinator
Early Childhood Center	Cindy Scarbrough, Director
Professional Education Unit Assessment	Michael McBride
Regional Professional Development Center	Rebecca Baldwin, Director

GENERAL INFORMATION

Admittance to Teacher Education

All students desiring to complete teacher certification requirements must make application to become officially admitted to the professional education program through the satisfactory completion of the “Application to Professional Education Program” form. This form may be obtained from the Teacher Education Student Services (TESS) Office, Administration Building, Room 348.

Application for admission to the professional education program should be initiated in the trimester following the one in which the eligible student completes 45 hours of academic credit or upon transfer of 45 hours of credit acceptable to this institution. All students desiring to become teacher candidates must demonstrate basic educational competencies prior to formal admission into the professional teacher education program. To do this applicants must:

1. Provide evidence (score) of completion of the ACT or SAT by having scores submitted to the University.
2. Successfully complete COM 29-102 Fundamentals of Oral Communication, with a grade of “C” or better.
3. Successfully complete EDCI 62-211 Observation and Activity in the Elementary School for elementary education programs; EDUC 61-262 Middle School Teaching Practicum I for middle school programs; EDUC 61-260 Secondary Teaching Practicum I for secondary education programs; EDUC 61-260 for elementary-secondary programs; EDCI 62-211 or EDUC 61-262 or EDUC 61-260 for special education programs; HPER 22-260 Observation and Practicum I in Physical Education for the Physical Education program.
4. Complete at least 45 semester hours of coursework and achieve a minimum major GPA and minimum GPA in education coursework with no more than seven hours below a “C” for all courses used to meet general education requirements. Reference minimum GPA in the Professional Education Handbook.
5. Complete two composition courses or one honors composition, a math course (MATH 17-171 for Elementary Education majors), COM 29-102 Fundamentals of Oral Communication, and recommended Institutional Requirements (EDUC 61-145 or EDCI 62-130, EDUC 61-252).
6. Achieve the minimum C-BASE (English, Mathematics, Science, Social Studies, Writing Sample) scores identified in the Professional Education Handbook.
7. Register for admission to the Professional Education Program at the Teacher Education Student Services (TESS) Office in Administration Building, Room 348, in accordance with the application procedure. This form will not be issued until all the above criteria have been met.
8. Take completed form to approved Professional Education advisor for signature and assignment of anticipated student teaching blocks or professional trimester.
9. Return signed form to the TESS Office for final approval by the TESS Office. A copy of the approved form will be sent to the student and advisor. Any changes in major or anticipated student teaching block/professional trimester must be submitted to and approved by the TESS Office once admission has been obtained.

Note: Students who do not meet the admissions standards listed above may qualify for “alternative” or “probationary” admission.

Alternative Admissions: The alternative admissions process is designed for applicants from a disadvantaged background (as provided in CBHE policy). In acting on such applications the Teacher Education Admissions Committee (TEAC) looks for evidence of extraordinary circumstances that are beyond the control of the student, and for specific data (leading indicators)

demonstrating ability to succeed in teacher education programming. The student must outline a credible plan by which they will overcome the particular academic challenge(s).

Probationary Admissions: Students seeking admission to the Teacher Education Program who fail to meet the minimum score required for any C-BASE subsection(s) for a third time, may not continue in the teacher education sequence. A student, who continues to be convinced that he/she can be successful in Teacher Education, should consult their academic advisor and may request a meeting with the TEAC to discuss probationary status. The student must complete the Application for Probationary Admission form, providing data-based reasons why they believe they can ultimately be successful. In granting probationary status, the TEAC may identify support processes, short courses, or other means by which the student can improve performance in the area(s) of deficiency. If a student is granted probationary admissions, he/she must meet admissions requirement within one trimester.

Students with handicapping conditions which prevent valid test results from the College BASE will be evaluated for basic educational competencies through appropriate testing instruments and/or procedures by psychometrists as designated and approved by the Council on Teacher Education.

Students must request testing arrangements to accommodate their special testing needs. Possible special arrangements include a large type edition of the College BASE, extended time, readers, signers, scribes, magnifying equipment and others.

Students pursuing an undergraduate degree (B.A., B.S., or B.S.Ed.) who meet Northwest professional education program requirements or those who have earned other baccalaureate degrees and have filed an academic contract or an approved graduate program to complete teaching certification requirements and have been admitted to the professional education program will receive a Missouri State Board of Education and an NCATE recommendation for certification.

Advanced Standing Requirement

All teacher education candidates must be formally admitted to the teacher education program to be eligible to enroll and participate in the following upper-division courses:

- EDUC 61-360 Secondary Teaching Practicum
- EDUC 61-461 School and Society
- EDUC 61-462 School and Society Seminar
- EDUC 61-520 Techniques of Classroom Management and Discipline
- EDCI 62-380 Diagnostic and Corrective Reading
- EDCI 62-384 Teaching Students in Cross Categorical Special Education:
Academic/Behavioral
- EDCI 62-385 Teaching Students in Cross Categorical Special Education:
Academic/Behavioral, Secondary
- EDCI 62-386 Teaching Students in Cross Categorical Special Education:
Functional/Physical
- EDCI 62-387 Teaching Students in Cross Categorical Special Education:
Functional/Physical, Secondary
- EDCI 62-407 Elementary School Language Arts Practicum
- EDCI 62-410 Elementary School Social Studies
- EDCI 62-420 Content Teaching in Elementary Schools
- EDCI 62-430 Teaching Writing in the Middle School
- EDCI 62-456 Practicum and Seminar in Elementary School Reading
- EDCI 62-470 Assessment in Special Education
- EDCI 62-471 Assessment in Special Education Lab
- EDCI 62-508 Transition/Career Education for Students with Disabilities

EDCI 62-511 Middle School Curriculum, Methods and Practicum
 EDCI 62-531 Curriculum and Methods in Early Childhood
 EDCI 62-540 Behavior Management Techniques
 EDCI 62-541 Identifying and Prescribing Instruction in Early Childhood Education
 EDCI 62-543 Practicum in Early Childhood Education
 EDCI 62-544 Practicum in Early Childhood Special Education
 EDCI 62-574 Teaching Math to Students with Disabilities
 Middle School/Secondary Education Methods Courses (AGRI 03-580, ART 13-480,
 COM 29-480, CSIS 44-580, ENGL 10-480, LANG 14-480, FCS 15-580,
 MATH 17-580, MATH 17-582, MUS 19-482, MUS 19-484, HPER 22-480,
 HPER 22-580, SCED 28-580, SCED 28-582, SOSOC 36-480)
 Directed Teaching (all areas)

Teacher Education Guidance Committee

This committee considers those professional education students who have deficiencies which are so serious that their success in the field of teaching would be in jeopardy. Such deficiencies may or may not relate to quantitative criteria.

The guidance committee is an ad hoc subcommittee of the Council on Teacher Education. Although the Council on Teacher Education has overall reviewing authority, this subcommittee, known as the Teacher Education Guidance Committee, develops and implements the necessary procedures. Committee members may include the assistant director of Teacher Education, chairperson of the Department of Professional Education, field experiences representative, chairperson or director of the student's major studies area, the student's advisor, and faculty who have taught the student. These committee members are included since they possess relevant information about the student.

Any University faculty member may refer a student to the Teacher Education Guidance Committee. The chairperson of the Council on Teacher Education will then structure the ad hoc committee and arrange a meeting to which the student may be called to appear. The chairperson will then report the decision of the committee to the student.

The committee will take one of four courses of action in regard to a student in question:

1. No action; the student would continue in the Teacher Education Program.
2. Recommend remedial actions that the student must take, to be followed by further screening.
3. Recommend remedial action and suspension from the Teacher Education Program until the student has met said requirements of the committee.
4. Recommend that the student be terminated from the Teacher Education Program, in which case he or she would not be permitted to complete any program from this University leading to educator certification.

All students will have the right to appeal in person regarding decisions rendered by the Teacher Education Guidance Committee. The purpose of the appeal is not to provide a secondary hearing of a case already heard by the committee, but rather to insure that students have been able to present all information pertaining to their case and that proper protocols have been followed. Students should provide a basis for their appeal by submitting either new information (e.g. documentation from a doctor, counselor, or official) pertaining to their case, or evidence of error or bias on the part of the previous committee. The students must initiate the appeals process by contacting the Office of the Dean of the College of Education and Human Services.

Directed Teaching

Prospective student teachers must attend an orientation session and make application for student teaching with the Director of Educational Field Experiences **in the trimester immediately prior** to the trimester in which student teaching is to be completed. The Director of Educational Field Experiences will establish a specific date for application each trimester. At the time of application, the student must secure the approval of the following persons: Registrar, major advisor (and minor advisor when appropriate), and TESS coordinator. The application form containing the approval route should be obtained online. An overall GPA and official admittance to the teacher education program are required (see “Admittance to Teacher Education” on page 314-316). A minimum GPA is also required for all courses taken at Northwest, all courses taken in each of the applicant’s subject areas and all courses in the professional education sequence. Reference minimum GPA in the Professional Education Handbook.

Secondary and elementary-secondary program majors are required to successfully complete EDCI 62-353; EDUC 61-520, and EDUC 61-461 in order to maintain eligibility to student teach. Elementary, middle school, secondary, and special education majors student teach an entire trimester. **Students may not have a choice of time or location for the directed teaching experience.** Students may suggest a location, however, final placement resides with the Director of Field Experiences.

Graduation Requirements

Students completing a teacher education program must complete as a part of their program a field experience in a diverse setting for a minimum of thirty (30) clock hours.

Teacher Education candidates must demonstrate their competence across the state’s MoSPE standards for teacher educators. This is accomplished through authentic assessments designated in the Professional Education Unit (PEU) assessment system and demonstrated through the Teacher Work Sample (TWS).

Certification Exit Requirements

In addition to satisfying the respective program requirements, each candidate seeking initial certification must achieve the minimum GPA requirement set by the State Board of Education to include: A minimum overall GPA; a minimum GPA in each of the certificate subject areas; and a minimum overall GPA and no grade lower than a “C” in professional education courses, i.e., those courses defined as foundations for teaching, teaching methods and techniques, and clinical experiences. Each candidate must also achieve a satisfactory score on the appropriate PRAXIS-II Test(s). Reference minimum GPA in the Professional Education Handbook.

Certification

Students admitted to the professional education program are subject to all prevailing academic and social regulations and policies of the University in addition to those specified for the various certificate program sequences. The teacher education candidate is also subject to any Missouri legislative action or State Board of Education policy that may become effective during the lifetime of this catalog. The candidate is responsible for meeting the requirements of endorsement area(s) at the time of application for an initial Missouri teaching certificate. In addition to the certificate requirements, the student must satisfy the degree requirements of the major department. The teacher education advisor in each department will guide the student in meeting all requirements. Additional information about certification is in the Professional Education Handbook and on the Northwest website at www.nwmissouri.edu/education/peu. For specific information regarding teacher certification, contact the Teacher Certification Officer.

The Missouri Department of Elementary and Secondary Education-Office of Educator Quality is working with a representative stakeholders group to redesign the standards for educator preparation including certification requirements. These changes and implementation schedule will be communicated to students through individual advising sessions, meetings, and/or other university communications. If there are any questions or concerns, please contact the Missouri Department of Educator Preparation in the Office of Educator Quality (eqprep@dese.mo.gov).

Post-Degree Certification

Individuals who hold baccalaureate degrees from regionally-accredited institutions may elect to pursue their initial teaching certificate by completing our teacher preparation program. Candidates are subject to the requirements as provided in this catalog. Candidates are required to fulfill all the general education requirements for certification as designated by the state of Missouri.

Title II Reporting

Northwest annually reports to the United States Department of Education on the performance of its Teacher Education graduates. The report is public information and is contained in its entirety on the following website: www.nwmissouri.edu/education/peu.

Course Description

College of Education and Human Services / 73

101 Freshman Seminar (1 hour)

Freshman Seminar is designed to introduce students to Northwest Missouri State University. Topics of exploration will include: adjustment to

University life, skills necessary to make the most of the University experience, General Education requirements, academic programs and advisement, career exploration, campus and community resources, taking advantage of cultural and extra-curricular events and assuming responsibility for one's own University experience.

Department of Behavioral Sciences

Chairperson: Carla Edwards

Faculty: Jerrold Barnett, Sarah Creason, Elizabeth Dimmitt, Don Ehlers, Alisha Francis, Rebecca Hendrix, Shelly Hiatt, Lauren Leach-Steffens, Roger Neustadter, Jennifer Pratt-Hyatt, Kyoung-Ho Shin, Linda Sterling, Michele Veasey, Ryan Wessell

Mission

The Department of Behavioral Sciences focuses on Student Success in Career, Academics and Personal Development.

Vision

We will facilitate comprehensive professional student-centered and challenging learning within the university environment.

Values

The Department of Behavioral Sciences values:

- Critical thinking and scientific mentality
- Professionalism and professional ethics
- Student organizations and student research
- Personal responsibility
- Collegiality and professional networks

DEGREE PROGRAMS

Majors develop research and writing skills, problem solving and higher-order thinking ability related to analyzing, synthesizing and evaluating information. Majors find jobs in administrative support, public affairs, education, business, sales, helping professions, service industries, health, the biological sciences and computer programming. Many work as employment counselors, corrections counselor trainees, interviewers, personnel analysts, probation officers and writers.

Test out is not available for any course offered by the department.

Major in Psychology, 30 hours: B.A.–Minor Required; 36 hours: B.S.–Minor Required

Comprehensive Major in Psychology/Sociology, 54 hours: B.A., B.S.–No Minor Required

Comprehensive Major in Industrial Psychology, 60 hours: B.S.–No Minor Required

Comprehensive Major in Psychology and Biology: B.S., 66-69 hours – individual programs of study are arranged in both departments

Major in Child and Family Studies, 38-40 hours: B.S.–Minor Required (curriculum pending)

Minor in Psychology, 24 hours

Minor in Sport Psychology, 24 hours – also listed in Department of Health and Human Services

Minor in Gerontology, 24 hours – also listed in Department of Health and Human Services.

Minor in Sociology, 24 hours

Minor in Administration of Child Care Programs, 24 hours (curriculum pending)

Minor in Family and Life Resource Management, 24 hours (curriculum pending)

Advanced Standing Requirement

For all undergraduate psychology degree programs (excludes child and family studies majors):

1. Completion of all Directed General Education Courses with a minimum GPA of 2.00;
2. Completion of PSYC 08-103 General Psychology, and at least one, but not more than two, other psychology courses; and
3. A 2.00 GPA for any psychology courses taken prior to declaring the major.

Exit Requirement

All graduating seniors with the exception of biology/psychology, industrial/organizational psychology, and child and family studies majors must take the ACAT subject matter test and provide the department with test results prior to graduation approval.

MAJORS

Major in Child and Family Studies, 38-40 hours: B.S.– Minor Required

Curriculum not yet approved. Refer to online catalog for Fall 2012 Board of Regents approved curriculum.

Major in Psychology, 36 hours: B.S.–Minor Required

CIP: 420101

This major can be used either as a pre-professional or terminal degree, depending on the student's needs. Student should consult with their academic advisor, who can assist in course selection.

Directed General Education Course	Semester Hours
MATH 17-114 General Statistics	3
Required Courses	
PSYC 08-234 Introduction to Psychological Experimentation	3
PSYC 08-334 Experimental Psychology	3
PSYC 08-423 History and Systems of Psychology	3

Students must select six hours from each of the four categories below for a total of 24 hours:

Biological/Cognitive–select six hours from the following list:	6
PSYC 08-310 Cognitive Psychology (3)	
PSYC 08-343 Biological Psychology (3)	
PSYC 08-344 Drugs, Brain, and Behavior (3)	
PSYC 08-443 Advanced Biological Psychology (3)	

Individual—select six hours from the following list:	6
PSYC 08-201 Psychology in Films (3)	
PSYC 08-212 Personal Adjustment (3)	
PSYC 08-223 Abnormal Psychology (3)	
PSYC 08-305 Introduction to School Counseling (3)	
PSYC 08-323 Child and Adolescent Psychopathology (3)	
PSYC 08-335 Psychological Assessment (3)	
PSYC 08-363 Psychology of Personality (3)	
PSYC 08-438 Principles of Counseling (3)	
Developmental/Social—select six hours from the following list:	6
PSYC 08-301 Career Paths and Preparations (3)	
PSYC 08-315 Psychology of Groups and Teams (3)	
PSYC 08-333 Developmental Psychology (3)	
PSYC 08-383 Psychology of Aging (3)	
SOC 35-365 Social Psychology (3)	
Learning/Applied—select six hours from the following list:	6
PSYC 08-313 Industrial and Organizational Psychology (3)	
PSYC 08-325 Sport Psychology (3)	
PSYC 08-345 Disaster Psychology (3)	
PSYC 08-353 Psychology of Gender (3)	
PSYC 08-370 Applied Behavior Analysis (3)	
PSYC 08-495 Field Placement/Internship (3)	
SCGD 68-520 Drug Prevention and Education (3)	
Take three hours of approved psychology electives	3
Total Major Requirements	36

Major in Psychology, 30 hours: B.A.—Minor Required

CIP: 420101

This major can be used either as a pre-professional or terminal degree, depending on the student's needs. Student should consult with their academic advisor, who can assist in course selection.

Directed General Education Course	Semester Hours
MATH 17-114 General Statistics	3
Required Courses	
PSYC 08-234 Introduction to Psychological Experimentation	3
PSYC 08-334 Experimental Psychology	3
PSYC 08-423 History and Systems of Psychology	3

Students must select three to nine hours from each of the four categories below for a total of 21 hours:

Biological/Cognitive—select three to nine hours from the following list:	3-9
PSYC 08-310 Cognitive Psychology (3)	
PSYC 08-343 Biological Psychology (3)	
PSYC 08-344 Drugs, Brain, and Behavior (3)	
PSYC 08-443 Advanced Biological Psychology (3)	
Individual—select three to nine hours from the following list:	3-9
PSYC 08-201 Psychology in Films (3)	
PSYC 08-212 Personal Adjustment (3)	
PSYC 08-223 Abnormal Psychology (3)	
PSYC 08-305 Introduction to School Counseling (3)	
PSYC 08-323 Child and Adolescent Psychopathology (3)	

PSYC 08-335 Psychological Assessment (3)

PSYC 08-363 Psychology of Personality (3)

PSYC 08-438 Principles of Counseling (3)

Developmental/Social—select three to nine hours from the following list: 3-9

PSYC 08-301 Career Paths and Preparations (3)

PSYC 08-315 Psychology of Groups and Teams (3)

PSYC 08-333 Developmental Psychology (3)

PSYC 08-383 Psychology of Aging (3)

SOC 35-365 Social Psychology (3)

Learning/Applied—select three to nine hours from the following list: 3-9

PSYC 08-313 Industrial and Organizational Psychology (3)

PSYC 08-325 Sport Psychology (3)

PSYC 08-345 Disaster Psychology (3)

PSYC 08-353 Psychology of Gender (3)

PSYC 08-370 Applied Behavior Analysis (3)

PSYC 08-495 Field Placement/Internship (3)

SCGD 68-520 Drug Prevention and Education (3)

Total Major Requirements 30

Comprehensive Major in Psychology/Sociology, 54 hours: B.A., B.S.—No Minor Required

CIP: 422707

This major consists of psychology and sociology courses specifically designed to provide students with a broad exposure to the behavioral sciences. Students are required to take 27 semester hours from psychology and 27 semester hours from sociology.

Directed General Education Course Semester Hours

MATH 17-114 General Statistics 3

SOC 35-101 General Sociology 3

Required Courses

PSYC 08-234 Introduction to Psychological Experimentation 3

PSYC 08-334 Experimental Psychology 3

PSYC 08-423 History and Systems of Psychology 3

SOC 35-330 Social Stratification 3

SOC 35-450 Research Methods in Sociology 3

SOC 35-455 Sociological Theory 3

Psychology Requirements—select three hours from each of the four categories below for a total of 12 hours:

Biological/Cognitive—select three hours from the following list: 3

PSYC 08-310 Cognitive Psychology (3)

PSYC 08-343 Biological Psychology (3)

PSYC 08-344 Drugs, Brain, and Behavior (3)

PSYC 08-443 Advanced Biological Psychology (3)

Individual—select three hours from the following list: 3

PSYC 08-201 Psychology in Films (3)

PSYC 08-212 Personal Adjustment (3)

PSYC 08-223 Abnormal Psychology (3)

PSYC 08-305 Introduction to School Counseling (3)

PSYC 08-323 Child and Adolescent Psychopathology (3)

PSYC 08-335 Psychological Assessment (3)	
PSYC 08-363 Psychology of Personality (3)	
PSYC 08-438 Principles of Counseling (3)	
Developmental/Social—select three hours from the following list:	3
PSYC 08-301 Career Paths and Preparations (3)	
PSYC 08-315 Psychology of Groups and Teams (3)	
PSYC 08-333 Developmental Psychology (3)	
PSYC 08-383 Psychology of Aging (3)	
Learning/Applied—select three hours from the following list:	3
PSYC 08-313 Industrial and Organizational Psychology (3)	
PSYC 08-325 Sport Psychology (3)	
PSYC 08-345 Disaster Psychology (3)	
PSYC 08-353 Psychology of Gender (3)	
PSYC 08-370 Applied Behavior Analysis (3)	
PSYC 08-495 Field Placement/Internship (3)	
SCGD 68-520 Drug Prevention and Education (3)	
Take six hours of approved psychology electives	6
Sociology Requirements—select three hours from each of the four categories below for a total of 12 hours:	
Society—select three hours from the following list:	3
SOC 35-108 General Anthropology (3)	
SOC 35-365 Social Psychology (3)	
SOC 35-440 Fundamentals of Social Work Practice (3)	
SOC 35-495 Field Placement/Internship (3)	
Family Issues—select three hours from the following list:	3
SOC 35-217 The Family (3)	
SOC 35-318 Social and Cultural Foundations of Personality (3)	
SOC 35-320 Delinquency (3)	
SOC 35-443 Family Problems in Modern Society (3)	
Social Issues—select three hours from the following list:	3
SOC 35-230 Social Problems (3)	
SOC 35-316 Urban Sociology (3)	
SOC 35-323 Deviant Behavior (3)	
SOC 35-337 Race, Ethnic and Gender Issues in Modern Society (3)	
Crime and Society—select three hours from the following list:	3
SOC 35-240 Introduction to Corrections (3)	
SOC 35-375 Police and Society (3)	
SOC 35-380 Sociology of Health and Illness (3)	
SOC 35-421 Criminology (3)	
Take six hours of approved sociology electives	6
Total Major Requirements	54

**Comprehensive Major in Industrial Psychology, 60 hours:
B.S.—No Minor Required**

CIP: 422804

This major combines knowledge of business practices with psychology's understanding of behavior and mental processes, providing a comprehensive perspective on behavior in organizations. Students are prepared for a variety of jobs in business, government, and other settings.

Students choosing a Comprehensive Major in Industrial Psychology must complete the following major requirements:

Directed General Education Courses	Semester Hours
PSYC 08-103 General Psychology	3
ECON 52-150 General Economics I	3
MATH 17-114 General Statistics	3
Required Courses	
ACCT 51-201 Accounting I	3
ACCT 51-202 Accounting II	3
ECON 52-151 General Economics II	3
FIN 53-311 Business Law I	3
FIN 53-324 Fundamentals of Business Finance	3
MATH 17-118 College Algebra	3
MGMT 54-310 Managerial Communication	3
MGMT 54-313 Principles of Management	3
MGMT 54-314 Human Resource Management	3
MGMT 54-320 Negotiations	3
MKTG 55-330 Principles of Marketing	3
PSYC 08-223 Abnormal Psychology	3
PSYC 08-234 Introduction to Psychological Experimentation	3
PSYC 08-310 Cognitive Psychology	3
PSYC 08-313 Industrial and Organizational Psychology	3
PSYC 08-315 Psychology of Groups and Teams	3
PSYC 08-363 Psychology of Personality	3
PSYC 08-423 History and Systems of Psychology	3
SOC 35-365 Social Psychology	3
SOC 35-450 Research Methods in Sociology	3
Total Major Requirements	60

Comprehensive Major in Biology/Psychology, 66-69 hours: B.S.—No Minor Required

CIP: 422706

This major allows students to complete individual programs of study arranged by advisors in both the Department of Natural Sciences and the Department of Behavioral Sciences. While requiring students to complete half their class work as advised by each department, the number of elective hours gives this 66-69 hour program of study flexibility that allows students to tailor the major to their individual and specific academic needs. This program provides interdisciplinary training for a future career and/or graduate level training in psychology, biology, allied health or related fields. Students are urged to see advisors in both departments at an early date to contract a program of study.

	Semester Hours
Directed General Education Courses	
BIOL 04-112/113 General Botany/Lab	4
CHEM 24-114/115 General Chemistry /Lab	4
MATH 17-114 General Statistics	3
PSYC 08-103 General Psychology	3

Required Courses for Psychology	18
PSYC 08-223 Abnormal Psychology (3)	
PSYC 08-234 Introduction to Psychological Experimentation (3)	
PSYC 08-333 Developmental Psychology (3)	
PSYC 08-334 Experimental Psychology (3)	
PSYC 08-343 Biological Psychology (3)	
PSYC 08-443 Advanced Biological Psychology (3)	
Required Courses for Biology	8
BIOL 04-114/115 General Zoology and Laboratory (4)	
BIOL 04-350 Genetics (3)	
BIOL 04-491 Biological Science Seminar (1)*	
Biology Electives (12 hours from the following or other advisor approved courses)	12
BIOL 04-104 Medical Terminology (3)	
BIOL 04-140 General Microbiology (4)	
BIOL 04-301 Health Science Internship (1-3)	
BIOL 04-310 Cell Biology (4)	
BIOL 04-322 Comparative Anatomy (4)	
BIOL 04-418 Vertebrate Histology (4)	
BIOL 04-436 Human Anatomy (4)	
BIOL 04-438 Human Physiology (4)	
BIOL 04-440 Molecular Biology (4)	
BIOL 04-444 Immunology (4)	
Psychology Electives (6 hours from the following or other advisor approved courses)	6
PSYC 08-310 Cognitive Psychology (3)	
PSYC 08-323 Child and Adolescent Psychopathology (3)	
PSYC 08-335 Psychological Assessment (3)	
PSYC 08-344 Drugs, Brain, and Behavior (3)	
PSYC 08-353 Psychology of Gender (3)	
PSYC 08-363 Psychology of Personality (3)	
PSYC 08-370 Applied Behavior Analysis (3)	
PSYC 08-383 Psychology of Aging (3)	
PSYC 08-438 Principles of Counseling (3)	
SOC 35-365 Social Psychology (3)	
Collateral Requirements	16-17
MATH 17-118 College Algebra (3)	
CHEM 24-116/117 General Chemistry II/Lab (5)	
CHEM 24-242/243 Organic Chemistry/Lab (4) OR	
CHEM 24-342/343 Organic Chemistry I/Lab (5)	
PHYS 25-110/111 General Physics I/Lab (4)	
Collateral Electives (choose two)	6-8
CHEM 24-344 Organic Chemistry II (3)	
CHEM 24-362/363 Elementary Biochemistry/Lab (4) OR	
CHEM 24-562 General Biochemistry (3)	
PHYS 25-112/113 General Physics II/Lab (4)	
Total Major Requirements	66-69
*Must take Biology ACAT in this course	

MINORS

Minor in Administration of Child Care Programs, 24 hours: B.S.

Curriculum not yet approved. Refer to the online catalog for Fall 2012 Board of Regents approved curriculum.

Minor in Family Life and Resource Management, 24 hours: B.S.

Curriculum not yet approved. Refer to the online catalog for Fall 2012 Board of Regents approved curriculum.

Minor in Psychology, 24 hours

CIP: 420101

Required Courses	Semester Hours
PSYC 08-234 Introduction to Psychological Experimentation	3
Students must select three hours from each of the four categories below for a total of 12 hours:	
Biological/Cognitive—select three hours from the following list:	3
PSYC 08-310 Cognitive Psychology (3)	
PSYC 08-343 Biological Psychology (3)	
PSYC 08-344 Drugs, Brain, and Behavior (3)	
PSYC 08-443 Advanced Biological Psychology (3)	
Individual—select three hours from the following list:	3
PSYC 08-201 Psychology in Films (3)	
PSYC 08-212 Personal Adjustment (3)	
PSYC 08-223 Abnormal Psychology (3)	
PSYC 08-305 Introduction to School Counseling (3)	
PSYC 08-323 Child and Adolescent Psychopathology (3)	
PSYC 08-335 Psychological Assessment (3)	
PSYC 08-363 Psychology of Personality (3)	
PSYC 08-438 Principles of Counseling (3)	
Developmental/Social—select three hours from the following list:	3
PSYC 08-301 Career Paths and Preparations (3)	
PSYC 08-315 Psychology of Groups and Teams (3)	
PSYC 08-333 Developmental Psychology (3)	
PSYC 08-383 Psychology of Aging (3)	
SOC 35-365 Social Psychology (3)	
Learning/Applied—select three hours from the following list:	3
PSYC 08-313 Industrial and Organizational Psychology (3)	
PSYC 08-325 Sport Psychology (3)	
PSYC 08-345 Disaster Psychology (3)	
PSYC 08-353 Psychology of Gender (3)	
PSYC 08-370 Applied Behavior Analysis (3)	
PSYC 08-495 Field Placement/Internship (3)	
SCGD 68-520 Drug Prevention and Education (3)	
Take nine hours of approved psychology electives	9
Total Minor Requirements	24

Interdisciplinary Minor in Sport Psychology, 24 hours

CIP: 310508

	Semester Hours
Required Courses	12
PSYC 08-234 Introduction to Psychological Experimentation (3)	
PSYC 08-325 Sport Psychology (3)	
HPER 22-254 Anatomy and Physiology (3)	
HPER 22-512 Socio-Psychological Aspects of Human Performance (3)	
Select six hours from each of the categories below:	12
Exercise Science—select six hours from the following list:	
HPER 22-332 Physiology of Exercise (3)	
HPER 22-336 Basic Biomechanics (3)	
HPER 22-382 Care and Prevention of Athletic Injuries (3)	
HPER 22-555 Intervention and Strategies for Health Behavior Change (3)	
FCS 15-234 Nutrition and Diet Behavior (2)	
Psychology—select six hours from the following list:	
PSYC 08-212 Personal Adjustment (3)	
PSYC 08-223 Abnormal Psychology (3)	
PSYC 08-315 Psychology of Groups and Teams (3)	
PSYC 08-363 Psychology of Personality (3)	
PSYC 08-438 Principles of Counseling (3)	
SOC 35-365 Social Psychology (3)	
Total Minor Requirements	24

Interdisciplinary Minor in Gerontology, 24 hours

CIP: 301101

	Semester Hours
Required Courses	15
FCS 15-216 Gerontology (3)	
FCS 15-540 The Adult Learner (3)	
PSYC 08-383 Psychology of Aging (3)	
COM 29-553 Language, Speech and Hearing of the Exceptional Child and Adult (3)	
HPER 22-556 Health in Later Years (3)	
Choose an additional 9 hours from the following list:	9
(Courses may be selected from each of the areas or all 9 hours may be selected within an area to support a career direction)	
Health Aspects:	
FCS 15-110 Family and Individual Wellness (2)	
FCS 15-234 Nutrition and Diet Behavior (2)	
BIOL 04-104 Medical Terminology (3)	
HPER 22-550 Community Health (3)	
REC 45-461 Therapeutic Recreation Interventions with the Elderly (3)	
Psychological Aspects:	
*FCS 15-214 Human Development (3)	
PSYC 08-223 Abnormal Psychology (3)	
*PSYC 08-333 Developmental Psychology (3)	
PSYC 08-344 Drugs, Brain and Behavior (3)	
PSYC 08-438 Principles of Counseling (3)	

Social Aspects:

- FCS 15-315 Social Aspects of Aging and Families (3)
- FCS 15-526 Independent Living for Special Populations (3)
- COM 29-325 Listening Behavior and Skills (3)
- COM 29-336 Nonverbal Communication (3)
- REC 45-365 Leisure and Aging (3)
- REC 45-540 Group Dynamics (3)

Total Minor Requirements**24**

NOTE: To qualify for the undergraduate Certificate Program in Gerontology, the student must complete a 3 credit hour practicum/internship providing experiences with both well and frail older persons. If this is not a part of the practicum/internship required in your major then see your minor advisor in regard to meeting this requirement.

*Only majors other than Child and Family Studies, Foods and Nutrition, and Psychology may select one of these courses.

Minor in Sociology, 24 hours

CIP: 451101

Required Courses**Semester Hours**

*SOC 35-101 General Sociology	3
SOC 35-108 General Anthropology	3
SOC 35-217 The Family	3
SOC 35-330 Social Stratification	3
SOC 35-365 Social Psychology	3
SOC 35-440 Foundations of Social Work Practice	3
SOC 35-455 Sociological Theory	3
Approved electives in Sociology (See minor advisor)	3

Total Major Requirements**24**

*Cannot be used to fulfill any General Education requirement.

Course Descriptions

Psychology / 08**103 General Psychology (3 hours)**

A survey course designed to introduce students to the foundation of human and animal behavior. Students will study the content and the processes used by behavioral scientists to discover, describe, explain and predict human behavior. The course provides an environment in which students learn how to critically evaluate the biological, social/cultural and psychological variables that contribute to behavior and to reflect on those to develop an informed sense of self and others. (F, S, SS)

201 Psychology in Films (3 hours)

Designed to allow students to apply the principles learned in general psychology to analyze the por-

trayal of behavior and mental processes in popular films. Films will be chosen to present various models and views of a wide variety of psychological principles. Prerequisite: PSYC 08-103. (S)

212 Personal Adjustment (3 hours)

Involves clarification of the assumptions, concepts and problems associated with personal adjustment and the field of mental health. It will include some history, definitions of mental health and mental health models. Emphasis is on preventive mental health, personal adjustment and community-based treatment facilities. Prerequisite: PSYC 08-103. (S)

223 Abnormal Psychology (3 hours)

Studies behavior patterns considered by society to be maladaptive. The emphasis is on diagnostic

categories, relating diagnostic categories to symptom patterns and studying the etiology of symptom patterns. Therapeutic approaches are also presented. Prerequisite: PSYC 08-103 or 303. (F, S, SS)

234 Introduction to Psychological Experimentation (3 hours)

Designed to continue to develop student's critical thinking skills by introducing them to the scientific method and the research and data analysis techniques commonly used in psychology. Prerequisites: PSYC 08-103 and MATH 17-114. (F, S, SS)

301 Career Paths and Preparations (3 hours)

This course provides an examination of the various career paths within psychology. Students will have the opportunity to explore their skills, interests, and values while developing a tentative career plan. Emphasis is placed on preparation for graduate study as well as a career options within psychology. Prerequisite: PSYC 08-103. (F, S)

303 Educational Psychology (3 hours)

Emphasizes understanding and application of psychological principles that affect classroom instruction. Subject areas studied are cognitive development, learning, motivation and evaluation. Intended for prospective teachers and others interested in psychology as applied to education. (F, S, SS)

305 Introduction to School Counseling (3 hours)

A general orientation to and an exploration of the roles and functions of the K-12 school counselor. Prerequisites: PSYC 08-303 or 234.

310 Cognitive Psychology (3 hours)

Introduces students to cognitive processes including perception, attention, memory, mental imagery, problem solving, language and decision making. The class balances theory (model building), research (inductive/deductive reasoning), and application to areas such as social psychology, law, education and engineering. Prerequisites: PSYC 08-103 or 303.

312 Child Psychology (2 hours)

An introduction to human development prior to adolescence. Emphasis is placed upon understanding the genetic and environmental contributions to behavior, physical, social, intellectual, emotional and moral. The perspective used includes research, interpersonal and institutional components. Intended for prospective elementary school teachers. Prerequisite: PSYC 08-303. (S)

313 Industrial and Organizational Psychology (3 hours)

Organizations are a common part of day-to-day life. Regardless of your perspective (employee, manager, customer, spectator, etc.), there will be numerous times when you want to understand policies, procedures, and events within those organizations. This course applies theories and methods from Psychology to contribute to that understanding. Prerequisite: PSYC 08-103. (F)

315 Psychology of Groups and Teams (3 hours)

This course will draw upon research from a number of disciplines to understand behavior within the context of groups and teams. Given that understanding, students will discuss different types of groups and consider the ways in which Psychology can be applied to analyze and improve various aspects of group-based activities. (F)

317 Psychology of Early Adolescence (2 hours)

Survey of the developmental transformations from childhood to adolescence. The class examines the physical, cognitive, emotional and social changes unique to early adolescents. Intended for prospective middle school teachers. Prerequisite: PSYC 08-303. (F)

322 Adolescent Psychology (2 hours)

Examines the physical, mental, emotional and social life of the individual from puberty to legal adulthood and the influence of this growth period on the personal habits, attitudes, interests and social adjustments. Intended for prospective high school teachers. Attention is given to factors in the home, community and school that influence adolescent behavior and personality. Prerequisite: PSYC 08-303. (F, S)

323 Child and Adolescent Psychopathology (3 hours)

An overview of child and adolescent psychopathology. Provides students with a foundation of knowledge regarding the theoretical explanations of child and adolescent behaviors, as well as the assessment, diagnosis and treatment of these behaviors. Students will gain a better understanding of mental health issues facing children and adolescents. Prerequisite: PSYC 08-103 or 303. (F, S)

325 Sport Psychology (3 hours)

This course will examine psychological principles and techniques applied to sport performance. Special attention will be given to psychological

skills training techniques, psychological aspects of injury and rehabilitation, burnout, and athletic career termination issues. (F, S)

333 Developmental Psychology (3 hours)

A comprehensive survey of human developmental principles emerging during conception and continuing through to the process of death. Emphasis is placed upon the physical, intellectual, cognitive and social-emotional growth from research, theoretical and applied viewpoints based upon empirically demonstrated psychological knowledge. Prerequisite: PSYC 08-103 or 303. (F, S, SS)

334 Experimental Psychology (3 hours)

Designed to build on concepts and skills covered in Psych 08-234. Focuses on the design/logic of experimental design, internal and external validity, how to collect meaningful psychological data, how to analyze and interpret data, and the role of theory in psychology. Prerequisites: PSYC 08-103, 234, and MATH 17-114. (F, S)

335 Psychological Assessment (3 hours)

Surveys the historical and cultural influences related to philosophy and application of testing, statistical issues in test construction and administration, types of psychological tests and their uses, psychosocial evaluations related to psychological tests of measurements, ethical and legal concerns in psychological testing and assessment, and careers in assessment. Prerequisites: PSYC 08-103 and 234.

343 Biological Psychology (3 hours)

An examination of the relationship between behavior, thinking, and emotion and the underlying biological mechanisms of behavior, including elementary neuroanatomy and neurophysiology. Prerequisites: PSYC 08-103 and 234. (S)

344 Drugs, Brain and Behavior (3 hours)

Examination of the relationship between neuronal communication, drug use and behavior. Focuses on a description of basic neuroanatomy, an explanation of nervous system functioning, and how both legal and illicit drugs influence this communication and resulting behavior, thinking and emotion. Prerequisites: PSYC 08-103 and 234. (F)

345 Disaster Psychology (3 hours)

A broad introduction to the field of disaster psychology by examining theory, research and practice in disaster psychology. Focuses on the impact of

a disaster on both responders and those directly impacted by the event. Discusses intervention strategies and the role of relief organizations. Prerequisites: PSYC 08-103.

353 Psychology of Gender (3 hours)

Explores recent literature and research related to biological and cultural factors influencing the development of gender roles, identities and preferences. Explores stereotypes of masculinity and femininity and how these affect our lives at the personal, social and institutional levels. Psychological aspects of gender communication, conflict resolution, sexual behavior, marriage and family issues are also introduced. Prerequisite: PSYC 08-103. (S)

360 Key Issues in Psychology (1-3 hours)

Critical examination of status of theory and research involving key issues of contemporary knowledge in psychology. Prerequisites as announced. Repeatable for topic change.

363 Psychology of Personality (3 hours)

Examines individual patterns of behavior and reviews diverse theoretical positions that explain personality in terms of individual dynamics, biology, culture and cognition. Emphasis is placed on understanding the research and philosophy of personality in the context of widely recognized theories of psychology. A survey of relevant and current research is included. Prerequisite: PSYC 08-103. (F, S, SS)

370 Applied Behavior Analysis (3 hours)

A systematic review of the facts, concepts, and principles which describe classical and operant conditioning, extinction, generalization/discrimination processes, focusing on their applications to therapy, self-improvement, education, parenting, and animal training. Prerequisite: PSYC 08-103.

383 Psychology of Aging (3 hours)

A comprehensive survey of the changes older adults experience in the areas of physical decline, intellectual/cognitive functioning, socioeconomic adjustment and death/dying. Prerequisite: PSYC 08-103.

419 Independent Study (1-3 hours)

Allows an intensive, in-depth study by junior and senior psychology majors and minors in any area of their choice subject to the permission of the professor and the department chairperson. Minimum of 13 hours in psychology and consent of chairperson.

May be repeated for a total of 3 hours for new experience. Prerequisite: PSYC 08-103. (F, S, SS)

423 History and Systems of Psychology (3 hours)

This course is an in-depth survey of the historical foundations of modern psychology, discussing the influence of important people, ideas, and schools of thought within their social, cultural, political, and economic context. With an emphasis on practical application of historical principles and ideals, the course will include historically engaging experiences as well as philosophical and physiological perspectives that led to the approaches and ways of thinking. Prerequisites: PSYC 08-103. (F, S, SS)

438 Principles of Counseling (3 hours)

Provides students with a foundation of information related to the professional development of counselors and therapists. Provides tools and ethical guidelines required in the counseling and psychotherapy professions. Covers career paths of professional counselors, reviews counseling theory, and how active listening is used by the beginning therapist. Prerequisites: PSYC 08-103. (F)

443 Advanced Biological Psychology (3 hours)

An in-depth analysis of the anatomical and physiological correlates of behavior. Emphasis is placed on the physiological basis of sensation and perception, the brain mechanisms and control of movement, the genetic basis of personality, the biological basis for alcohol and drug dependency, neuropsychological disorders and an introduction to psychopharmacology. Other topics may be included. Prerequisites: PSYC 08-103, 234 and 343. (F)

495 Field Placement/Internship (3 hours)

Placement in approved facility offering psychological or human service activities. Prerequisite: Completion of 20 hours in psychology courses and instructor approval. Repeatable for new experience. (F, S, SS)

500 Special Offering (1-4 hours)

Prerequisites: PSYC 08-103 and consent of instructor and department chairperson. Repeatable with topic change.

526 Psychology of Leadership (3 hours)

Course is designed for individuals who wish to pursue leadership positions, using research supported psychological principles and theory, in community

service, education, business management, and/or the helping professions. Focuses on the application and utilization of basic psychological concepts and principles related to the career area of interest. Prerequisite: Senior or graduate standing.

School Counseling / 68

520 Drug Prevention and Education in Schools (3 hours)

Prepares teachers and other individuals to work with prevention planning in schools and communities. Emphasis is on tools necessary for proposing and carrying out a prevention program targeting school age children and their parents. Focuses on best practices that have empirical support in the contest of community and school needs. Introduces grant writing and data driven decision making tools. Prerequisite: Senior or graduate standing. (S)

570 Principles and Practices of the K-12 Guidance Program (3 hours)

Provides a general orientation to the role and function of the K-12 school counselor. Both the functions of guidance and counseling are examined. Prerequisite: Senior or graduate standing. (SS)

Sociology / 35

101 General Sociology (3 hours)

This course is designed to provide a greater understanding of the social world. Sociology is defined as a scientific study of human behavior in social life with an assumption that there are social forces which shape and influence patterns of behavior and ways of thinking. These include social forces such as culture, stratification, age, gender, race and ethnicity, and globalization. Several sociological perspectives serve as the point of reference by which human behavior at the micro and macro level are better understood. (F, S, SS)

217 The Family (3 hours)

The family is studied as a historical and changing social institution. The structure and patterns of the family in modern life are examined. Prerequisite: SOC 35-101. (F, S)

230 Social Problems (3 hours)

This course is designed to explore competing explanations for the causes and/or influences of, and cures for social problems at the micro and macro levels. The course critically analyzes dominant definitions of social problems, the political and

economic roots of these problems, and the public policies aimed at reducing them. Prerequisite: SOC 35-101. (F)

240 Introduction to Corrections (3 hours)

An introduction to the history, concept and realities of crime and punishment with an emphasis on the increasing social significance and diversity of prisons and the penal system in American society. Prerequisites: PSYC 08-103 or SOC 35-101.

316 Urban Sociology (3 hours)

Course is designed to provide students with a better understanding of the structure and function of urban areas in society. Examines the dynamic relations of cities, not only in the U.S., but in the Third World. Discussions on urban processes and urban life will cover theoretical approaches and various urban problems such as poverty, ethnic minority concentration, crime in urban settings, and recent developments in urban sociology, including new network approaches to city systems and global cities. Prerequisite: SOC 35-101.

318 Social and Cultural Foundations of Personality (3 hours)

This course examines the historical development of youth in Western culture and the status of youth in contemporary American society. Focuses on males and females growing up in America. Prerequisite: SOC 35-101 or 108. (F)

320 Delinquency (3 hours)

Theories and causes of delinquency. Examines antisocial behavior and delinquent behavior in gangs. Prerequisite: SOC 35-101. (S)

323 Deviant Behavior (3 hours)

An examination of rule breaking behavior. This course will focus on theories of criminal, noncriminal and organizational deviance. In addition, this class will examine in some detail a variety of deviant behaviors. Included among the forms of deviance addressed are mental illness, sex related deviance, corporate crime, white-collar crime, governmental deviance, organized crime and common crime. Prerequisite: SOC 35-101. (S)

330 Social Stratification (3 hours)

Structures and functions of social inequality and their differential impact on life patterns. Includes theories of stratification, social class identification, social-psychological and structural variables in social mobility, life patterns in each social class and potential for change. Prerequisite: SOC 35-101. (F, S)

337 Race, Ethnic and Gender Issues in Modern Society (3 hours)

Designed to develop the student's awareness of his/her own identity in terms of ethnicity and to enhance a positive sense and recognition of the different experiences and values of the diverse minority groups within American society. Examines the beliefs and values which are embedded in various types of stereotypes and prejudice. Ethnic minority groups such as African Americans, Hispanic Americans and Asian Americans will be studied. Also theoretical and social issues on women as a minority will be discussed. Prerequisite: SOC 35-101.

365 Social Psychology (3 hours)

An introductory course probing the development of human behavior in its social context. Significant theories and methodologies in social psychology developed within the disciplines of sociology and psychology are considered, along with representative research in areas such as social perception and attribution, interpersonal attraction, aggression, altruism, role- and self-development and group processes. Prerequisites: SOC 35-101 or PSYC 08-103. (F, S, SS)

375 Police and Society (3 hours)

This is an introduction to the police in American society. The material is organized around the development and structure of the police as an integral part of the criminal justice process, with an emphasis on large municipal departments. The course addresses issues such as the tension between the coercive power of the police and the expectation of freedom in American society; the ability of the police, as organized, to deal with crime and disorder; the nature of role expectations and role conflict between the police and the public; the nature and effects of what is called "the police subculture," and issues of profiling, stereotyping, prejudice, and corruption. Prerequisite: SOC 35-101.

380 Sociology of Health and Illness (3 hours)

This course is designed to explore and investigate the social, cultural, and political aspects of health, illness, and the health care system. Topics in the course include social factors and the meaning of health and illness, medical dilemmas and debates, the self and illness, disparities in health and the health care systems in terms of age, gender, race/ethnicity, socioeconomic status, and alternatives to dominant understandings of health and healing. Prerequisite: SOC 35-101.

421 Criminology (3 hours)

Examines the theory and research regarding the biological, psychological and sociological patterns of criminal behavior. Patterns of property crime, corporate crime and violent crime will be examined. Prerequisite: SOC 35-101. (F)

440 Fundamentals of Social Work Practice (3 hours)

Examines current private and public social welfare policy, organization, function and the historical development in relation to human need. Prerequisite: SOC 35-101. (S)

443 Family Problems in Modern Society (3 hours)

Course deals with problems that occur as a result of societal pressures and inadequate functioning within the family system. The class will choose specific topics of study from the following areas: alcoholism, violence, incest, dual career, single-parent, step-parent, divorce, death and others. Current literature will be read in lieu of a text. Prerequisite: SOC 35-217.

450 Research Methods in Sociology (3 hours)

An introduction to the scientific method as it is applied to social and behavioral research. Course content includes a study of basic research issues and research strategies utilized by social and behavioral researchers. Basic issues covered include research ethics, causality, the relationship between theory and research methods, and discussion of the differences between scientific social analysis and nonscientific social analysis. Quantitative survey strategies will be emphasized but unobtrusive methods and experimental designs will also be introduced. Prerequisite: SOC 35-101 and MATH 17-114. (F, S)

455 Sociological Theory (3 hours)

A survey of the major theories of society from the classic positions through the present with special emphasis on contemporary theories. Prerequisite: SOC 35-101. (S)

460 Key Issues in Sociological/Anthropological Theory (3 hours)

Critical examination of status of theory and research involving key issues of contemporary knowledge in sociology/anthropology. Prerequisite: SOC 35-101 or 108. Repeatable for new topic.

479 Independent Study in Sociology/Anthropology (1-3 hours)

Directed readings and/or experiential contacts involving an in-depth probe of an area of sociology or anthropology and culminating in a written project. Students wishing to enroll need to prepare a short plan of study to be placed on file. Prerequisites: SOC 35-101 and a minimum of 13 hours in sociology and consent of the chairperson. Repeatable for new experience. (F, S, SS)

495 Field Placement/Internship in Sociology/Social Work/Corrections (3 hours)

Provides direct contact with helping agencies and paraprofessional experiences. Students will apply knowledge from behavioral science courses. Prerequisites: SOC 35-101, completion of 15 hours in sociology courses and instructor approval. Repeatable for new experience. (F, S, SS)

ANTHROPOLOGY**108 General Anthropology (3 hours)**

A survey course covering the origins of man, ancient man and prehistoric culture; faces of man and cultural capacity; historical and contemporary pre-literate culture, including housing and handicrafts, marriage and kinship, status and role, property and government, religion and the supernatural. (S)

217 The Family (3 hours)

May be taken for credit as either sociology or anthropology, but not for both. See SOC 35-217.

318 Social and Cultural Foundations of Personality (3 hours)

Stages of personality change in different cultures from infancy to old age. Cross-cultural research on the bearings of social structure on personality and identity formation. Comparative analysis of problems of socialization, enculturation and acculturation for the young and aging. Prerequisite: SOC 35-101 or 108. (F)

460 Key Issues in Sociological/Anthropological Theory (3 hours)

May be taken for credit as either sociology or anthropology, but not for both. See SOC 35-460.

479 Independent Study in Sociology/Anthropology (1-3 hours)

May be taken for credit as either sociology or anthropology, but not for both. See SOC 35-479.

Department of Health and Human Services

Chairperson: Terry Robertson

Faculty: Loren Butler, Bryan Dorrel, Jeff Ferguson, Alice Foose, Karen From, Jon Gustafson, Matthew Johnson, Terry Long, Gina McNeese, Susan Myllykangas, Janet Reusser, Matt Symonds, Rheba Vetter

Administrative Appointments: Adam Dorrel, Charles Flohr, Tracy Hoza, Mark Kellogg, Robert Lade, Darin Loe, Scott Lorek, Ben McCollum, Joe Quinlin, Kelly Quinlin, Jessica Rinehart, Mark Rosewell, Robert Veasey, Rich Wright

The Department of Health and Human Services is comprised of three primary discipline areas including: Foods and Nutrition, Health and Physical Education, as well as Recreation. Each of these academic program areas are fully accredited by their respective professional organizations and all majors' courses are taught by fully qualified faculty and staff. Within each of these disciplines, multiple options, majors, emphasis areas, certifications, and minors exist.

Statement of Vision and Mission

The vision of the Department of Health and Human Services is “lifespan health and active living.” This vision is to be achieved through our mission, which is “to prepare and develop professionals to become leaders in the facilitation of healthy active lifestyles throughout society and across the lifespan”.

The Department of Health and Human Services and the individual faculty who contribute to its existence on a daily basis are proud of their history of innovative, creative, and entrepreneurial efforts to continually grow and evolve in a manner that allows for vision to become reality. It is our desire as we move into the coming years to continue this tradition and lead the way into a new era for our college and the University as a whole. Driving this desire is our firm shared commitment to addressing health and lifestyle issues pertinent to the well-being of our society. Despite the professional diversity and various associated initiatives that exist among our faculty, we as a department share a common vision of *Lifespan Health and Active Living* for all people. This vision not only pertains to our local campus and our philosophical approach to developing professional leaders, but also to the surrounding region and both national and international societies. As we move forward to achieving the presented vision, our strategy will be to develop and address annually established goals to be implemented at micro, meso, and macro levels within society. Priority will be placed first on ensuring that our departmental curriculum and the approach to student preparation reflect the inherent characteristics of our vision and associated mission. In addition, we intend to systematically expand our efforts through inter-departmental and inter-agency partnerships at the local and regional level. We believe that these efforts will result in multiple inter-disciplinary opportunities to have significant impact within the human services realm at all levels. Ultimately, we hope that reframing our departmental world view and modeling the potential value of this perspective for others will lead to a positive evolution of educational and human service delivery systems.

Foods and Nutrition / 15

In accordance with the vision and mission of Northwest Missouri State University, the philosophy of the Foods and Nutrition program is to provide quality education experiences, which are student-centered, use “leading-edge technologies,” and maintain commitment to continuous improvement. The mission of the Foods and Nutrition program is to prepare competent and productive members of the nutrition and food service profession. These graduates will possess lifelong learning skills. The graduates, as professionals, will perform as enablers to help individuals and families sustain and enhance their quality of life in a dynamic world. This program will prepare graduates to pursue graduate study, to pursue a supervised practice program or to provide quality service to individuals and families in clinical, foodservice and community setting.

Advanced Standing Requirement

Students majoring in Foods and Nutrition must meet the requirement for advanced standing, which requires that every student complete 15 credit hours including ENGL 10-111 and 112, COM 29-102, a course meeting the mathematics requirement, and CSIS 44-130 by the end of the sophomore year. A student must present a cumulative grade point average of 2.00 in these courses. In addition, all Foods and Nutrition majors must complete a 100- or 200-level course required for their major and FCS 15-201 before being permitted to take any 300- or 400-level course within the major.

MAJOR

Comprehensive Major in Foods and Nutrition; Didactic Program in Dietetics, 70 hours: B.S.—No Minor Required

CIP: 513101

This program provides education for persons desiring a career in foods and nutrition. The Didactic Program in Dietetics at Northwest is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the American Dietetic Association, 120 South Riverside, Plaza, Suite 2000, Chicago, IL 60606, (312) 899-0400, ext. 5400. This degree, followed by a dietetic internship, enables one to sit for the examination leading to registered dietician (R.D.) status.

General Education requirements must include BIOL 04-102/103 General Biology and Lab, MATH 17-114 General Statistics, CHEM 24-112/113 General Chemistry and Lab, SOC 35-101 General Sociology and PHIL 39-274 Introduction to Ethics. Institutional requirements must include CSIS 44-130 Computers and Information Technology and COM 29-225 Intercultural Communication. **Course descriptions for FCS courses are listed beginning on page 374.**

Required Courses	Semester Hours
Family and Consumer Sciences Core	
FCS 15-201 Foundations and Careers in Family and Consumer Sciences	2
FCS 15-401 Issues in Family and Consumer Sciences	3
Specialization Requirements	
FCS 15-110 Family and Individual Wellness	3
FCS 15-230 Food Science	4
FCS 15-232 Food Service Management	3
FCS 15-234 Nutrition and Diet Behavior	2
FCS 15-322 Consumer Economics and Personal Finance	3
FCS 15-332 Quantity Food Preparation	2

FCS 15-333 Quantity Food Preparation Laboratory	2
FCS 15-334 Community Nutrition	4
Professional and Interdepartmental Requirements	
MGMT 54-313 Principles of Management	3
FCS 15-214 Human Development	3
FCS 15-338 Practicum in Food Service Occupations	1
FCS 15-431 Macronutrients	3
FCS 15-432 Micronutrients	3
(CHEM 24-242/243 Organic Chemistry prerequisite)	
FCS 15-434 Medical Nutrition Therapy	5
FCS 15-436 Medical Nutrition Counseling	2
FCS 15-540 The Adult Learner	3
CHEM 24-242/243 Organic Chemistry I and Laboratory	4
CHEM 24-362/363 Elementary Biochemistry and Laboratory	4
BIOL 04-104 Medical Terminology	3
BIOL 04-140 General Microbiology	4
BIOL 04-238 Physiology Allied Health	4

MINORS

Minor in Food Service, 24 hours: B.S. (Not available to Foods and Nutrition majors)

CIP: 190505

Course descriptions for FCS courses are listed beginning on page 374.

Required Courses	Semester Hours
FCS 15-230 Food Science (includes lab)	4
FCS 15-232 Food Service Management	3
FCS 15-234 Nutrition and Diet Behavior	2
FCS 15-332 Quantity Food Preparation	2
FCS 15-333 Quantity Food Preparation Laboratory	2
FCS 15-350 Home Equipment Technology	3
FCS 15-439 Field Experience in Food Service Management	2
Choose 6 hours from the following courses:	6
ACCT 51-201 Accounting I (3)	
MGMT 54-313 Principles of Management (3)	
MKTG 55-330 Principles of Marketing (3)	
MGMT 54-314 Human Resource Management (3)	
FIN 53-311 Business Law I (3)	

Minor in Nutrition, 23-24 hours: B.S. (Not available to Foods and Nutrition Majors)

CIP: 190501

Course descriptions for FCS courses are listed beginning on page 374.

General Education requirements must include BIOL 04-102/103 General Biology and Lab or BIOL 04-114/115 General Zoology and Lab; CHEM 24-112/113 General Chemistry and Lab or CHEM 24-114/115 General Chemistry I and Lab.

Required Courses	Semester Hours
FCS 15-230 Food Science	4
FCS 15-234 Nutrition and Diet Behavior	2
FCS 15-334 Community Nutrition	4
FCS 15-431 Macronutrients	3
FCS 15-432 Micronutrients	3
Choose 4 hours from the following courses	4
CHEM 24-242/243 Organic Chemistry and Laboratory (4) OR	
CHEM 24-342/343 Organic Chemistry I and Laboratory (4) OR	
CHEM 24-362/363 Elementary Biochemistry and Laboratory (4)	
Choose 3-4 hours from the following courses	3-4
BIOL 04-436 Human Anatomy (4)	
BIOL 04-238 Physiology Allied Health (4)	
HPER 22-254 Anatomy and Physiology (3)	
HPER 22-332 Physiology of Exercise (3)	

General Education requirements are listed above. Refer to appropriate course descriptions for prerequisites for science courses.

Health / 22, Physical Education / 22

The vision of the Health and Physical Education Teacher Education Unit is to develop competent and reflective educators. The mission of the Health and Physical Education Teacher Unit is to:

1. Develop the teacher candidates' knowledge base.
2. Provide experiential learning activities for the teacher candidate to develop a variety of instructional skills for all learners.
3. Mentor the teacher candidate to enhance positive dispositions.
4. Model better practices of the profession.

Advanced Standing Requirement: Physical Education

A student may apply for advanced standing after completing 40 semester hours of credit. The 40 hours must be completed with a minimum grade point average. The student must also complete the following courses with grades of "C" or better and a minimum grade point average: HPER 22-207 Aerobic and Strength Conditioning, 3 hours; HPER 22-233 First Aid, CPR and Care of Sports Injuries, 2 hours; HPER 22-239 Foundations of Physical Education, 2 hours; and HPER 22-254 Anatomy and Physiology, 3 hours. Please reference the Professional Education Handbook for minimum GPA requirements.

Professional Education Admittance: Physical Education majors must also be admitted into the Professional Education Program. This process is initiated at the Teacher Education Student Service (TESS) Office. Refer to Admittance to Teacher Education section in the College of Education and Human Services on page 314.

Physical Education Certification: Students desiring to be certified to teach in Missouri must complete the Physical Education Core and the courses to complete the Professional Education Requirements listed under the B.S. Ed., Secondary Program (page 362) or the B.S. Ed., Elementary-Secondary Program (page 363) in the Department of Educational Leadership in the College of Education and Human Services.

To be certified to teach physical education in Missouri requires passing the PRAXIS-II. Health and Physical Education students must also take three credit hours of wellness-related coursework (HPER 22-110 and 111 are suggested.)

Physical Education Upper-level Gated Courses: The Physical Education major must be admitted to the Professional Education Program before admittance into upper-level physical education courses. The following upper level physical education courses are “closed” or “gated” courses. Majors must be admitted to the Professional Education Program before taking any of the following courses:

- EDUC 61-461 School and Society
- EDUC 61-520 Techniques of Classroom Management and Discipline
- HPER 22-433 Senior Seminar in Physical Education
- HPER 22-480 Health Education Methods in the Secondary School
- HPER 22-512 Socio-Psychological Aspects of Human Performance
- HPER 22-523 Motor Development
- HPER 22-537 Assessment in Physical Education
- HPER 22-580 Methods in Secondary Physical Education

Physical Education program completion requirements:

1. Completion of a program approved field experience within a diverse setting for a minimum of 30 clock hours.
2. Completion of the Teacher Work Sample demonstrating what the student knows and is able to perform in accordance to state teacher certification standards.
3. Successful completion of the PRAXIS-II examination (Missouri State Teacher Certification).
4. Completion of all exit criteria in order to complete the teacher education program and be recommended for graduation and certification.

MAJORS

**Major in Physical Education, 47 hours: B.S.Ed.
(Certifies Grades K-12)**

CIP: 131314

Required Courses	Semester Hours
HPER 22-207 Aerobic and Strength Conditioning	3
HPER 22-208 Techniques of Folk, Square and Recreational Dance	3
HPER 22-233 First Aid, CPR and Care of Sports Injuries	2
HPER 22-238 Health and Physical Education Methods in the Elementary School	3
HPER 22-239 Foundations of Physical Education	2
HPER 22-254 Anatomy and Physiology	3
HPER 22-332 Physiology of Exercise	3
HPER 22-336 Basic Biomechanics	3
HPER 22-361 Creative Rhythms and Activities 5-9	2
HPER 22-362 Creative Rhythms and Activities K-4	3
HPER 22-410 Adapted Physical Education	3
HPER 22-430 Lifetime Team Activities	3
HPER 22-431 Lifetime Individual Activities	3
HPER 22-433 Senior Seminar in Physical Education	2
HPER 22-512 Socio-Psychological Aspects of Human Performance	3
HPER 22-523 Motor Development	3
HPER 22-537 Assessment in Physical Education	3

Total Major Requirements	47
Professional Education Requirements	32
HPER 22-260 Observation and Practicum I in Physical Education (2)	
HPER 22-360 Observation and Practicum II in Physical Education (2)	
HPER 22-480 Health Education Methods in the Secondary School (3)	
HPER 22-580 Methods in Secondary Physical Education (3)	
EDUC 61-461 School and Society (2)	
EDUC 61-462 School and Society Seminar (1)	
EDUC 61-470 Directed Teaching in the Elementary and Secondary School (10)	
EDUC 61-520 Techniques of Classroom Management and Discipline (2)	
EDUC 61-521 Seminar in Classroom Management (1)	
EDCI 62-353 Teaching Reading in Content Areas (2)	
EDCI 62-371 Introduction to Special Education (3)	
PSYC 08-303 Educational Psychology (Directed General Education)	
PSYC 08-322 Adolescent Psychology (2)	
Degree Requirements	3
EDUC 61-569 Multiculturalism in Education (3) OR	
LANG 14-100 level "Communication and Culture" modern language course* (3)	
*Includes LANG 14-151 Introduction to American Sign Language and Deaf Culture.	
Recommended Institutional Requirements for Education Majors	
EDUC 61-145 Information and Educational Technology (3) (Secondary)	
EDUC 61-252 Pluralism in a Multicultural Society (3)	
EDCI 62-130 Educational Computing and Technology (3) (Elementary)	

MINORS

Minor in Coaching, 22 hours

CIP: 131314

Core Requirements	Semester Hours
HPER 22-254 Anatomy and Physiology	3
HPER 22-332 Physiology of Exercise	3
HPER 22-334 Administration of Athletics and Coaching Practicum	2
HPER 22-336 Basic Biomechanics	3
HPER 22-382 Care and Prevention of Athletic Injuries	3
FCS 15-234 Nutrition and Diet Behavior	2
Total Core Requirements	16
Four hours from the following:	4
HPER 22-481 Theory and Fundamentals of Coaching Soccer (2)	
HPER 22-482 Theory and Fundamentals of Coaching Baseball (2)	
HPER 22-483 Theory and Fundamentals of Coaching Track and Field (2)	
HPER 22-484 Theory and Fundamentals of Coaching Basketball (2)	
HPER 22-485 Theory and Fundamentals of Coaching Football (2)	
HPER 22-486 Theory and Fundamentals of Coaching Volleyball (2)	
Two hours from the following:	2
HPER 22-281 Officiating Soccer (1)	
HPER 22-282 Officiating Baseball and Softball (1)	
HPER 22-283 Officiating Track and Field (1)	
HPER 22-284 Officiating Basketball (1)	
HPER 22-285 Officiating Football (1)	

HPER 22-286 Officiating Volleyball (1)

HPER 22-287 Officiating Wrestling (1)

Total Minor Requirements

22

**Minor in Health Education, 28 hours: B.S.Ed., Secondary Program
(Certifies Grades 9-12)**

CIP: 131307

Core Requirements	Semester Hours
HPER 22-233 First Aid, CPR and Care of Sports Injuries	2
HPER 22-254 Anatomy and Physiology	3
HPER 22-332 Physiology of Exercise	3
HPER 22-550 Community Health	3
HPER 22-554 Human Sexuality	3
HPER 22-555 Intervention and Strategies for Health Behavior Change	3
PSYC 08-212 Personal Adjustment	3
FCS 15-234 Nutrition and Diet Behavior	2
SCGD 68-520 Drug Prevention and Education in Schools	3
Three hours from the following:	3
HPER 22-272 Introduction to Safety Education-Driver Education I (3)	
HPER 22-552 Health Promotion (3)	
BIOL 04-376 Basic Ecology (4)	
FCS 15-310 Family Relationships (3)	
Total Minor Requirements	28

9-12 Certification: HPER 22-480 Health Methods in the Secondary School (3) must be completed as part of the Professional Education Requirements.

**Certification in Health, Grades K-9, B.S.Ed. Degree
(not a major or minor) 25 hours**

CIP: 131307

Required Courses	Semester Hours
HPER 22-110/111 Lifetime Wellness/Lab	3
HPER 22-233 First Aid, CPR, Care of Sports Injuries	2
HPER 22-254 Anatomy and Physiology	3
HPER 22-332 Physiology of Exercise	3
HPER 22-550 Community Health	3
HPER 22-554 Human Sexuality	3
PSYC 08-212 Personal Adjustment	3
FCS 15-234 Nutrition and Diet Behavior	2
SCGD 68-520 Drug Prevention and Education in Schools	3
Total Certification Requirements	25

K-9 Certification: HPER 22-238 Health and PE Methods in the Elementary Schools (3) and HPER 22-480 Health Methods in the Secondary School (3) must be completed as part of the Professional Education Requirements.

Certification in Physical Education, Grades K-9, B.S.Ed. degree (Not a major or minor)

CIP: 131314

HPER 22-233 First Aid, CPR, and Care of Sports Injuries	2
HPER 22-238 Health and Physical Education Methods in the Elementary School	3
HPER 22-239 Foundations of Physical Education	2
HPER 22-254 Anatomy and Physiology	3
HPER 22-332 Physiology of Exercise	3
HPER 22-336 Basic Biomechanics	3
HPER 22-361 Creative Rhythms and Activities 5-9	2
HPER 22-362 Creative Rhythms and Activities K-4	3
HPER 22-410 Adapted Physical Education	3
HPER 22-433 Senior Seminar in Physical Education	2
HPER 22-512 Socio-Psychological Aspects of Human Performance	3
HPER 22-523 Motor Development	3
HPER 22-537 Assessment in Physical Education	3
Electives from HPER 22-207, 208, 430, 431	3
Total Certification Requirements	38

This program meets the Missouri certification standards for grades K-9. The above courses serve as an area of concentration (24 hours) or endorsement (21 hours for Middle School Majors) in the Department of Professional Education.

Certification in Driver Education, 12 hours: B.S.Ed., Secondary Program (Not a Minor)

CIP: 131304

Required Courses	Semester Hours
HPER 22-271 Driver Task Analysis–Driver Education II	3
HPER 22-272 Introduction to Safety Education–Driver Education I	3
HPER 22-571 Developing Classroom Knowledge–Driver Education III	3
HPER 22-572 Developing Vehicle Competencies & Skills–Driver Education IV	3
Total Requirements	12

To be certified in Driver Education, the above hours must be completed in conjunction with an established certifiable Secondary Education (B.S.Ed.) degree program.

Recreation / 45

Vision

- We make a difference locally, nationally, and internationally.
- We graduate students who are prepared and qualified to manage traditional recreation programs accessible to all peoples in both urban and rural areas.
- We prepare passionate students for the profession who can think critically, solve problems, communicate effectively, lead with assurance, and contribute to the continuation of the field.
- We are a model of pedagogy for the college and University.
- We believe in the philosophy of holistic health through the provision of recreation and our students will be prepared to implement programs in all areas of the profession (cultural, aquatic, athletic, youth, adult, senior, and therapeutic).

Mission

The mission of the Recreation Program is the preparation of future Parks, Recreation and Leisure Service professionals. Professionals, who possess the knowledge, technical and human relations' skills needed to facilitate lifelong learning in a world of change; to confront the challenges of tomorrow; and the ability to help others in the development and pursuit of productive and healthy leisure lifestyles.

Values

- TOLERANCE for diverse peoples and situations.
- QUALITY OF LIFE by taking responsibility for our own health and promoting positive healthy behaviors to others.
- EXCELLENCE through our efforts to do the best quality work at all times.
- STEWARDSHIP through responsible social and environmental actions.
- ADVOCACY for access to services for everyone who wishes to participate.
- CARING for each other; both personally and professionally.
- HONESTY with each other to work together for the betterment of the program and success of our students.
- RESPECT for the historic foundations of the profession.
- EXPERIENCE for our students and selves through hands-on applications, coursework, and projects.

Advanced Standing Requirement: Recreation

A student may apply for advanced standing after completing 40 semester hours. The 40 semester hours must be completed with a grade point average of 2.25. The student must also complete the following courses with a grade of "C" or better: REC 45-240 Foundations of Recreation, 3 hours and REC 45-245 Leisure Services and Special Populations, 3 hours.

To be in good standing (advanced standing), students must maintain a minimum GPA of 2.25 or higher within all major courses (recreation core and emphasis area) and must have a grade of "C" or better in all recreation (core) courses. Students must petition the department chair to gain permission to retake any recreation core class a third time.

MAJOR

Major in Recreation, 56-63 hours: B.S.—No Minor Required

CIP: 310301

Core Requirements	Semester Hours
REC 45-240 Foundations of Recreation	3
REC 45-245 Leisure Services and Special Populations	3
REC 45-340 Recreational Programs	3
REC 45-434 Senior Seminar in Recreation	3
REC 45-440 Leisure Resources/Facility Design and Management	3
REC 45-443 Techniques of Recreation Leadership	3
REC 45-446 Evaluation of Leisure Services	3
REC 45-450 Field Experience in Recreation and Park Management OR	
REC 45-451 Field Experience in Therapeutic Recreation OR	
REC 45-452 Field Experience in Corporate Recreation/Wellness	3
REC 45-499 Recreation Internship	6-12
REC 45-546 Administration of Recreation	3
Total Core Requirements	33-39

Setting I–Recreation and Park Management, 24 hours**Required Courses**

REC 45-444 Outdoor Recreation/Education	3
REC 45-533 Recreation Sports Management	3
REC 45-545 Risk Management	3

Select 15 additional hours from one of the options below: 15

Option A: Recreation Management

FCS 15-216 Gerontology (3)	
POLS 34-203 State and Local Government (3)	
ACCT 51-201 Accounting I (3)	
MGMT 54-310 Managerial Communications (3)	
MGMT 54-313 Principles of Management (3)	
MGMT 54-314 Human Resource Management (3)	
MKTG 55-330 Principles of Marketing (3)	
REC 45-321 Exploring Recreation Resources (3)	
REC 45-365 Leisure and Aging (3)	
REC 45-425 Expressive and Creative Programs (3)	
REC 45-445 Natural Resources History/Interpretation (3)	
REC 45-511 Golf Course Maintenance and Management (2)	
REC 45-512 Aquatic Facility Maintenance and Management (2)	
REC 45-513 Outdoor Recreation Facilities Maintenance & Management (2)	
REC 45-525 Commercial Recreation (3)	
REC 45-547 Grantsmanship (3)	

Option B: Park Management

AGRI 03-382 Woody Landscape Plants (3)	
AGRI 03-383 Landscape Design (3)	
AGRI 03-583 Turfgrass Management (3)	
GEOL 27-212 Historical Geology (3)	
GEOL 27-326 Geology of the National Parks (3)	
GEOG 32-501 Conservation of Natural Resources (3)	
REC 45-321 Exploring Recreation Resources (3)	
REC 45-425 Expressive and Creative Programs (3)	
REC 45-445 Natural Resources History/Interpretation (3)	
REC 45-511 Golf Course Maintenance and Management (2)	
REC 45-512 Aquatic Facility Maintenance and Management (2)	
REC 45-513 Outdoor Recreation Facilities Maintenance and Management (2)	
REC 45-547 Grantsmanship (3)	
MGMT 54-313 Principles of Management (3)	
GEOG 32-201 Maps and Map Interpretation (3)	
GEOG 32-207 GPS Fundamentals (3)	

Total Setting I Requirements 24

Setting II–Therapeutic Recreation, 24 hours**Required Courses**

HPER 22-254 Anatomy and Physiology	3
REC 45-243 Introduction to Therapeutic Recreation	3
REC 45-345 Therapeutic Recreation Program Design	3
REC 45-542 Trends and Issues in Therapeutic Recreation	3
REC 45-562 Assessments, Diagnostics, and Treatment Planning in Therapeutic Rec.	3

PSYC 08-223 Abnormal Psychology	3
FCS 15-214 Human Development	3
Select three hours from the courses below:	3
BIOL 04-104 Medical Terminology (3)	
FCS 15-216 Gerontology (3)	
FCS 15-315 Social Aspects of Aging and Families (3)	
HPER 22-332 Physiology of Exercise (3)	
HPER 22-336 Basic Biomechanics (3)	
HPER 22-410 Adapted Physical Education (3)	
HPER 22-523 Motor Development (3)	
HPER 22-552 Health Promotion (3)	
HPER 22-556 Health in the Later Years (3)	
REC 45-365 Leisure and Aging (3)*	
REC 45-461 Therapeutic Recreation Interventions with the Elderly (3)	
REC 45-547 Grantsmanship (3)*	

*Note: Does not meet current national therapeutic recreation certification requirements.

Total Setting II Requirements **24**

Setting III–Corporate Recreation/Wellness, 23-24 hours

Required Courses

FCS 15-234 Nutrition and Diet Behavior	2
HPER 22-254 Anatomy and Physiology (3) OR	
BIOL 04-130 Animal Anatomy and Physiology (4)	3-4
HPER 22-332 Physiology of Exercise	3
HPER 22-336 Basic Biomechanics	3
HPER 22-410 Adapted Physical Education	3
HPER 22-552 Health Promotion	3

Select six additional hours from the courses below: **6**

FCS 15-216 Gerontology (3)	
HPER 22-207 Aerobic Strength and Conditioning (3)	
HPER 22-382 Care and Prevention Athletic Injuries	
HPER 22-512 Socio-Psychological Aspects of Human Performance (3)	
HPER 22-529 Theory and Fund of Strength & Conditioning/Personal Training (3)	
HPER 22-532 Exercise Testing, Prescription and Analysis of Cardiac Function (3)	
HPER 22-550 Community Health (3)	
HPER 22-555 Intervention and Strategies for Health Behavior Change (3)	
HPER 22-556 Health in Later Years (3)	
REC 45-365 Leisure and Aging (3)	
REC 45-545 Risk Management (3)	
REC 45-547 Grantsmanship (3)	

Total Setting III Requirements **23-24**

MINORS

Minor in Recreation, 24 hours

CIP: 310301

Required Courses	Semester Hours
REC 45-240 Foundations of Recreation	3
REC 45-245 Leisure Services and Special Populations	3

REC 45-340 Recreational Programs	3
REC 45-443 Techniques of Recreation Leadership	3
REC 45-444 Outdoor Recreation/Education	3
REC 45-446 Evaluation of Leisure Services	3
REC 45-450 Field Experience in Recreation and Park Management OR	
REC 45-451 Field Experience in Therapeutic Recreation OR	
REC 45-452 Field Experience in Corporate Recreation/Wellness	3
REC 45-546 Administration of Recreation	3
Total Minor Requirements	24

Interdisciplinary Minor in Gerontology, 24 hours

CIP: 301101

Course descriptions for FCS courses are listed beginning on page 374.

Required Courses	Semester Hours
FCS 15-216 Gerontology	3
FCS 15-540 The Adult Learner	3
PSYC 08-383 Psychology of Aging	3
COM 29-553 Language, Speech and Hearing of the Exceptional Child and Adult	3
HPER 22-556 Health in Later Years	3

Choose 9 hours from the following courses to total 24 hours (Courses may be selected from each of the areas or all 9 hours may be selected within an area to support a career direction): **9**

Health Aspects:

- FCS 15-110 Family and Individual Wellness (2)
- FCS 15-234 Nutrition and Diet Behavior (2)
- BIOL 04-104 Medical Terminology (3)
- HPER 22-550 Community Health (3)
- REC 45-461 Therapeutic Recreation Interventions with the Elderly (3)

Psychological Aspects:

- *FCS 15-214 Human Development (3)
- PSYC 08-223 Abnormal Psychology (3)
- *PSYC 08-333 Developmental Psychology (3)
- PSYC 08-344 Drugs, Brain and Behavior (3)
- PSYC 08-438 Principles of Counseling (3)

Social Aspects:

- FCS 15-315 Social Aspects of Aging and Families (3)
- FCS 15-526 Independent Living for Special Populations (3)
- COM 29-325 Listening Behavior and Skills (3)
- COM 29-336 Nonverbal Communication (3)
- REC 45-365 Leisure and Aging (3)
- REC 45-540 Group Dynamics (3)

NOTE: To qualify for the undergraduate Certificate Programs in Gerontology, the student must complete a 3 credit hour practicum/internship providing experiences with both well and frail older persons. If this is not a part of the practicum/internship required in your major then see your minor advisor in regard to meeting this requirement.

***Only majors other than Child and Family Studies, Foods and Nutrition, and Psychology may select one of these courses.**

Interdisciplinary Minor in Sport Psychology, 24 hours

CIP: 310508

	Semester Hours
Required Courses	12
PSYC 08-234 Introduction to Psychological Experimentation (3)	
PSYC 08-325 Sport Psychology (3)	
HPER 22-254 Anatomy and Physiology (3)	
HPER 22-512 Socio-Psychological Aspects of Human Performance (3)	
Select six hours from each of the categories below:	12
Exercise Science—select six hours from the following list:	
HPER 22-332 Physiology of Exercise (3)	
HPER 22-336 Basic Biomechanics (3)	
HPER 22-382 Care and Prevention of Athletic Injuries (3)	
HPER 22-555 Intervention and Strategies for Health Behavior Change (3)	
FCS 15-234 Nutrition and Diet Behavior (2)	
Psychology—select six hours from the following list:	
PSYC 08-212 Personal Adjustment (3)	
PSYC 08-223 Abnormal Psychology (3)	
PSYC 08-315 Psychology of Groups and Teams (3)	
PSYC 08-363 Psychology of Personality (3)	
PSYC 08-438 Principles of Counseling (3)	
SOC 35-365 Social Psychology (3)	
Total Minor Requirements	24

Course Descriptions

Health /22, Physical Education /22, Recreation / 45

ACTIVITY COURSES

Only 4 activity credits may count toward the minimum hours required for graduation.

22-101 Restricted Activity (1 hour)

Repeatable for mastery. (F, S)

22-106 Weight Training and Conditioning (1 hour)

(F, S)

22-107 Racquetball (1 hour)

(F, S, SS)

22-112 Jogging (1 hour)

(F, S)

22-113 Individualized Fitness

Program (1 hour)

Repeatable for new content and/or mastery.
(F, S, SS)

22-116 Casting and Angling (1 hour) (F)

22-121 Volleyball (1 hour) (F, S)

22-131 Beginning Tennis (1 hour) (F, S, SS)

22-134 Badminton (1 hour) (F, S)

22-139 Golf (1 hour) (F, S, SS)

22-160 Aerobic Dance (1 hour) (F, S)

22-170 Beginning Swimming (1 hour)**22-173 Water Aerobics (1 hour)****45-110 Climbing Wall (1 hour)**
(F, S, SS)**45-124 Noncompetitive and Recreational Games (1 hour)****45-130 Canoeing (1 hour)** (F, SS)**45-131 Kayaking (1 hour)** (F, SS)**45-132 Watercraft (1 hour)** (F, SS)**45-140 Archery (1 hour)** (F, SS)**45-150 Trapshooting (1 hour)**
(F, S, SS)**VARSITY ATHLETICS****180 Varsity Cross Country* (1 hour)**
(F)**181 Varsity Tennis* (1 hour)**
(S)**182 Varsity Baseball* (1 hour)**
(S)**183 Varsity Track and Field* (1 hour)**
(S)**184 Varsity Basketball* (1 hour)**
(F, S)**185 Varsity Football* (1 hour)**
(F)**186 Varsity Volleyball* (1 hour)**
(F)**190 Varsity Softball* (1 hour)**
(S)**197 Varsity Soccer* (1 hour)****198 Varsity Golf* (1 hour)**

*HPER 22-180 through 198 Varsity Athletics may each be repeated for 4 total credit hours per course for further mastery.

Health / 22**110 Lifetime Wellness (2 hours)**

A course designed to develop an understanding of the principles necessary for promoting lifetime wellness, clarifying values, living effectively and improving the quality of life, through a study of critical issues which affect the individual and society, including: self concept and relationships, physical fitness, substance abuse and dependency behaviors, nutrition, prevention and control of disease, sexuality issues and consumer health. (Must co-register in HPER 22-111 Lifetime Wellness Laboratory). (F, S, SS)

111 Lifetime Wellness Laboratory (1 hour)

A laboratory designed to conduct a wellness assessment and to provide students with practical strategies and skills for developing a personal program of fitness and lifetime sports activities. (F, S, SS)

459 Independent Study in Health Education (1-2 hours)

Individual study under faculty supervision of a selected area of interest. May be repeated for a total of three hours for new experience or further mastery. Prerequisite: Permission of advisor and instructor. (F, S, SS)

480 Health Education Methods in the Secondary School (3 hours)

Organizing health instruction, development and appraisal of materials, use of instructional and assessment strategies for the 9-12 learner. Prerequisites: Admission to teacher education. (F, SS)

550 Community Health (3 hours)

Factors in physical, biological and social environments that influence the nature, extent and programming of health problems for all age groups. Special emphasis on high risk populations such as prenatal and the aging. (S)

552 Health Promotion (3 hours)

The study of the organization and implementation of a comprehensive health promotion program. Practical applied experiences are included. (F, S)

554 Human Sexuality (3 hours)

A study of the historical, biological, psychological and sociocultural aspects of sexuality in relation to modern life. (F, S)

555 Intervention and Strategies for Health Behavior Change (3 hours)

An applied approach of behavior change. Models to investigate health behavior modification. (S, SS)

556 Health in the Later Years (3 hours)

This course investigates theories of aging, changes in the body with age, mental health and wellness, chronic health conditions, and prevention and health promotion. (F)

Physical Education / 22**207 Aerobic and Strength Conditioning (3 hours)**

Development of advanced skills and methodology in working with cardiovascular aerobic conditioning. (S, F)

208 Techniques of Folk, Square and Recreational Dance (3 hours)

Development of skills and methodology for folk, square and recreational dance. (F, SS)

210 Special Topics in Physical Education Activity (1-3 hours)

Designed for undergraduate special topic classes, new initiatives and developing courses in physical education that are activity based. Repeatable for new experience or further mastery.

226 Advanced Weight Training (1 hour)

Advanced development of skills. (F, S)

227 Techniques of Swimming I (1 hour)

Development of basic skills in swimming.

229 Techniques of Gymnastics I (1 hour)

Development of basic skills in tumbling and apparatus.

233 First Aid, CPR and Care of Sports Injuries (2 hours)

Theory and practice of first aid and CPR. Development of skills in the prevention and care of injuries associated with sports and activity. (F, S, SS)

238 Health and Physical Education Methods in the Elementary School (3 hours)

Methods and activities in health and physical education in the elementary school. (F, S, SS)

239 Foundations of Physical Education (2 hours)

An introductory professional course which covers the scope, purpose, history, growth and development, and career assessment of physical education. (F, S)

254 Anatomy and Physiology (3 hours)

The structure and function of the skeletal, muscular and circulatory systems. (F, S)

260 Observation and Practicum I in Physical Education (2 hours)

Observation and participation in elementary, middle and secondary schools with both non-instructional and limited instructional responsibilities. Twenty-four hours of field experience required. (F, S)

281 Officiating Soccer (1 hour)

(S)

282 Officiating Baseball and Softball (1 hour)

(S)

283 Officiating Track and Field (1 hour)

(S)

284 Officiating Basketball (1 hour)

(S)

285 Officiating Football (1 hour)

(F)

286 Officiating Volleyball (1 hour)

(F)

287 Officiating Wrestling (1 hour)

(F)

332 Physiology of Exercise (3 hours)

A study of the immediate and long-range effects of physical activity on the muscular, respiratory, circulatory, nervous and metabolic systems. Laboratories are included. Prerequisite: HPER 22-254. (F, S, SS)

334 Administration of Athletics and Coaching Practicum (2 hours)

Principles and procedures for administering athletic programs in the schools. A 30-hour required practicum experience in an athletic setting. (F, S)

336 Basic Biomechanics (3 hours)

The study of the principles of human movement: structural and mechanical. Prerequisite: HPER 22-254. (F, S)

360 Observation and Practicum II in Physical Education (2 hours)

Intermediate level practicum for K-12 schools requiring 24 hours of observation and field experience. (F, S)

361 Creative Rhythms and Activities 5-9 (2 hours)

The study and understanding of movement concepts as they relate to space, time and energy through dance and gymnastics for the 5-9 learner. (S, SS)

362 Creative Rhythms and Activities K-4 (3 hours)

The study and understanding of movement concepts as they relate to space, time and energy through dance and gymnastics for the K-4 learner. (F, S)

382 Care and Prevention of Athletic Injuries (3 hours)

Covers primary cause of injuries, analysis of preventive measures and care of injuries in relation to type of tissue involved. (F, S)

410 Adapted Physical Education (3 hours)

Survey of human physical disabilities combined with adaptive and rehabilitative measures to promote better living for the individual. (F, S, SS)

430 Lifetime Team Activities (3 hours)

An introduction to basic skills and teaching techniques of lifetime team activities. (F, S)

431 Lifetime Individual Activities (3 hours)

An introduction to basic skills and teaching techniques in lifetime individual activities. (F, S)

433 Senior Seminar in Physical Education (2 hours)

A capstone course designed to acquaint the student with current issues and trends in Health and Human Services (HHS) and to apply principles of philosophy to HHS. Prerequisites: Admission to teacher education. (F, S)

437 Practicum: Physical Education in the Elementary School (2 hours)

Practical experience in the elementary school physical education program. Prerequisites: Admission to teacher education. (F, S)

439 Independent Study in Physical Education (1-2 hours)

Individual study, under faculty supervision, of a selected area of interest. May be repeated for a total of three hours for new experience or further mastery. Prerequisite: Permission of advisor and instructor. (F, S, SS)

481 Theory and Fundamentals of Coaching Soccer (2 hours)

(F)

482 Theory and Fundamentals of Coaching Baseball (2 hours)

(S)

483 Theory and Fundamentals of Coaching Track and Field (2 hours)

(S)

484 Theory and Fundamentals of Coaching Basketball (2 hours)

(F)

485 Theory and Fundamentals of Coaching Football (2 hours)

(F)

486 Theory and Fundamentals of Coaching Volleyball (2 hours)

(S)

510 Special Topics (1-3 hours)

Designed for special workshops. Repeatable for new experience and further mastery.

512 Socio-Psychological Aspects of Human Performance (3 hours)

Analysis of sociological and psychological aspects which influence human performance. Prerequisites: Upper-division standing, admission to teacher education, or permission of instructor. (F, S)

520 Classroom Management and Motivation in Physical Education (3 hours)

This course presents appropriate use of current techniques used to motivate and manage student behavior. Emphasis is placed on the physical education setting. Suggested for Outreach graduate program; see advisor before enrolling.

523 Motor Development (3 hours)

The course is designed to focus on normal and abnormal motor development of school-age individuals. Emphasis is placed on the study of the interaction between environmental and biological

factors which affect changes in motor performance, motor development assessment techniques, and designing and implementing an individualized program for a school-age learner. Prerequisite: Admission to teacher education or permission of instructor. (F, SS)

529 Theory and Fundamentals of Strength and Conditioning/Personal Training (3 hours)

Provides the basic skills, program design and teaching techniques for strength training and personal conditioning. (S)

532 Exercise Testing, Prescription and Analysis of Cardiac Function (3 hours)

A course designed to provide special emphasis to testing individuals with several exercise protocols and modes. Emphasis will be placed upon cardiovascular functions at rest, during exercise and recovery. The format is practical and laboratory based in nature. Prerequisites: HPER 22-254, 332 with grade of "B" or better. (F, SS)

536 Mechanical Analysis of Sports Skills (3 hours)

Designed to improve the student's ability to teach physical education or coach by analyzing a variety of activities in terms of the fundamental principles of mechanics. Prerequisites: HPER 22-254 and 336 (SS, even years)

537 Assessment in Physical Education (3 hours)

A study of the evaluation procedures in physical education, the administration of such procedures and the interpretation of the results of fundamental statistical methods. Prerequisite: Admission to teacher education. (F, S)

580 Methods in Secondary Physical Education (3 hours)

A survey of teaching styles and pedagogy. Special emphasis is given to daily teaching methodology with practical experiences. The relationship of methods of teaching to curriculum is also covered. Prerequisite: Admission to teacher education. (F, S)

Recreation / 45

210 Special Topics in Recreation Activity (1-3 hours)

Designed for special workshops, special topics, new initiatives and developing courses in recreation that are activity based. Repeatable for new experience and further mastery. (F, S, SS)

211 Leisure and Society (3 hours)

This course explores the historical and contemporary leisure and recreation phenomena within the context of societal diversity and multicultural considerations. The course will review diverse perspectives on the meaning of leisure and the role it plays within cultures and ethnic groups, as well as the potential implications of assimilation into dominant cultural norms. (F, S, SS)

240 Foundations of Recreation (3 hours)

An introductory course designed to provide an overview of the different areas of study, participation and career opportunities in the field of recreation and leisure. Includes a thorough description of its current scope and organizational practices, as well as the historical, sociological, psychological, philosophical and economic aspects of recreation and leisure. Concurrent enrollment in REC 45-245 is recommended. (F, S)

243 Introduction to Therapeutic Recreation (3 hours)

Designed to introduce students to the therapeutic recreation profession. Course content focuses on three distinct areas: historical and technological development, clinical and programmatic management, and current community and clinical practice. Prerequisites: REC 45-240 and 245, or permission of instructor. (F)

245 Leisure Services and Special Populations (3 hours)

Students are provided with opportunities to review their personal awareness and values related to various special populations. An overview of general strengths and limitations faced by each group will be presented. Exploration of leisure services offered for special populations as well as adaptations to programs to promote inclusion is stressed. Prerequisite: Concurrent enrollment recommended in REC 45-240. (F, S)

310 Special Topics in Recreation (1-3 hours)

Designed for special workshops, special topics, new initiatives and developing courses in recreation at the undergraduate level. Repeatable for new experience and further mastery. (F, S, SS)

321 Exploring Recreation Resources (3 hours)

This course allows students the opportunity to visit a variety of recreation agencies for the purpose of comparing and contrasting the nature of the

services provided, and to learn about career opportunities. Repeatable for new experience and further mastery. (SS)

340 Recreational Programs (3 hours)

Principles of program planning; roles of leader, administrator and community in program planning; special consideration for programs necessitated by various recreation settings; short term, seasonal and year round. Prerequisites: REC 45-240 and 245 and concurrent enrollment in REC 45-443 recommended. (F, S, SS)

345 Therapeutic Recreation Program Design (3 hours)

Designed to develop the necessary competencies and skills needed to plan and implement appropriate therapeutic recreation programs for diverse special need populations. Prerequisites: REC 45-243 and 245, or permission of instructor. (S)

365 Leisure and Aging (3 hours)

The course explores the role of leisure in a healthy older adult development. Students will acquire a basic understanding of leisure for the current older adult cohort, the Baby Boomers, and future elders. Students will explore leisure services and settings, critically analyzing how history has and will shape the leisure behaviors of seniors (F)

425 Expressive and Creative Programs (3 hours)

An exploration into the highly creative program areas in the recreation and leisure industry. Course will examine the performing and visual arts, arts and crafts, dance, literature and drama. Students participate in, and lead activities, and develop a resource guide. (S)

434 Senior Seminar in Recreation (3 hours)

A study of the current issues and trends in recreation and internship preparation. (F, S)

440 Leisure Resources/Facility Design and Management (3 hours)

Understanding of the principles and the ability to apply techniques of planning, design, development and maintenance of recreation and park areas and facilities. (F, S)

443 Techniques of Recreation Leadership (3 hours)

Theoretical and practical experiences in recreation leadership. Techniques of group work and progressive leadership applicable to recreational activities, programs and settings. Prerequisites: REC 45-240

and 245. Concurrent enrollment in REC 45-340 recommended. (F, S)

444 Outdoor Recreation/Education (3 hours)

Exploration of the outdoor activity areas in the recreation and leisure industry. Students participate in activities, lead activities, and develop a resource guide of activities associated with outdoor recreation and education. (F)

445 Natural Resource History and Interpretation (3 hours)

Exploration of federal and state natural resource agencies. Focus will be on the history, philosophies, uses, and management practices of wildlands, historic resources, and natural areas. The course will explore and practice the communication processes and practices between managers and publics that help "interpret" the special characteristics of natural, cultural, and historic resources. (F)

446 Evaluation of Leisure Services (3 hours)

Knowledge of appropriate measurement techniques utilized in the recreation and leisure services industry. Emphasis will be placed on those assessment/evaluation skills which are used by leisure professionals to determine the extent to which programmatic and organizational goals and objectives have been achieved. Prerequisites: REC 45-340 and 443. (F, S, SS)

449 Independent Study in Recreation (1-3 hours)

Individual study in recreation and/or leisure, under faculty supervision of a selected area of interest. May be repeated for a total of three hours for new experience or further mastery. Prerequisite: Permission of advisor and instructor. (F, S, SS)

450 Field Experience in Recreation and Park Management (3 hours)

Opportunity to gain practical experience in specific recreation and park management programs. The experience should include a minimum of 200 hours of hands-on, supervised practical experience for an 8-12 week period. Must be directed and supervised by a recreation professional and University field experience supervisor. Prerequisites: REC 45-340 and 443, or permission of instructor. (F, S, SS)

451 Field Experience in Therapeutic Recreation (3 hours)

Opportunity to gain practical experience in specific therapeutic recreation programs. The experience should include a minimum of 200 hours of hands-

on, supervised practical experience for an 8-12 week period. Must be directed and supervised by a recreation professional and University field experience supervisor. Prerequisites: REC 45-243, 340 and 443, or permission of instructor. (F, S, SS)

452 Field Experience in Corporate Recreation/Wellness (3 hours)

Opportunity to gain practical experience in specific corporate recreation and wellness programs. The experience should include a minimum of 200 hours of hands-on, supervised practical experience for an 8-12 week period. Must be directed and supervised by a recreation professional and University field experience supervisor. Prerequisites: REC 45-340 and 443, or permission of instructor. (F, S, SS)

461 Therapeutic Recreation Interventions with the Elderly (3 hours)

The course is designed to introduce students to various therapeutic recreation intervention strategies that have been shown to benefit frail older adults. Emphasis will be given to looking at behavior issues, physical and mental challenges, documentation, evaluation, and communication with the elderly. (S)

499 Recreation Internship (6-12 hours)

A gradual induction to professional recreation is provided through a progression of experiences. The experience should include a minimum of 480-560 hours of hands-on, supervised practical experience over a 12-16 week period. The experience will be directed and supervised by a recreation professional and a University internship supervisor. Settings for internships may include municipal or community recreation and/or park departments, social service agencies, hospitals, penal institutions, retirement homes and others. Repeatable for new experience. Prerequisites: REC 45-446, 546, and REC 45-450 or 451 or 452. (F, S, SS)

510 Special Topics in Recreation (1-3 hours)

Designed for graduate/advanced level special workshops, special topics, new initiatives and developing courses in recreation. Repeatable for new experience and further mastery. (F, S, SS)

511 Golf Course Maintenance and Management (2 hours)

This course is designed to familiarize students with the aspects of golf course maintenance and management. It will cover the design and maintenance of greens, tees, fairways, roughs, and bunkers. Concepts of staffing, budgeting, and equipment selection and maintenance will be covered. (S, SS)

512 Aquatic Facility Maintenance and Management (2 hours)

This course will emphasize the development of technical knowledge and skills needed to operate a safe aquatics environment, staff development and management, and aquatics program development. (S, SS)

513 Outdoor Recreation Facilities Maintenance and Management (2 hours)

This course is designed to help students develop a knowledge base related to the maintenance and management of outdoor recreation resource areas. Specific areas of study will include shooting sports areas, climbing walls and towers, trails, marinas, campgrounds, and RV operations. (F)

520 Challenge Course Facilitator Training (3 hours)

Course emphasizes assessing, planning, implementing, processing and evaluating challenge course programs in the recreation services industry. Programs are designed to promote communication, cooperation, trust, goal setting, problem solving, self-concept and interpersonal interactions. Repeatable for new experience or further mastery. (F, S, SS)

525 Commercial Recreations (3 hours)

An introduction to the scope, characteristics, development, management aspects and trends within the commercial recreation industry including the delivery of goods, services, amenities, facilities, and entrepreneurship. (S)

533 Recreation Sports Management (3 hours)

A study of the objectives and principles in administering an intramural program in the schools. Application of principle to practical situations with field experiences. Prerequisites: REC 45-340 and 443 or HPER 22-239 and 333. (F)

540 Group Dynamics (3 hours)

An introduction to the dynamics of group work including different models of group development, types of groups, stages of development, selective processes and intervention strategies. Students will observe, participate in and evaluate group activities. Group leadership and facilitation skills will be presented. (S, SS)

542 Trends and Issues in Therapeutic Recreation (3 hours)

This course is designed to familiarize students with existing trends in therapeutic recreation pro-

gramming, to discuss current legal issues, current societal attitudes toward persons with disabilities, trends within the health care delivery system and other current trends and issues related to therapeutic recreation. Prerequisites: REC 45-345 and 451, or permission of instructor. (S)

545 Risk Management (3 hours)

Designed to give students a basic understanding of their legal responsibilities as recreation and physical activity professionals to provide a safe environment for those they serve, and to develop an understanding of the current legislation, practice standards, and policy, as well as how it may apply to the rights of recreation activity participants, students, special populations, employees and/or co-workers. (S, SS)

546 Administration of Recreation (3 hours)

Organization and administration of recreation services, facilities and resources on the federal, state and local levels. Special attention is given to community recreation organization providers' role and responsibilities for budgeting and personnel management, as well as managing the facilities, activities and special events in the recreation program. Prerequisites: REC 45-340 and 443. (F, S)

547 Grantsmanship (3 hours)

Acquaints students with the vocabulary, concept and practices in the study of grants administration and management. Enables practicing the skills necessary in obtaining outside funding and provides awareness of the individual roles and agencies within public funding. (F)

562 Assessments, Diagnostics and Treatment Planning in Therapeutic Recreation (3 hours)

Course will provide an overview of (1) the basic concepts associated with psychometric assessment, (2) a variety of individual client assessments used in practice and (3) the use of therapeutic recreation assessments in the development of individualized treatment/program plans. (F)

Safety/Driver Education / 22

271 Driver Task Analysis – Driver Education II (3 hours)

An introduction to the task of the driver within the highway transportation system with emphasis on risk perception and management and the decision-making process. Not a learn-to-drive class.

272 Introduction to Safety Education – Driver Education I (3 hours)

Introductory course examining the principles and fundamentals of safety education. Concern for safety as a social problem, considers major accident areas, accident causes, liability and analysis of possible solutions to the accident problem. Develops concepts to prepare the driver education student to assume responsibility for accident prevention in the home, school, community and on the highway.

479 Independent Study in Safety Education (1-2 hours)

Individual study, under faculty supervision, of a selected area of interest. May be repeated for a total of three hours. Prerequisite: Permission of instructor. (F, S, SS)

571 Developing Classroom Knowledge – Driver Education III (3 hours)

Learning activities focus on preparing the prospective driver educator's classroom skills with application to classroom organization, maintaining a learning environment, development instructional modules and conducting learning experiences.

572 Developing Vehicle Competencies and Skills – Driver Education IV (3 hours)

Learning activities focus on preparing the prospective driver educator to conduct activities which develop operational skills for a novice driver. Emphasis on laboratory organization and administration, maintaining a learning environment, developing laboratory instructional modules and conducting learning experiences.

SWIMMING AND ARC CERTIFICATION PROGRAM COURSES

172 Basic and Emergency Water Safety (1 hour)

Successful completion of this course meets the requirements for ARC Basic Water Safety and Emergency Water Safety certification so that the student will know how to respond in an aquatic emergency. It serves as a foundation for further training in lifeguarding and aquatics courses for individuals in the area of recreation, education, public safety and industry. Repeatable for new experience or further mastery. (F, S)

276 Lifeguard Training (2 hours)

Designed to provide the only certification to qualify a student for lifeguarding at pool and non-surf facilities. Successful completion of this course provides the student the ARC Lifeguard Training Certification. To complete the certification the student must submit evidence of current certification in adult CPR and standard first aid. Repeatable for new experience or further mastery. (S)

Department of Professional Education

Chairperson: Joe Kreizinger

Director, Horace Mann School: Jill Baker

Director, Early Childhood Center: Cindy Scarbrough

Department of Professional Education

The department offers undergraduate programs in elementary education, early childhood education, middle school education, secondary education, and special education.

Faculty, Department of Professional Education: Kristina Alexander, Jane Andrews, Barbara Crossland, Margaret Drew, Carole Edmonds, Shantel Farnan, Nancy Foley, Virgil Freeman, Max Fridell, Jan Glenn, Dan Gordon, William Hedge, Nissa Ingraham, Terry Lovelace, Barbara Martin, Phillip Messner, Vickie Miller, Suzanne Nuttall, Pradnya Patet, Victoria Seeger, Shirley Steffens, Patricia Thompson

Faculty, Horace Mann School: Robin Akins, Heidi Beatty, Nancy Farlow, Sara Finn, Linda Heeler, Gina McNeese, Erin Oehler, Vanessa Parsons, Sara Rogers, Mary Jane Stiens, Cathi Schwienebart

Early Childhood Center Personnel:

Information regarding program advisement, requirements and certification may be obtained from the following people:

Program	Coordinator
Early Childhood Education	Pradnya Patet
Elementary Education	Barbara Crossland
Middle School	Patricia Thompson
Secondary Education	Jan Glenn
Special Education	Shantel Farnan

Statement of Mission

Northwest Missouri State University is a learning-centered community of scholars offering undergraduate and selected graduate programs. The University is committed to preparing broadly educated and engaged citizens for a world of constant change, applying information technology to improve learning processes, and promoting continuous improvement to enhance performance in all its activities. Northwest seeks to expand access to learning and promote research designed to address the needs of our students and stakeholders.

Changes to programs during this catalog cycle may be made related to changes in certification requirements and/or program changes approved by both Department of Elementary and Secondary Education.

All education majors are required to purchase the Tk20 assessment package. Students who have not purchased the subscription will not be admitted into the Professional Education Unit.

Education: Curriculum and Instruction / 62

DEGREE PROGRAM

Bachelor of Science in Education

Completion of one of the following curricula, other University requirements and an overall grade point average identified in the Professional Education Handbook on a 4.00 scale qualifies the student to receive a Bachelor of Science in Education degree.

The number of hours in the major, minor and elective categories may vary depending on the major and minor selected. Care should be exercised in choosing courses to assure a minimum of 40 semester hours in courses numbered above 300.

All degrees in education are subject to state requirements which may change at any time due to action of the State Board of Education.

B.S.Ed. Degree Requirements, Elementary Program

	Semester Hours
General Education Requirements (See pages 66-68)	42
Directed General Education Courses:	
PSYC 08-303 Educational Psychology (must achieve grade of "C" or better)	
MATH 17-171 Fundamentals of Mathematics (must achieve grade of "C" or better)	
COM 29-102 Oral Communications (must achieve grade of "C" or better)	
BIOL 04-102/103 Biology and PHSC 40-102/103 Physical Science are prerequisites for SCED 28-380 Methods in Elementary School Science	
MUS 19-201 The Enjoyment of Music OR MUS 19-202 Jazz Appreciation OR MUS 19-222 American Popular Music OR ART 13-102 Art Appreciation is a prerequisite for Art and Music Methods courses (13-380 and 19-380)	
GEOG 32-101 Introduction to Geography	
Institutional Requirements	6
Information Technology Competency	
Recommended EDCI 62-130 Educational Computing and Technology (3)	
Multicultural/Diversity Competency (3)	
Degree Requirements	3
LANG 14-100 level "Communication and Culture" Modern Languages course* (3)	
*Includes LANG 14-151 Introduction to American Sign Language and Deaf Culture.	
The degree requirement for language is separate from the Multicultural/Diversity Institutional Requirement.	
Elementary Education Major Requirements	65-68
Concentration in Subject Area of Specialization (See College of Education and Human Services)	21-22
TOTAL MINIMUM ACADEMIC HOURS	124

****All students interested in teaching at the elementary level must complete a Major in Elementary Education and one of the following specialty studies: Concentration in a subject area (21-22 hours), Early Childhood minor (30-34 hours), Early Childhood Special Education endorsement (36-39 hours), or dual major in Special Education-Cross Categorical. Concentration subject areas include: Language Arts, Math, Psychology, Science, Social Science, Multicultural Studies, Computer Science, Special Education-Cross Categorical, and Physical Education.**

MAJOR

Major in Elementary Education, 65-68 hours: B.S.Ed., Elementary Program (Certifies Grades 1-6)

CIP: 131202

Required Courses	Semester Hours
Foundations for Teaching	
EDCI 62-301 Reporting Pupil Progress	2
EDCI 62-371 Introduction to Special Education	3
PSYC 08-312 Child Psychology (2) OR PSYC 08-333 Developmental Psychology (3)	2-3
EDUC 61-461 School and Society	3
PSYC 08-303 Educational Psychology (Directed General Education)	
Teaching Methods	
EDCI 62-216 Literature for the Elementary School	3
EDCI 62-320 Classroom Behavior Management	3
EDCI 62-356 Teaching Reading/Language Arts in the Elementary School	4
EDCI 62-380 Diagnostic and Corrective Reading	2
EDCI 62-410 Elementary School Social Studies	3
ART 13-380 Art in the Elementary School	2
MATH 17-471 Mathematical Methods for Elementary Teachers	3
MUS 19-380 Music in the Elementary School	2
HPER 22-238 Health and PE Methods in the Elementary School	3
SCED 28-380 Methods in Elementary School Science	3
Clinical Experiences	
EDCI 62-211 Observation and Activity in the Elementary School	1
EDCI 62-407 Elementary School Language Arts Practicum	1
EDCI 62-420 Content Teaching in Elementary Schools	3
EDCI 62-456 Practicum and Seminar in Elementary School Reading	3
EDUC 61-471 Directed Teaching in the Elementary School	12-14
EDCI 62-591 Seminar in Education	1
Elementary School Course	
MATH 17-371 Algebra and Geometry for Elementary and Middle School Teachers	3
Certification Course	
ECON 52-130 Survey of Economics OR ECON 52-150 Economics I OR ECON 52-151 Economics II	3

NOTE: Directed teaching from other certification or other degrees may count for up to 6 hours of the 12 required hours.

NOTE: Students must achieve a grade of "C" or better in all major courses excluding Economics.

Concentration in Subject Area, 21 hours

This alternative is recommended for persons who wish to extend their competencies in a particular subject area, but do not seek additional certification at this time. Students should see the Coordinator of Elementary Education or their advisor for specific subject area requirements. Concentration subject areas include: Language Arts, Math, Psychology, Science, Social Science, Multicultural Studies, Special Education-Cross-Categorical, Computer Science or Physical Education.

MINOR

Minor in Early Childhood Education, 30-31 hours: B.S.Ed., Elementary Program (Certifies Birth through Grade 3)

CIP: 131204

This program is recommended for elementary majors who desire specialized training in early childhood programs for children birth to age eight. This minor is required for teaching in a self-contained kindergarten classroom in Missouri.

Required Courses	Semester Hours
FCS 15-312 Child Development	3
FCS 15-314 Administration of Programs for Young Children	3
FCS 15-330 Preschool and Elementary Nutrition Education	2
FCS 15-410 Parenthood Education	3
EDCI 62-340 Principles of Early Childhood Education	2
EDCI 62-531 Curriculum and Methods in Early Childhood	3
EDCI 62-532 Family and Community Resources in Early Childhood	2
EDCI 62-541 Identifying and Prescribing Instruction in Early Childhood Education	3
EDCI 62-543 Practicum in Early Childhood	4
**EDUC 61-473 Directed Teaching Early Childhood	5-6

**Students enrolling in EDUC 61-480 Directed Teaching Early Childhood Special Education should consult with advisor for correct advisement.

Certification in Early Childhood Special Education, 6-9 hours: (Certifies Pre-K and K in Missouri)

CIP: 131099

This program is designed for the elementary education major/early childhood minor* who desires to teach pre-kindergarten and kindergarten children who have disabilities.

Elementary Education Requirements	Semester Hours
(See page 356.)	67-70
Early Childhood Requirements	
(See above.)	30-34
Early Childhood Special Education Requirements	
EDCI 62-542 Curriculum and Methods in Early Childhood Special Education	3
EDCI 62-544 Practicum in Early Childhood Special Education (Graduate Students Only) (3) OR EDUC 61-480 Directed Teaching in Early Childhood Special Education (Undergraduates Only) (3-9)	3-6
Total Hours	6-9

*Students not pursuing an elementary education major/early childhood minor should consult with their advisor for requirements.

MAJOR**Major in Middle School, 47-54 hours: B.S.Ed. degree—
Certifiable Subject Field Required**

CIP: 131203

This major meets Grades 5-9 certification (subject area requirements for Grades 5-9) in Missouri through two or more minor(s), concentration(s), and/or endorsement(s) completed by the student. Students must meet the general studies Missouri certification requirements.

	Semester Hours
General Education Requirements (see pages 66-68)	42
Directed General Education Courses (must achieve grade of “C” or better in each)	
PSYC 08-303 Educational Psychology	
COM 29-102 Fundamentals of Oral Communication	
Recommended General Education Course	
MATH 17-171 Fundamentals of Mathematics	
Institutional Requirements	6
Information Technology Competency	
Recommended EDCI 62-130 Educational Computing and Technology (3)	
Multicultural/Diversity Competency (3)	
Degree Requirement	3
LANG 14-100 level “Communication and Culture” language course* (3)	
*Includes LANG 14-151 Introduction to American Sign Language and Deaf Culture.	
Required Courses	Semester Hours
Professional Education Requirements	
EDUC 61-461 School and Society	3
EDUC 61-570 The Middle School	3
EDCI 62-371 Introduction to Special Education	3
PSYC 08-317 Psychology of Early Adolescence	2
PSYC 08-303 Educational Psychology (Directed General Education)	
Teaching Methods	
EDCI 62-353 Teaching Reading in Content Areas	2
EDCI 62-356 Teaching Reading/Language Arts in the Elementary School	4
EDCI 62-430 Teaching Writing in the Middle School	2
EDCI 62-511 Middle School Curriculum, Methods and Practicum	3
EDUC 61-520 Techniques of Classroom Management and Discipline	2
Concentration Area Methods Course—One for each minor, concentration and/or endorsement area	5-6
Additional Mathematics Course (State required)	
MATH 17-371 Algebra and Geometry for Elementary and Middle School Teachers	3
Clinical Experience	
EDUC 61-262 Middle School Teaching Practicum I	1
EDUC 61-362 Middle School Teaching Practicum II	1
EDUC 61-474 Directed Teaching in the Middle School	12
EDCI 62-591 Seminar in Education	1

NOTE: Directed teaching from other certification fields may count for up to 6 of the 12 hours. See Middle School Coordinator for advisement.

Areas of Concentration/Endorsement/Minor

Two minors or areas of concentration (21 hours minimum) to be chosen from:

Language Arts, Mathematics, Science, Social Science, Agriculture Education, Business Education, and Speech/Theatre.

Language Arts Concentrations for Middle School Major

Certifies Grades 5-9 when completed with the Middle School Major

CIP: 131305

Required Courses	Semester Hours
ENGL 10-322 Introduction to the Teaching of Writing	3
ENGL 10-404 Schoolhouse Grammars and Pedagogy	3
ENGL 10-590 Young Adult Literature	3
COM 29-325 Listening Behavior and Skills	3
THEA 43-460 Creative Dramatics	3

21 Hour Concentration (meets requirements of middle school major)

Required Courses	15
*Two courses from electives	6

*See advisor for list of approved electives

NOTE: EDCI 62-356 Teaching Reading/Language Arts in the Elementary School, EDCI 62-353 Teaching Reading in Content Areas, and EDCI 62-430 Teaching Writing in the Middle School are the required subject field methods courses.

MAJORS**Major in Special Education: Cross Categorical, 84-87 hours:
B.S.Ed.-(Certifies Grades K-12)**

CIP: 131007

Required Courses	Semester Hours
Foundations for Teaching	
EDUC 61-461 School and Society	3
EDCI 62-301 Reporting Pupil Progress	2
EDCI 62-371 Introduction to Special Education	3
EDCI 62-382 Introduction to Cross Categorical Special Education	3
EDCI 62-470 Assessment in Special Education	3
EDCI 62-471 Assessment in Special Education Lab	1
EDCI 62-508 Transition/Career Education for Students with Disabilities	2
PSYC 08-333 Developmental Psychology (3) OR	
PSYC 08-312 Child Psychology (2) AND	
PSYC 08-322 Adolescent Psychology (2)	3-4
PSYC 08-303 Educational Psychology (Directed General Education)	3
Teaching Methods	
EDCI 62-216 Literature for the Elementary School	3
HPER 22-238 Health and PE Methods in the Elementary School	3
EDCI 62-356 Teaching Reading/Language Arts in the Elementary School	4
EDCI 62-380 Diagnostic and Corrective Reading	2
ART 13-380 Art in the Elementary School	2

MUS 19-380 Music Methods for Elementary Education	2
MATH 17-371 Algebra and Geometry for Elementary and Middle School Teachers	3
MATH 17-471 Mathematical Methods for Elementary Teachers	3
SCED 28-380 Methods in Elementary School Science	3
EDCI 62-410 Elementary School Social Studies	3
COM 29-553 Language, Speech and Hearing of the Exceptional Child	3
EDCI 62-574 Teaching Math to Students with Disabilities	2
EDCI 62-553 Teaching Reading in Content Areas (2) OR EDCI 62-553 The Reading Program in the Secondary School (3)	2-3
EDCI 62-320 Classroom Behavior Management	3
EDCI 62-384 Teaching Students in Cross Categorical Special Education: Academic/Behavioral (3) OR EDCI 62-385 Teaching Students in Cross Categorical Special Education: Academic/Behavioral, Secondary (3) (see advisor)	3
EDCI 62-386 Teaching Students in Cross Categorical Special Education: Functional/Physical (3) OR EDCI 62-387 Teaching Students in Cross Categorical Special Education: Functional/Physical, Secondary (3) (see advisor)	3

Clinical Experiences

EDCI 62-211 Observation and Activity in the Elementary School (1) OR EDUC 61-260 Secondary Teaching Practicum I (1) AND EDUC 61-360 Secondary Teaching Practicum II (1) OR EDUC 61-262 Middle School Teaching Practicum I (1) AND EDUC 61-362 Middle School Teaching Practicum II (1)	1-2
EDCI 62-407 Elementary School Language Arts Practicum	1
EDCI 62-456 Practicum and Seminar in Elementary School Reading	3
EDCI 62-444 Practicum in Special Education: Cross-Categorical	3
EDUC 61-481 Directed Teaching in Cross Categorical Special Ed: Elementary (6) AND EDUC 61-482 Directed Teaching in Cross Categorical Special Education: Secondary (6)	12

NOTE: Directed teaching from other certification or other degrees may count for up to 6 hours of the 12 required hours.

TOTAL MINIMUM ACADEMIC HOURS 135-140

Dual Majors in Special Education: Cross Categorical and Elementary Education

Additional requirements for adding elementary education (certifies self-contained grades 1-6) as a second major to the major in Special Education: Cross Categorical are the following:

LANG 14-100 level "Communication and Culture" modern language course	3
*ECON 52-130 Survey of Economics OR 52-150 General Economics I OR 52-151 General Economics II (if not taken as part of special ed)	3
*GEOG 32-101 Introduction to Geography (if not taken as part of special ed)	3
EDCI 62-420 Content Teaching in Elementary Schools	3
**EDUC 61-471 Directed Teaching in the Elementary School	6
EDCI 62-591 Seminar in Education	1

Total Additional Hours 9

*Either Economics or Geography is required in the major in special education; both are required for elementary education.

****When combined with a major in special education, there are two Directed Teaching placements of 6 hours each (one elementary and one special education for a total of 12.) Each major, taken separately, would require 12 hours of directed teaching, so the dual major does NOT add additional Directed Teaching hours. Therefore, only 9 additional hours are required to complete both majors.**

Concentration in Special Education, 22 hours

This concentration is recommended for majors in elementary education wishing to extend their competencies to include the teaching of students with disabilities within the regular classroom. The program described below does not result in certification in special education.

Required Courses	Semester Hours
EDCI 62-301 Reporting Pupil Progress	2
EDCI 62-380 Diagnostic and Corrective Reading	2
EDCI 62-382 Introduction to Cross Categorical Special Education	3
EDCI 62-470 Assessment in Special Education	3
EDCI 62-471 Assessment in Special Education Lab	1
EDCI 62-504 Creating Inclusive Classrooms	3
EDCI 62-384 Teaching Students in Cross Categorical Special Education: Academic/Behavioral (3) OR	
EDCI 62-385 Teaching Students in Cross Categorical Special Education: Academic/Behavioral, Secondary (3) OR	3
EDCI 62-320 Classroom Behavior Management	3
EDCI 62-574 Teaching Math to Students with Disabilities	2

Education: Educational Leadership / 61

DEGREE PROGRAM

Bachelor of Science in Education, Secondary Program (Certifies Grades 9-12)

Completion of this curriculum, other University requirements, and an overall grade point average identified in the Professional Education Handbook on a 4.00 scale qualifies the student to receive a Bachelor of Science in Education degree.

The number of hours in the major, minor, and elective categories may vary depending on the major and minor selected. Care should be exercised in choosing courses to assure a minimum of 40 semester hours of senior college work in courses numbered above 300.

All degrees in education are subject to state requirements which may change at any time due to action of the State Board of Education.

B.S.Ed. Degree Requirements, Secondary Program

	Semester Hours
General Education Requirements (See pages 66-68)	42
Directed General Education Requirement (must achieve grade of "C" or better in each)	
COM 29-102 Fundamentals of Oral Communication	
PSYC 08-303 Educational Psychology	

Institutional Requirements	6
Information Technology Competency	
Recommended EDUC 61-145 Information and Educational Technology (3)	
Multicultural/Diversity Competency (3)	
Degree Requirement	3
EDUC 61-569 Multiculturalism in Education (3) OR	
LANG 14-100 level "Communication and Culture" modern language course* (3)	
*Includes LANG 14-151 Introduction to American Sign Language and Deaf Culture.	
The degree requirement for language is separate from the	
Multicultural/Diversity Institutional Requirement.	
Professional Education Requirements	27-28
PSYC 08-322 Adolescent Psychology	2
EDCI 62-353 Teaching Reading in Content Areas	2
EDCI 62-371 Introduction to Special Education	3
Special Methods in Education: (See department course listings)	2-3
A special methods course must be completed with each	
major or minor which carries 9-12 or K-12 certification	
EDUC 61-260 Secondary Teaching Practicum I	1
**EDUC 61-360 Secondary Teaching Practicum II	1
**EDUC 61-461 School and Society	2
***EDUC 61-462 School and Society Seminar	1
***EDUC 61-472 Directed Teaching in the Secondary School	10
**EDUC 61-520 Techniques of Classroom Management and Discipline	2
***EDUC 61-521 Seminar in Classroom Management	1
Major or Major/Minor Requirements and Electives	55-60
TOTAL MINIMUM ACADEMIC HOURS	124

**These courses are to be taken in the same trimester as the content methods course.

***These courses must be taken during the student teaching trimester.

Bachelor of Science in Education, Elementary-Secondary Program (K-12 Certification)

Completion of this curriculum, other University requirements, and an overall grade point average identified in the Professional Education Handbook on a 4.00 scale qualifies a student to receive a Bachelor of Science in Education degree.

Candidates for this program must complete a major in one of the following areas: art, modern language, music or physical education.

These majors may be combined with other majors and/or minors.

The number of hours in the major, minor, and elective categories may vary depending on the major and minor selected. Care should be exercised in choosing courses to assure a minimum of 40 semester hours of senior college work in courses numbered above 300.

All degrees in education are subject to state requirements which may change at any time due to action of the State Board of Education.

B.S.Ed. Degree Requirements, Elementary/Secondary Program

Semester Hours

General Education Requirements (See pages 66-68)	42
Directed General Education Requirement (must achieve grade of "C" or better in each)	
COM 29-102 Fundamentals of Oral Communication	
PSYC 08-303 Educational Psychology	
Institutional Requirements	6
Information Technology Competency	
Recommended EDUC 61-145 Information and Educational Technology (3)	
Multicultural/Diversity Competency (3)	
Degree Requirement	3
EDUC 61-569 Multiculturalism in Education (3) OR	
LANG 14-100 level "Communication and Culture" modern language course* (3)	
*Includes LANG 14-151 Introduction to American Sign Language and Deaf Culture.	
The degree requirement for language is separate from the	
Multicultural/Diversity Institutional Requirement.	
Professional Education Requirements	27-28
EDUC 61-260 Secondary Teaching Practicum I	1
**EDUC 61-360 Secondary Teaching Practicum II	1
EDCI 62-353 Teaching Reading in Content Areas	2
**EDUC 61-461 School and Society	2
***EDUC 61-462 School and Society Seminar	1
***EDUC 61-470 Directed Teaching in Elementary and Secondary School	10
**EDUC 61-520 Techniques of Classroom Management and Discipline	2
***EDUC 61-521 Seminar in Classroom Management	1
EDCI 62-371 Introduction to Special Education	3
PSYC 08-322 Adolescent Psychology	2
Special methods in education (See department course listings)	2-3
A special methods course must be completed with each	
major or minor which carries 9-12 or K-12 certification	
Major or Major/Minor Requirements and Electives	55-60
TOTAL MINIMUM ACADEMIC HOURS	124

** These courses are to be taken in the same trimester as the content methods course.

***These courses must be taken during the student teaching trimester.

Special Education majors should consult with their advisor for program substitutions for PSYC 08-322 and EDCI 62-353.

Course Descriptions

Education: General/ Leadership / 61

145 Information and Educational Technology (3 hours)

This educational information and technology course will provide instruction in technology language and

technology use for the educator. This course is intended to serve students majoring in education to prepare them to plan, instruct, communicate and manage record keeping in addition to modeling technology use for their students.

210 Field Experience in Diversity (1 hour)

The purpose of this course is to gain an understanding of people in a different culture and to become sensitive to their uniqueness. The course is a vehicle by which undergraduates in the teacher education program can experience diversity in a real-world setting, thus meeting the program's diversity requirement. (SS)

252 Pluralism in a Multicultural Society (3 hours)

This course is designed to impart a knowledge of and sensitivity to issues which foster potential prejudices and discrimination. These issues include race, national origin, sexism, religion, handicaps (physical and mental), economic position and others. Methodology in humanizing the curriculum, sensitivity issues, historical perspectives, and means by which dehumanizing biases may be recognized in instructional materials also shall be included in the content of this course. (F, S, SS)

260 Secondary Teaching Practicum I (1 hour)

Observation and participation in the secondary or junior high school with both non-instructional and limited instructional responsibilities. A portion of this course is devoted to periodic discussion sessions. May not be taken during the same trimester as EDUC 61-360. (F, S, SS)

262 Middle School Teaching Practicum I (1 hour)

Observation and participation in the middle school (grades 5-9) with both non-instructional and limited instructional responsibilities. A portion of this course is devoted to periodic discussion sessions. (F, S, SS)

360 Secondary Teaching Practicum II (1 hour)

Emphasizes practical teaching skills to include observation and practice in a supervised classroom situation including off-campus week long teaching placement. Prerequisite: EDUC 61-260 or equivalent. May not be taken during the same trimester as EDUC 61-260. Must be taken concurrently with EDUC 61-461, 520 and Content Methods. (F, S)

362 Middle School Teaching Practicum II (1 hour)

Continues the observation and teacher-aide activities of Middle School Teaching Practicum I and gives the prospective middle school teacher additional background in practical teaching skills to observe

and to practice in a supervised classroom situation. Emphasis is given to using practical approaches to "everyday" classroom instruction and activities. Prerequisite: EDUC 61-262 or equivalent. (F, S, SS)

412 Audio-Visual Aids (2 hours)

An introductory course designed to familiarize teachers with the general types of audio-visual aids. (F)

461 School and Society (2-3 hours)

A survey of the sociological, philosophical, historical and legal foundations of education with special emphasis on staffing patterns, multicultural needs, career opportunities, organizational patterns and school/community relations. Secondary students must be enrolled concurrently with EDUC 61-360, 520 and Content Methods the trimester prior to student teaching. (F, S)

462 School and Society Seminar (1 hour)

Course is to be taken during the student teaching trimester and is a continuation of EDUC 61-461 with many of those topics readdressed as students are actively engaged in student teaching experiences. The preparatory work done in the 2-hour credit course will serve as a foundation for discussion, for application, for reflection and for alteration. (F, S)

463 Secondary Methods and Techniques (3 hours)

Provides a sequence of laboratory experiences in a variety of basic teaching methods and skills such as questioning techniques, reinforcement, stimulus variation, use of illustrations and examples, demonstrations and disciplinary procedures. Also included are an introduction to innovative instructional methods, a unit on use of instructional technology and a unit on evaluative procedures. (F, S)

470 Directed Teaching in Elementary and Secondary School (10 hours)

This course is offered only for those seeking K-12 certification in art, music, modern languages or physical education. (F, S)

471 Directed Teaching in the Elementary School (6-12 hours)

A gradual induction into teaching in the elementary school is provided through a progression which includes observation of the children and the work of the cooperating teacher, gradual participation and finally directed teaching under the supervision of the cooperating teacher and the college coordinator.

The candidate must have adequately fulfilled the requirements as set by the College of Education and Human Services. Prerequisite: Permission of director of educational field experiences. (F, S)

472 Directed Teaching in the Secondary School (10 hours)

A gradual induction into teaching in the secondary school is provided through a progression which includes observation of the students and the work of the cooperating teacher, gradual participation, and finally, directed teaching under the supervision of the cooperating teacher and the college coordinator. Prerequisite: Permission of director of educational field experiences. (F, S)

473 Directed Teaching Early Childhood (5-6 hours)

A gradual induction into teaching in an early childhood setting through a progression which includes observation of the children and the work of the cooperating teacher, gradual participation, and finally directed teaching under the supervision of the cooperating teacher and the college coordinator. Prerequisite: Permission of director of educational field experiences. (F, S)

474 Directed Teaching in the Middle School (12-18 hours)

A gradual induction into teaching in the middle school is provided through a progression which includes observation of the student and the cooperating teacher, gradual participation, and finally directed teaching under the supervision of the cooperating teacher and the college coordinator. Prerequisite: Permission of director of educational field experiences. (F, S)

480 Directed Teaching in Early Childhood Special Education (3-6 hours)

A gradual induction into teaching children in a preschool special education environment with emphasis on interpretation of individual tests and application of behavior management techniques. Prerequisite: Permission of director of educational field experiences. (F, S)

481 Directed Teaching in Cross Categorical Special Education: Elementary (6-12 hours)

A gradual induction into teaching students with mild disabilities in a cross categorical setting (elementary) through a progression which includes interpretation of intelligence tests, formal and informal diagnostic procedures, prescriptive

instruction and practical application of teaching strategies and behavior management techniques. Prerequisite: Permission of director of educational field experiences. (F, S)

482 Directed Teaching in Cross Categorical Special Education: Secondary (6-12 hours)

A gradual induction into teaching students with mild disabilities in a cross categorical setting (secondary) through a progression which includes interpretation of intelligence tests, formal and informal diagnostic procedures, prescriptive instruction and practical application of teaching strategies and behavior management techniques. Prerequisite: Permission of director of educational field experiences. (F, S)

511 Instructional Materials and Equipment (2 hours)

Develops a basic pattern for the preparation of instructional materials, discusses the principles and practices and the utilization of these materials, and provides for instruction for the proper use of equipment in various types of school and educational programs. (F)

520 Techniques of Classroom Management and Discipline (2 hours)

Designed to assist present or prospective teachers in developing classroom and behavior management techniques. Must be taken concurrently with EDUC 61-360, 461 and Content Methods. (F, S)

521 Seminar in Classroom Management (1 hour)

Course is taken during the student teaching trimester and is a continuation of EDUC 61-520 with many of those topics readdressed as students are actively engaged in student teaching experiences. The preparatory work done in the 2-hour credit course will serve as a foundation for discussion, for application, for reflection and for alteration. Must be taken concurrently with student teaching and EDUC 61-462. (F, S)

528 Teaching of the Gifted (3 hours)

Methods, techniques and materials used in the teaching of the gifted. (S, even years)

530 Problems of Adult Education (2 hours)

An overview of the growth and need for continuous education through adulthood; emphasis is placed on programs, surveying community needs and coordination of community agencies. (F, even years)

549 Trends in Continuous School Improvement (1-3 hours)

Repeatable with a change in topic.

550 Trends in Curriculum Development (1-3 hours)

This course is designed to assist teachers and/or administrators in general curriculum design, revision and/or evaluation. Repeatable with a change in topic. (F, S, SS)

551 Trends in Language Arts (1-3 hours)

This course is designed to update teachers in methods, techniques and innovations in teaching language arts. Repeatable with a change in topic. (F, S, SS)

552 Trends in Social Studies (1-3 hours)

This course is designed to update teachers in methods, techniques and innovations in teaching social studies. Repeatable with a change in topic. (F, S, SS)

553 Trends in Mathematics (1-3 hours)

This course is designed to update teachers in methods, techniques and innovations in teaching mathematics. Repeatable with a change in topic. (F, S, SS)

554 Trends in Science (1-3 hours)

This course is designed to update teachers in methods, techniques and innovations in teaching science. Repeatable with a change in topic. (F, S, SS)

556 Trends in Classroom Management (1-3 hours)

This course is designed to update teachers in methods, techniques and innovations in teaching classroom management and discipline. Repeatable with a change in topic. (F, S, SS)

557 Trends in Computer Use in Education (1-3 hours)

This course is designed to update teachers in educational uses of computers. Repeatable with a change in topic. (F, S, SS)

558 Trends in Motivational Techniques (1-3 hours)

This course is designed to update teachers in methods, techniques and innovations in classroom motivation of students. Repeatable with a change in topic. (F, S, SS)

559 Trends in Instructional Techniques (1-3 hours)

This course is designed to update teachers in general instructional methods and techniques for the classroom. Repeatable with a change in topic. (F, S, SS)

569 Multiculturalism in Education (3 hours)

This course is designed to impart a knowledge of and sensitivity to issues which foster potential prejudices and discrimination. These issues include race, national origin, sexism, religion, handicaps (physical and mental), economic position and others. Methodology in humanizing the curriculum, sensitivity issues, historical perspectives, and means by which dehumanizing biases may be recognized in instructional materials also shall be included in the content of this course. Prerequisite: Junior classification. (F, S, SS)

570 The Middle School (3 hours)

Designed to acquaint prospective or experienced teachers and administrators with the functions, organization, curriculum and personnel associated with the middle and junior high school; with concentration on the early adolescent learner. (S, SS, even years)

585 Co-Curricular Activities (3 hours)

The importance of co-curricular activities is studied through the philosophy and practices of these activities in the modern school. Also emphasized is the role of the teacher-sponsor in the program. (F, even years)

598 Problems—Secondary (1-4 hours)

Designed to meet individual student's needs in independent study. The study topic must be approved by the instructor. (F, S, SS)

Education: Curriculum and Instruction / 62**110 Strategies for College Reading (1 hour)**

A basic course designed to improve student reading ability through group and individualized instruction for students who need additional reading skills to succeed at the University level. (F)

130 Educational Computing and Technology (3 hours)

Introductory educational technology course required for all elementary education majors that

emphasizes application of contemporary technology in elementary education. Students will learn to use technology as a tool to improve the teaching and learning processes. The methodologies and materials used in the course are updated each trimester according to current trends, practices, and research in the field of educational technology. In addition, technologies used in the course will be the same as technologies that are used and available in K-6 classrooms. (F, S)

211 Observation and Activity in the Elementary School (1 hour)

The student assists the elementary or middle school teacher with both non-instructional and limited instructional responsibilities in the student's area of specialization. A portion of the course is devoted to periodic discussion sessions. (F, S)

216 Literature for the Elementary School (3 hours)

Selection and presentation of literature at the various levels of the elementary school. (F, S)

301 Reporting Pupil Progress (2 hours)

A study of group measurement, evaluation, interpretation and counseling techniques used with students, parents and other school personnel. (F, S)

320 Classroom and Behavior Management (3 hours)

Preservice teachers will develop the knowledge and strategies necessary for successful classroom management and discipline for students who exhibit a wide range of behavioral needs and characteristics, including learners with special needs. (F, S)

340 Principles of Early Childhood Education (2 hours)

This course introduces students to the philosophical and theoretical frameworks of early childhood education. Includes observation and analysis in varied early childhood settings. (S, SS)

353 Teaching Reading in Content Areas (2 hours)

Topics will focus on basic reading skills as relevant to all academic areas in the junior and senior high schools, with additional attention to specialized skills of reading as related to particular content materials. (F, S)

356 Teaching Reading/Language Arts in the Elementary School (4 hours)

This course has been designed to provide methods of instruction for an integrated elementary/

middle school reading and language arts program. Emphasis will be placed on methods, materials and teaching approaches which will assist children in developing the lifelong communication skills of listening, speaking, reading and writing. (F, S)

371 Introduction to Special Education (3 hours)

Provides participants with knowledge and understanding about the identification of exceptional children, methods of working with exceptional children and sources of referral available to parents and teachers. (F, S)

380 Diagnostic and Corrective Reading (2 hours)

Diagnostic techniques and procedures for the correction of learning problems in reading. Prerequisites: EDCI 62-301 and 356. (F, S, SS)

382 Introduction to Cross Categorical Special Education (3 hours)

Designed to develop knowledge of the issues and characteristics of individuals with mild/moderate disabilities (e.g., intellectual disabilities (IDS), learning disabilities, behavior disorders and/or physical and other health impaired, including ADHD) and to provide information and organizational techniques to meet their educational needs in a cross categorical setting. Students will develop the conceptual frameworks needed to identify and interpret a broad range of student behavior and deficits from a cross-categorical perspective. Prerequisite: EDCI 62-371. (S)

384 Teaching Students in Cross Categorical Special Education: Academic/Behavioral (3 hours)

Designed to equip teachers-in-training with the knowledge and skills to effectively teach students with mild/moderate academic and/or behavioral disabilities. This is one of two methods courses (with no required sequence) required for the major in Special Education: Cross Categorical. Prerequisites: EDCI 62-371 and 382. (F)

385 Teaching Students in Cross Categorical Special Education: Academic/Behavioral, Secondary (3 hours)

Designed to equip teachers-in-training with the knowledge and skills to effectively teach adolescents and young adults with mild/moderate academic and/or behavioral disabilities. This is one of two methods courses (with no required sequence) required for the major in Special Education: Cross Categorical. Permission of advisor/

instructor needed to enroll. Prerequisites: EDCI 62-371 and 382. (F)

386 Teaching Students in Cross Categorical Special Education: Functional/Physical (3 hours)

Designed to equip teachers-in-training with the knowledge and skills to effectively teach students with mild/moderate functional and/or physical and other health impairments. This is one of two methods courses (with no required sequence) required for the major in Special Education: Cross Categorical. Prerequisites: EDCI 62-371 and 382. (S)

387 Teaching Students in Cross Categorical Special Education: Functional/Physical, Secondary (3 hours)

Designed to equip teachers-in-training with the knowledge and skills to effectively teach adolescents and young adults with mild/moderate functional and/or physical and other health impairments. This is one of two methods courses (with no required sequence) required for the major in Special Education: Cross Categorical. Permission of instructor needed to enroll. Prerequisites: EDCI 62-371 and 382. (S)

407 Elementary School Language Arts Practicum (1 hour)

Supervised practice in teaching language arts. Must be taken concurrently with EDCI 62-456. Prerequisite: EDCI 62-356. (F, S)

410 Elementary School Social Studies (3 hours)

An examination of the content, teaching techniques, instructional materials and role of social studies in today's elementary school. Course includes both classroom and practicum experiences. (F, S)

420 Content Teaching in Elementary Schools (3 hours)

Preservice teachers will develop knowledge in the content areas and teach content area subjects (math, science and social studies) under the guidance and supervision of a faculty member and a cooperating teacher in a classroom setting. Prerequisites: EDCI 62-320, 410, SCED 28-380 and MATH 17-471. (F, S)

430 Teaching Writing in Middle School (2 hours)

A study of the methods and materials for teaching the process of writing to middle school students. Content includes: developmental stages of writ-

ing, the writing process, writing evaluation, writing across the curriculum, creating a stimulating writing environment and the use of technology in writing. (F)

444 Practicum in Special Education: Cross Categorical (3 hours)

Supervised clinical experience that includes interpretation of intelligence tests, formal and informal diagnostic procedures, prescriptive instruction and practical application of teaching strategies and behavior management techniques. Prerequisites: EDCI 62-384 or 385, EDCI 62-386 or 387, EDCI 62-470 and 471. (F, S)

456 Practicum and Seminar in Elementary School Reading (3 hours)

Supervised practice in teaching reading with weekly seminars regarding problems in the teaching of reading. Must be taken concurrently with EDCI 62-407. Prerequisite: EDCI 62-356 and 380. (F, S, SS)

470 Assessment in Special Education (3 hours)

Instruction in administration and interpretation of formal and informal assessment instruments, interpretation of individualized intelligence tests and instruction in authentic assessment measures in order to design appropriate intervention programs for students with special instructional needs. Must be enrolled concurrently in EDCI 62-471. Prerequisites: EDCI 62-301 and 371. (F, S)

471 Assessment in Special Education Lab (1 hour)

Students will have the opportunity to administer assessments and develop evaluation plans, IEPs and other documents within the special education process. In addition, diagnosing student needs and prescribing appropriate educational interventions will be emphasized. Prerequisite: Must be enrolled concurrently in EDCI 62-470. (F, S)

504 Creating Inclusive Classrooms (3 hours)

Designed to provide a framework for creating learning environments that support the learning and socialization of students who bring unique characteristics to the classroom. Teachers will develop effective techniques and methods for all students including: those who are at risk for success or who have disabilities; the gifted and talented; those whose diversity lies in their culture, language, race, gender, sexual orientation or family structure. Prerequisites: At least two of the following courses: EDCI 62-356, SCED 28-380, MATH 17-471 or EDCI 62-410 or permission of instructor. (S)

508 Transition/Career Education for Students with Disabilities (2 hours)

Acquaints student with the principles, methods and procedures of career development and transition for students with disabilities. Prerequisites: EDCI 62-382, 384 and 386, or permission of instructor. (S, SS)

511 Middle School Curriculum, Methods and Practicum (3 hours)

Methods and techniques of teaching, practicum experience and curriculum construction for the middle and junior high school with attention given to early adolescent development. (F, SS even years)

519 Problems in Elementary Education (1-4 hours)

This course is designed to meet the individual student's educational needs. The studies may be either of a subjective or objective research nature. Repeatable for further mastery. (F, S, SS)

520 Introduction to Teaching Students with Autism Spectrum Disorders (3 hours)

This course is intended to develop effective teachers of students with autism spectrum disorders. This course will cover a wide variety of topics regarding students with autism spectrum disorders: from characteristic, basic knowledge of assessment, to effective practices used to address their unique needs in school, family, and community. This course will provide an introduction and overview of issues surrounding the education of students with autism spectrum disorders.

521 Teaching Students with Autism Spectrum Disorders (3 hours)

This course is intended to develop effective teachers of students with autism spectrum disorders (ASD). This course is a follow up to the prerequisite Introduction to Teaching Students with Autism Spectrum Disorders and will go into more depth with methods and evidence-based practices used with students with ASD. Students will gain more specific knowledge of strategies and evidence-based practices as well as develop some supports to be used with students in special education or inclusion settings. Prerequisite: EDCI 62-520.

522 Technology for Teaching and Learning (3 hours)

Students will learn about various technologies, applications, procedures and assessment to facilitate the learning of students with disabilities.

Topics include assessment, levels of assistive technology services and devices, use of word processing, spreadsheet, and database software in the classroom, student and teacher productivity applications, legal, ethical issues regarding technology in the classroom and instructional software.

531 Curriculum and Methods in Early Childhood (3 hours)

A gradual induction into planning, creating and integrating developmentally appropriate curriculum and materials for working with children birth through grade 3. Prerequisite: EDCI 62-340. (F, S)

532 Family and Community Resources in Early Childhood (2 hours)

Study of family and community resources used in working with parents and children, birth through grade 3. Prerequisite: EDCI 62-340 or permission of instructor. (F, S)

540 Behavior Management Techniques (3 hours)

This course is designed to provide teachers-in-training with both technical and functional understanding of applied behavior analysis, as well as strategies for the everyday applications of behavior management in classrooms and other educational settings. Prerequisites: EDCI 62-371 or permission of instructor. (F, SS)

541 Identifying and Prescribing Instruction in Early Childhood Education (3 hours)

A survey of varied formal and informal evaluation techniques to help teachers screen, diagnose and prescribe instruction for educationally high risk children. Emphasis is placed upon the prevention and correction of developmental deficits. Prerequisites: EDCI 62-340 and 531 or permission of instructor. (F, SS)

542 Curriculum and Methods in Early Childhood Special Education (3 hours)

This course is designed to develop skills which enable the prospective teacher of the young child with special needs (birth to age five years), to (1) plan and organize appropriate curriculum content and learning sequences; (2) identify and implement appropriate instructional strategies, techniques and environments; and (3) work effectively with parents and families, as well as other professionals and caregivers. Prerequisites: EDCI 62-340 or 531, EDCI 62-541, 470 or 652. (F)

543 Practicum in Early Childhood (4 hours)

Supervised practice in evaluation and teaching children from birth through grade 3. Prerequisites: EDCI 62-340, 531 and 541 or permission of instructor. (F, S, SS)

544 Practicum in Early Childhood Special Education (3 hours)

Supervised practice in early childhood teaching, interpreting individualized tests, and application of behavior management techniques with pre-school handicapped children. Prerequisite: EDCI 62-542. (S)

553 The Reading Program in the Secondary School (3 hours)

A course for specialized personnel in reading at the secondary level. Topics will focus on means for identifying students' basic and developmental skill needs as well as materials and techniques for instruction. (S, SS)

555 Trends in Reading (1-3 hours)

This course is designed to update teachers in methods, techniques and innovations in teaching reading. Repeatable with a change in topic. (F, S, SS)

563 Trends in Special Education (1-3 hours)

This course is designed to update teachers in methods, techniques and innovations in special education. Repeatable with a change in topic. (F, S, SS)

574 Teaching Math to Students with Disabilities (2 hours)

Methods and materials used in teaching remedial math to the exceptional learner. (F, SS)

580 Methods and Techniques for Teaching English Language Learners (ELL/ESOL) (3 hours)

Designed to introduce the student to the current methods and techniques used to instruct limited English proficient students regardless of their age group or goal. Special attention is given to application of the Missouri WIDA and TESOL Standards to the development of curriculum of the content of ELL class. Explores how current trends in developing second language competence is used to teach language in ESL and mainstream classrooms through a content-based approach. Required for an ESL endorsement. (F)

582 Linguistics for Teaching ELL/ESOL (3 hours)

Examines the nature of language through a study of pragmatics, semantics, syntax, morphology, and phonology, and explores language variation as it is shaped by society and culture. The concepts of first and second language acquisition, the neurological foundations of language, and the evolution of writing systems are introduced. (S)

591 Seminar in Education (1 hour)

Current Trends and Issues Seminar is a required component of the Professional Trimester experience and is taken in conjunction with the student teaching experience. It is designed to help students become reflective teachers by providing an opportunity to synthesize the student teaching experience and by providing a forum for collaborative, critical inquiry. This seminar is taken concurrently with the Directed Teaching courses (EDUC 61-471, 473 and/or 472, 474).

Career Education

Northwest Missouri State University Outreach offers a professional development certificate program in Career and Technical Education. Upon successful completion of this program, career and technical educators meet DESE certification in career education at the secondary or adult levels and build their present knowledge in the areas of teaching, curriculum, and assessment. Courses are offered at Northwest's Outreach Centers in blended delivery of both face-to-face and online learning delivery modes.

Career and Technical Education Certificate, 16 hours

CIP: 131319

Required Courses

- VOED 02-501 History and Philosophy of Career Education (2)
- VOED 02-505 Assessment in Career Education (2)
- VOED 02-506 Career Education Curriculum (2)
- VOED 02-508 Guidance in Career Education (2) OR
- VOED 02-510 Coordination of Cooperative Education (2)
- VOED 02-515 Instructional Methods of Career Education (3)
- VOED 02-520 Special Investigations in Career Education (2)
- EDCI 62-371 Introduction to Special Education (3)

Total Hours

16

Course Descriptions

Career Education/02

193 FAA Ground School with Flight (3 hours)

This course is designed to give the student opportunity to complete 35 hours of ground school training in order to qualify for the Federal Aviation private pilot examination. The student will be required to complete 10 hours of flight instruction and/or solo. (Cost depends upon aircraft used.) (F, S, SS)

195 Private Pilot Certification (2 hours)

This course is a continuation of VOED 02-193, with flight training to complete flying requirements for the Federal Aviation private pilot's license. Prerequisite: VOED 02-193 or equivalent. (Cost depends upon aircraft used.) (F, S, SS)

500 Special Offerings (1-4 hours)

Courses which are offered on only one occasion or variable issue-oriented courses which have the content described in the title. Credit and prerequisites as announced. (F, S, SS)

501 History and Philosophy of Career Education (2 hours)

The philosophy, evolution of, and principles of career education. Practices and trends related to legislation and the relationship of career education to the total plan of public education. (F)

503 Implementing Career Education (2 hours)

The establishment and operation of career education programs including organization, administration, supervision, curricula and evaluation.

505 Assessment in Career Education (2 hours)

Beginning with the end in mind, investigate what students should know and be able to do when leaving their course of study. Examine and design usable summative and formative assessments. (F)

506 Career Education Curriculum (2 hours)

Designed to provide career education teachers with knowledge of the problems, techniques and procedures in the selection and organization of

career education subject matter for instructional purposes in day, part-time, and evening schools and classes. (S)

508 Guidance in Career Education (2 hours)

Designed to acquaint the student with an understanding of principles, methods and procedures of career education guidance. Describes plans for developing a program to assist youth in preparations for entering upon and making adjustments in career choices.

510 Coordination of Cooperative Education (2 hours)

Selection, development, and presentation of materials used in supervision of students in the work place. Includes methods, techniques, evaluation, current practices, and trends in teaching and supervising of COE. (S)

515 Instructional Methods for Career Education (3 hours)

An introduction and modeling of successful teaching methods and strategies. Career and technical education teachers will develop a repertoire of teaching skills, strategies, and styles to improve instruction and classroom management. (F)

520 Special Investigations in Career Education (1-3 hours)

Independent study in career education where the selected problems to investigate could include topics such as methods, control, publicity, finance and equipment in the varied disciplines in career education. This course may be repeated with a change in topic. (SS, F)

540 The Adult Learner (3 hours)

Organization and administration of programs for adults. A study of teaching procedures, recent trends in subject matter, materials, techniques and evaluation as applied to adult education. This course provides opportunity for observation and participation in adult programs.

Family and Consumer Sciences

The Department of Family and Consumer Sciences is in the process of realignment with its programs being divided among other departments. The Department of Behavioral Sciences now houses the major in Child and Family Studies and minors in Administration of Child Care Programs, and Family Life and Resource Management. The Department of Business now houses the major in Merchandising of Textiles, Apparel and Furnishings. The Department of Health and Human Services now houses the major in Foods and Nutrition: Didactic Program in Dietetics and minors in Food Service, and Nutrition. Please see the appropriate sections of this catalog for major and minor requirements.

Course Descriptions

Family and Consumer Sciences / 15

110 Family and Individual Wellness (3 hours)

A study of wellness as a holistic approach to health as it impacts the well-being and lifestyle of families and individuals. (F, S)

150 Creating Aesthetic Environments (3 hours)

A study of the principles of design and color in relation to the selection and arrangement of furniture within the home. (F, S)

160 Apparel Selection (3 hours)

A study of the sociological, psychological, cultural, and aesthetic factors influencing clothing and appearance. (F, S)

201 Foundations and Careers in Family and Consumer Sciences (2 hours)

A study of the systems approach as it relates to the family ecosystem, family systems and the Family and Consumers sciences body of knowledge. Study of careers in Family and Consumers Sciences. Applications of professional skills. Prerequisite: Completion of one 100- or 200-level course for majors in FCS. (S)

214 Human Development (3 hours)

A lifespan approach to learning, which explores the development of the infant and continues through adulthood to death. It integrates the physical, social, cognitive and emotional development of individuals as they function in family structures. (F, S)

216 Gerontology (3 hours)

Provides an overview of the total process of aging and the changes that evolve in society and in the lives of individuals as others grow old ahead of us. Students will be encouraged to think positively and realistically about aging and elderly, and develop sensitivity to family and social and economic situations of older people. Prerequisite: PSYC 08-103. (F)

230 Food Science (4 hours)

A laboratory course with emphasis on the study of scientific principles of food preparation and on criteria for recognition and evaluation of standard products. Two hours lecture and 4 hours lab per week. (F)

232 Food Service Management (3 hours)

An introductory food service course emphasizing food service sanitation and requiring application of principles of food buying and food preparation to menu planning, meal preparation and service. Three hours lecture and 1 hour lab per week. Prerequisite: FCS 15-230 or by permission. (S)

234 Nutrition and Diet Behavior (2 hours)

An entry-level nutrition course which provides basic nutrition information. Coursework will include a self-assessment of nutrient intake utilizing computer analysis. (F, S)

250 Contemporary Housing (3 hours)

A study of housing as it impacts the physical, social, psychological and economic needs of individuals and families. (F, S)

260 Clothing Construction Techniques (3 hours)

Basic clothing construction techniques including a laboratory for experimentation and practice with methods and materials. Emphasis on how and why, rather than on garment construction. One hour lecture and 5 hours lab per week. Prerequisite: FCS 15-160 or by permission. (On demand)

266 Textile and Apparel Industries (3 hours)

History and organization of the textiles and apparel industries. Emphasis on changes occurring throughout the industries and implications these changes have for the merchandising of apparel products at both the production and retail levels. (F)

300 Special Offerings (1-4 hours)

Course which is offered on only one occasion or variable issue-oriented course which has the content described in the title.

310 Family Relationships (3 hours)

A study of the variety of styles of interpersonal relationships emphasizing self-knowledge and understanding of individuals within relationships as a basic step in relating to others in dating, courtship, engagement, marriage and daily living. Includes exploration of types of relationships, communication patterns and alternative family forms. (F, S)

312 Child Development (3 hours)

A developmental approach to the study of children from birth to 12 years of age, integrating physical, social, emotional, cognitive and creative aspects of the child's total development. Observation and participation with children at the child development center and cooperating schools will be an integral part of the course. (F, S, SS)

314 Administration of Programs for Young Children (3 hours)

A study of child care models and early childhood programs. Provides an in-depth analysis of program development, program philosophy, operational policies, budgetary process, staffing, record keeping, equipment selection, facility and program administration. Prerequisite: FCS 15-312 or by permission. (F, S)

315 Social Aspects of Aging and Families (3 hours)

This course introduces you to social welfare programs designed to assist older adults such as Social Security, Medicare and Medicaid. Students

will also have the opportunity to learn about social networks and families in later life. Prerequisite: FCS 15-216. (S)

322 Consumer Economics and Personal Finance (3 hours)

This course examines the consumer perspective of how an economic system functions. It also provides skills and tools necessary for individuals to critically assess and evaluate consumer products and service and to manage finances, to make prudent buying investment, and income protection decisions. Students will gain awareness of rights and legal options in situations where readiness from fraudulent actions and misrepresentation is sought. (F, S, SS)

330 Preschool and Elementary Nutrition Education (2 hours)

Basic principles of nutrition with focus on nutritional needs of children and on methods of teaching children about foods and health. Designed for preschool and elementary education students; includes practical experience in coordinating nutritional classroom activities for children. (F, S)

332 Quantity Food Preparation (2 hours)

A lecture course in basic quantity food preparation with emphasis on principles of preparation, identification of quality products, standardized recipes, safety and sanitation, care and supervision of food service equipment, organization of work place, work simplification and preparation of food. Prerequisite: FCS 15-232. (F, alt. years)

333 Quantity Food Preparation Laboratory (2 hours)

Provides laboratory experience in quantity food preparation. Four hours lab per week. Must be taken concurrently with FCS 15-332. (F, alt. years)

334 Community Nutrition (4 hours)

Fundamentals of nutrition care delivery in community programs. This course explores nutrition programs that serve various segments of the population and the relationship of these programs to nutrition policy at the local, national and international levels. The specific needs of population groups (infants, children, women and the elderly) are considered and questions of food security are investigated. Students plan and execute a social marketing project and experiences in community nutrition programs will be required. Three hours lecture and two hours lab per week. Prerequisite: FCS 15-234. (F, alt. years)

338 Practicum in Food Service Occupations (1-3 hours)

Supervised experience in various types of commercial food services such as short order, carry-out service, tray service in rest homes and hospitals, cafeterias, restaurants, and catering services. A job analysis will be an integral part of the work experience. Prerequisites: FCS 15-230 and 232. (F, S, SS)

350 Home Equipment Technology (3 hours)

A study of basic materials, finishes and technology as related to the selection, use and care of appliances, utensils, and table appointments; the basic principles of the use of gas, electricity and technology in the home; and the use of adequate lighting. Two hours lecture and two hours lab per week. (F)

362 Textiles (3 hours)

Introduction to textile fiber, yarn and fabric characteristics. Basic textile terminology, serviceability, coloring and finishing; selection, performance and care of textile products. Three hours lecture, one hour laboratory per week. (F)

366 Merchandising (3 hours)

Focuses on procedures for planning, and controlling inventories for profitable management of product lines. Prerequisites: FCS 15-266, MKTG 55-331 or by permission. (S)

368 Visual Merchandising (2 hours)

Theories and techniques of merchandise presentation, planning and execution; display, promotion, store layout and evaluation as related to image, sales, profit and aesthetics. Prerequisite: FCS 15-366 or MKTG 55-330. (F)

401 Issues in Family and Consumer Sciences (3 hours)

A course designed to provide FCS majors opportunities for investigation of the philosophy of family and consumer sciences, current issues and trends affecting the field, the role of the profession in public policy and research, and the interpretation of professional ethics. Coursework is designed to facilitate the transition from student to professional. (F, S)

410 Parenthood Education (3 hours)

A study of major parenting strategies and the development of competencies necessary for effective parenting and the student's future involvement in parenthood education. Prerequisites: FCS 15-312 or by permission. (F, S, SS)

412 Family Theory and Application (3 hours)

Analysis of major theories in the study of family science, including family development, family systems, and family stress, as well as major theories of the broader social science arena, including symbolic interactionism, structural functionalism, and conflict theory. Theories applied to a variety of contemporary family issues. Prerequisites: FCS 15-310 or SOC 35-217, or by permission. (F)

413 Child Development Practicum (3 hours)

A team approach to the organization and operation of a preschool facility. This course provides an opportunity for supervised teaching in the Leet Center, a program enrolling three-, four-, and five-year-old children. Prerequisites: FCS 15-314 and 312. (F, S)

418 Problems—Child Development and Family Relations (1-3 hours)**

Opportunity to investigate, with instructor's guidance, a problem identified in consultation with advisor. Available to second trimester juniors or seniors with 2.70 or above GPA who have completed course offerings in this area. (F, S)

424 Family Resource Management/Consumer Policy Issues (3 hours)

Students examine and improve resource management and clarify the impact of management on them and their families, on quality of life, and on other systems and their environment. The course employs a systems perspective. Students will have opportunities to apply these principles through analyzing a variety of management problems and through a group project. (F)

428 Problems—Family Economics and Management (1-3 hours)**

Opportunity to investigate, with instructor's guidance, a problem identified in consultation with advisor. Available to second trimester juniors and seniors with a 2.70 or above GPA who have completed course offerings in this area. (F, S)

431 Macronutrients (3 hours)

Physiological and chemical basis for the macronutrient and food needs of the individual and the application of basic principles to problems of meeting the macronutrient needs of the individual. Prerequisites: CHEM 24-242/243. (S, alt years)

432 Micronutrients (3 hours)

Physiological and chemical basis for the micronutrient and food needs of the individual, and the application of basic principles to problems of

meeting the micronutrient needs of the individual. Prerequisites: FCS 15-334, CHEM 24-242/243, 362/363 and BIOL 04-434. (F, alt. years)

434 Medical Nutrition Therapy (5 hours)

The science of nutrition as it applies to individuals with atypical metabolic conditions and/or pathological conditions. Students apply the biochemical, physiological, and nutritional basis of medical nutrition therapy concepts through completion of case studies, product analyses, and calculations for enteral and parenteral nutrition support. Four hours lecture and two hours lab per week. Prerequisites: FCS 15-432. (S, alt. years)

435 Internship in Merchandising (1-3 hours)

Junior or senior students in merchandising of textiles, apparel and furnishings may, with the permission of their academic advisor, enroll in an intern program with an approved business. Prerequisites: FCS 15-266, 362, 366, 450, MKTG 55-330, 331. (F, S, SS)

436 Medical Nutrition Counseling (2 hours)

The basic theories and techniques of counseling as related to medical nutrition therapy. Students will counsel individuals on nutrition. Prerequisites: FCS 15-432. (S, alt. years)

438 Problems–Food and Nutrition (1-3 hours)**

Opportunity to investigate, with instructor's guidance, a problem identified in consultation with advisor. Available to second trimester juniors and seniors with a 2.70 or above GPA who have completed course offerings in this area. (F, S)

439 Field Experience in Food Service Management (1-6 hours)

Advanced work assignments in food service management in business of student's choice. By permission of instructor. (F, S, SS)

448 Problems–Family and Consumer Sciences Education (1-3 hours)**

Opportunity to investigate, with instructor's guidance, a problem identified in consultation with advisor. Available to second trimester juniors or seniors with 2.70 or above GPA who have completed course offerings in this area. (F, S)

450 Merchandising of Furnishings and Accessories (3 hours)

Application of design element and principles. Investigation of contemporary furniture and design trends as related to present environmental design. Prerequisites: FCS 15-150 and 362. (S)

458 Problems–Housing and Home Furnishings (1-3 hours)**

Opportunity to investigate, with instructor's guidance, a problem identified in consultation with advisor. Available to second trimester juniors or seniors with 2.70 or above GPA who have completed course offerings in this area. (F, S, SS)

466 Analysis of Sewn Products (3 hours)

A study of apparel manufacturing and the decision-making involved in marketing, merchandising and producing apparel. Analysis of textile products with an emphasis on quality, performance and cost considerations in relation to product development. Prerequisites: FCS 15-160 and 362. (S)

468 Problems–Textiles and Clothing (1-3 hours)**

Opportunity to investigate, with instructor's guidance, a problem identified in consultation with advisor. Available to second trimester juniors or seniors with 2.70 or above GPA who have completed course offerings in this area. (F, S, SS)

470 Internship in Family and Consumer Sciences (1-6 hours)

Designed to provide a professional job experience in specialized areas of family and consumer sciences relative to appropriate professional goals. Permission of instructor required. (F, S, SS)

490 Directed Teaching in Vocational Family and Consumer Sciences Education (10 hours)

Provides a gradual induction into teaching Family and Consumer Sciences. The clinical experience includes observation of teaching/learning, co-teaching with a master teacher and directed teaching under the supervision of a master teacher in FCS. The clinical experience is supervised by a college coordinator, who is fully certified as a family and consumer sciences teacher in career education. Prerequisite: Approval for student teaching by the director of educational field experiences. (F)

500 Special Offerings (1-4 hours)

Course which is offered on only one occasion or variable issue-oriented course which has the content described in the title.

526 Independent Living for Special Populations (3 hours)

A lifespan approach to the principles involved in developing independent living skills for those who have disabilities. The course will be designed to provide training and experience in working with the disabled and the elderly. Prerequisite: FCS 15-424 or by permission. (S)

540 The Adult Learner (3 hours)

Organization and administration of programs for adults. A study of teaching procedures, recent trends in subject matter, materials, techniques, and evaluation as applied to adult education. This course provides opportunity for observation and participation in adult programs. (F)

542 Foundations in Family and Consumer Sciences Education (3 hours)

A course designed to develop competency in curriculum construction in family and consumer sciences based on the comprehension and analysis of the structure of the field of family and consumer sciences, relevant legislation and special needs of the learner. Includes emphasis on career and technical student organizations within the curriculum. (F)

544 Organization and Administration of Programs in Family and Consumer Sciences Education (3 hours)

A course designed to develop competence in selection, development, and use of instructional techniques, materials, and evaluation procedures in family and consumer science education. Prerequisite: FCS 15-542. (S)

571 Trends in Child Development and Family Relations (1-2 hours)

A course designed to update teachers in the subject matter area of child development and family relations. Special topic or focus is identified for each offering. (Alt. years)

572 Trends in Family Economics and Management (1-2 hours)

A course designed to update teachers in the subject matter area of family economics and management. Special topic or focus is identified for each offering. (Alt. years)

573 Trends in Foods and Nutrition (1-2 hours)

A course designed to update teachers in the subject matter area of foods and nutrition. Special topic or focus is identified for each offering. (Alt. years)

574 Trends in Family and Consumer Sciences Education (1-2 hours)

A course designed to update information in the subject matter area of family and consumer sciences education. Special topic or focus is identified for each offering. (Alt. years)

575 Trends in Housing, Home Furnishings and Equipment (1-2 hours)

A course designed to update teachers in the subject matter area of home furnishings, housing and equipment. Special topic or focus is identified for each offering. (Alt. years)

576 Trends in Textiles and Clothing (1-2 hours)

A course designed to update teachers in the subject matter area of textiles and clothing. Special topic or focus is identified for each offering. (Alt. years)

580 Methods in Family and Consumer Sciences Education (3 hours)

A course designed to develop competence in selection, development, and use of instructional techniques, materials and evaluation procedures in family and consumer sciences education. Prerequisite: FCS 15-542, Admission to teacher education. (S)

**Limit of 6 credits of FCS 15-418, 428, 438, 448, 458, and/or 468 for any student.

The Missouri Academy of Science, Mathematics and Computing

Dr. Cleopas T. Samudzi, Dean

The Missouri Academy of Science, Mathematics and Computing

Dean: Cleopas T. Samudzi

The Missouri Academy of Science, Mathematics and Computing (Missouri Academy or MASMCM) is a two-year early-entrance-to-college, residential school for academically high performing students. It is located on the campus of Northwest Missouri State University in Maryville, Missouri. The school accepts students (domestic and international) who have completed 10th grade at their traditional high schools, and thus replaces the junior and senior years of traditional high school. The curriculum consists of college coursework taught by professors at Northwest Missouri State University. Missouri Academy students attend the same classes with traditional university students, and professors have the same high expectations of Missouri Academy students as they do for traditional university students. Students who complete this program earn an Associate of Science degree and a high school diploma. It is an opportunity for high achieving students to live and study in a community of peers. By most measures, this school has been successful since its inception in August 2000.

The primary goals of the Missouri Academy are: 1) to prepare students for continued success in higher education in the areas of science, technology, engineering and mathematics (STEM), and 2) to provide a solid foundation of education, integrity and quality and thus, to enable its graduates to have a lasting positive impact in society. Missouri Academy students participate in many university clubs and organizations that offer opportunities for enduring friendships, personal growth, recreation and leadership.

Many Missouri Academy graduates have gone on to attend in-state institutions such as the University of Missouri-Columbia, Missouri University of Science and Technology, Northwest Missouri State University, Washington University in St. Louis, Truman State University, and out-of-state institutions such as Boston University, University of Illinois, Cornell University, MIT and the University of Iowa.

Missouri residents accepted to the Missouri Academy receive scholarships covering about 45% of tuition/fees for two years (completion of FAFSA is required). The Missouri Academy is committed to being affordable for all Missouri students regardless of family income. Therefore, depending on demonstrated need based on information provided on the FAFSA form, students receive scholarships to cover 20-100 percent of the room costs. All students are expected to pay their board (meal) costs.

Applicants to the Missouri Academy must be currently enrolled in the tenth grade (or equivalent) of their traditional high school. A minimum ACT composite score of 23 and a math score of 24, or a minimum SAT composite score of 1060, with 560 in math, is required for eligibility. Geometry and Algebra II must be completed prior to beginning the first trimester at the Missouri Academy. Admission decision is based on: 1) cumulative GPA in the 9th and 10th grades, 2) standardized

test scores, 3) evaluations from high school teachers, 4) student essays, and 5) mathematics/science career interests as well as student/family commitment, and good disciplinary record.

Additional information and application forms can be obtained from the Missouri Academy by calling toll free (877) 398-4615, or by email at MASMC@nwmissouri.edu.

The Missouri Academy of Science, Mathematics and Computing / 81

Director of Academic Affairs: Neal Davis

Statement of Mission

The Missouri Academy of Science, Mathematics and Computing is an early-entrance-to-college school at Northwest Missouri State University. Utilizing the principles of Integrity and Quality (IQ), this living and learning community prepares its graduates to succeed in science, technology, engineering and mathematics (STEM) and other academic fields at any higher education institution – thus empowering them to contribute to society in ethical and meaningful ways.

DEGREE PROGRAM

The Missouri Academy has a structured curriculum leading to the Associate of Science degree in Mathematics and Science. This degree is designed for the Missouri Academy only, and not for traditional students at Northwest Missouri State University.

Associate of Science in Science and Mathematics

CIP: 309999

Science	Semester Hours
Biological/Life Sciences	
BIOL 04-102/103 General Biology and Laboratory	4
BIOL 04-140 General Microbiology OR	
BIOL 04-350 Genetics	3 or 4
Chemical Sciences	
CHEM 24-114/115 General Chemistry I and Laboratory	4
CHEM 24-116/117 General Chemistry II and Laboratory	5
Physical Sciences	
PHYS 25-120/121 Fundamentals of Classical Physics I and Laboratory	5
PHYS 25-230/231 Fundamentals of Classical Physics II and Laboratory	5
Mathematics	
MATH 17-117 Precalculus	4
MATH 17-120 Calculus I	4
MATH 17-121 Calculus II	4
Computing	
CSIS 44-149 Scientific Computing	3
CSIS 44-141 Computer Programming I	3

English/Communication

ENGL 10-111 Composition I: Academic Literacies	3
ENGL 10-112 Composition II: Writing as Engagement	3
Literature (Choose one of the following: ENGL *10-220, *10-224, *10-226, *10-233, *10-234, *10-245, *10-246, *10-325, 10-331, 10-343, *10-372)	3
COM 29-102 Fundamentals of Oral Communication	3

Social Science and Humanities

HIST 33-155 America—A Historical Survey	3
POLS 34-102 Introduction to American Government and Politics	3
Humanities (Choose one of the following: HUM 26-102, 26-103, 26-104, **26-105, **26-162, PHIL 39-171, 39-274, POLS 34-105)	3

Seminar/Colloquium

MOAC 81-102 Seminar: You and Your Community	1
MOAC 81-103 Colloquium	1

Total Degree Requirements 67-68

For students to graduate from the Missouri Academy a minimum cumulative GPA of 2.75 on a 4.0 scale must be maintained.

Note: The Freshman Seminar General Education requirement at Northwest Missouri State University will be waived for all Missouri Academy students who have successfully completed both MOAC 81-102 and 81-103 and continue on to pursue undergraduate degrees at Northwest.

*These courses may be used to satisfy Northwest's General Education requirement for Literature if a Missouri Academy student stays at Northwest to complete an undergraduate degree.

**These courses will fulfill the Missouri Academy's Humanities course requirement, but will not fulfill Northwest's General Education requirement for Humanities. However, these courses will fulfill Northwest's Institutional Requirements in their respective categories.

Course Descriptions

Missouri Academy of Science, Mathematics and Computing / 81

102 Seminar on You and Your Community (1 hour)

This seminar is designed for first-year Missouri Academy students. It explores skills that help the student to be academically successful. Students will also discuss living in, and contributing to, the community in which they live. The course provides a safe, nurturing environment for each to explore his/

her personal identity and discover what it means to be a successful, positive, contributing member of the Missouri Academy and Northwest community.

103 Colloquium (1 hour)

Course is designed for second-year Missouri Academy students. Suitable topics will be selected from the following categories: 1) service-learning experiences and community service, 2) social responsibility and citizenship, 3) exploring connections between academic majors and professions/careers, and 4) structure and organization of higher education. Prerequisite: MOAC 81-102.

Appendix

- Facilities
- Governance
- Personnel
- Faculty
- Emeritus Faculty
- Campus Guide

Facilities

Administration Building

Built in 1907-1910, this Tudor Revival structure with its four towers is the landmark of the campus. In 1979, a fire destroyed the north wing and the west wing, the latter of which is largely restored. In addition, the entire second floor and a portion of the third floor have been extensively renovated. This historic building houses Admissions, Career Services, Graduate Office, Registrar's Office, Scholarships and Financial Assistance Office, Cashiering, Bursar's Office, and other administrative and student services offices. It was added to the National Registry of Historic Places in 2010.

Alumni House

Located on College Avenue, this structure is owned by the non-profit Northwest Foundation and houses the Office of University Advancement and Alumni Relations. This former private residence is the social center for alumni and friends of Northwest.

Everett W. Brown Education Hall

Located across from the J.W. Jones Union, this Neo-Gothic ornamented structure was renovated and rededicated in 1987 to Everett W. Brown, an alumnus, long-time staff member, eight-term member of the Missouri House of Representatives and former appointed member of the Missouri Coordinating Board for Higher Education. Originally dedicated in 1939, Brown Hall houses the Department of Professional Education, as well as the Horace Mann School for elementary education.

Center for Innovation and Entrepreneurship (CIE)

Construction of the Center for Innovation and Entrepreneurship was completed in 2009. The structure includes two connected facilities: a business incubator on the west and a combined academic/teaching/research space on the east. The Incubator houses commercial research laboratories, offices and small scale production space for several businesses. The Small Business & Technology Development Center is also housed in the building. The academic space houses classrooms, faculty offices, and applied research labs.

Colden Hall

Completed in 1959, this V-shaped structure is named for Charles J. Colden, the first president of the Board of Regents. This major academic structure was completely renovated in 1996-1997 providing environments for technology to supplement and facilitate learning, and with flexibility for advancements in the future. Located on the second floor are the faculty and staff offices for Business; Computer Science and Information Systems; English; and Behavioral Sciences.

Mabel Cook Recruitment and Visitors Center

Located at the southeast entrance to campus, the center is named for a graduate of the Department of Family and Consumer Sciences, who later served on the faculty and chaired the department. As a student, Mabel Cook initiated the idea for Kappa Omicron Phi, now a national family and consumer sciences honor society called Kappa Omicron Nu. The house is now used as a visitors center for prospective students and their families as well as housing Admissions personnel and Student Ambassadors.

Raymond J. Courter College Park Pavilion

The Pavilion in College Park located west of the Ron Houston Center for the Performing Arts was completed in 2005. It includes a 5,600 square foot outdoor amphitheatre with stage, theatrical lighting, storage and restrooms for University and community events. The Pavilion is named in honor of Raymond Courter whose influence over 37 years of service and as chief financial officer guided master planning for capital construction projects resulting in additions or improvements to nearly 30 campus buildings and structures.

DeLuce Fine Arts Building

Located on the south side of the campus, this circular structure was dedicated in 1965 and honors the long-time faculty member and nationally-recognized leader in art education, Olive DeLuce. DeLuce contains studios, the DeLuce Gallery, classrooms, rehearsal rooms, and faculty and staff offices for Art and Music.

The 549-seat **Charles Johnson Theater**, housed in DeLuce, is named for the first chairman of the Spring Festival of the Arts, which evolved into the year-long Northwest Encore Performances. The Charles Johnson Theater also has a two-manual, 21-rank McManis pipe organ.

Fire Arts Building

This triangle shaped building constructed in 2004-2005 is located to the southeast of the DeLuce Building. It houses ceramics, sculpting and welding art classes.

Garrett-Strong Science Building

This building on the north side of campus honors two former department chairmen: William T. Garrett, Department of Biological Sciences; and J. Gordon Strong, Department of Chemistry and Physics. Completed in 1968, Garrett-Strong contains laboratories, lecture halls and classrooms, as well as faculty and staff offices for Biology; Chemistry; Physics; Geology; Geography; and Mathematics. The entire building was renovated in 2000-2001 resulting in a state-of-the-art facility. The botany laboratory and greenhouse building were added in 2002.

Thomas J. Gaunt House

Located across from the Alumni House on the south end of campus, the Gaunt House was constructed in 1870 by a retired sea captain whose tree nursery was located on what is now the main campus. The Classical Revival-style structure has been the home of University presidents since the founding of the institution in 1905, and it is listed in the National Register of Historic Places. In 1999-2000, a new addition was added that expanded the kitchen to include daily family use and a food preparation area for large group gatherings. A new outside patio was also added. Extensive renovations to the entire house were completed in 2009-2010.

Ron Houston Center for the Performing Arts

Built in 1984, the Ron Houston Center for the Performing Arts is named for Ron Houston, whose generosity led to a significant expansion of performance facilities available to Northwest theatre students. The center also includes the **Mary Linn Auditorium**, named after Mary Casteel Linn, a former University Regent and dedicated patron of the arts. The 1,099-seat theater can accommodate a full symphony orchestra, or it can be scaled down for more intimate productions. The Houston Center also houses a “black box” theater as well as the offices and production shops of University Theatre. A **Studio Theatre** addition connected to the Houston Center for the Performing Arts on the southeast side opened in 2008. The Studio Theatre functions as a drama laboratory and contains state-of-the-art technology, including an articulated lighting grid, a makeup lab/classroom and a new lighting and sound control system. The Studio Theatre seats up to 250 people, depending on how the space is configured, and provides a more intimate environment for student and departmental performances.

J.W. Jones Union

The opening of this structure in the center of campus in 1952 fulfilled a long-time dream of J.W. Jones, sixth president of the University. In 1966, an addition on the north more than doubled the size of the building. During 1998-2000 the entire facility underwent a complete renovation and reconfiguration of spaces.

Alfred McKemy Center for Lifelong Learning

Located north of the Garrett-Strong Science Building, this structure was completed in 1977 and is named after a former member and president of the Board of Regents. Completely renovated in 1999, it houses the Math Skills Laboratory which is used to assist students in improving their mathematics literacy. Contained within are one distance learning classroom and one room for teleconferencing.

Memorial Bell Tower

Completed in 1971 and refurbished in 1989, and completely renovated in 2004, this 100-foot high structure located in the center of campus dominates the campus vista. The Bell Tower was constructed from funds provided by University friends and alumni and has brass memorial and commemorative plaques, an electric carillon and displays the University seal as it has evolved with name changes from Normal School to University.

Ryland Milner Complex

Named for long-time coach, athletic director and alumnus Ryland Milner, the Complex contains two gymnasiums, an aquatic center, tennis courts and Bearcat Stadium, all located on the southwest side of campus.

Uel W. Lamkin Activity Center, named for the University's fifth president, was first opened in 1959. During the 1993-1994 academic year, the facility was the recipient of a \$6 million renovation and enlargement. Included was the total renovation of the existing structure and the construction of north and south additions. The north expansion, called the Northwest Student Recreation Center, houses a suspended jogging track, three basketball courts and five racquetball/handball courts. Included in the south addition is the Fitness Center on the lower level, a lobby on the main level, and offices and meeting rooms for coaches on the top level. The area where

basketball and volleyball competition is held has been named the Bearcat Arena. The Arena wood floor was replaced in 2011. Also housed in the Activity Center are classrooms and ticket and concession areas on the main level. The lower level has weight-lifting, dressing rooms and athletic training facilities.

Martindale Hall, opened in 1926, was the original University gymnasium. Remodeled and renovated in 1973-1975, Martindale honors Nell Martindale Kuchs, a faculty member and early leader in women's athletics. Martindale has a regulation-sized basketball court, replaced in 2011, which can be split for two separate activities such as gymnastics, dance and volleyball. The building also contains classrooms, physical education faculty offices, a dance studio and women's dressing rooms.

Bearcat Stadium is a playing field with permanent seating accommodating 6,200 spectators and stadium capacity of 7,500. The field is surrounded by the **Herschel Neil Track**, a resilient all-weather track named after the 1930s Northwest student who held numerous NCAA records. During calendar year 2000, the east grandstand and southeast ticket houses were completely renovated to enhance customer services. In 2002-2003, the west grandstand and pressbox were replaced by an enlarged facility featuring chairback, railback and traditional seats, 10 suites, and an upper media/coaching area and filming tower. A new scoreboard was also added with video replay capabilities. The stadium was renamed in 2004 from Rickenbrode to Bearcat Stadium to honor the Northwest family members who helped to fund the replacement structures and additional facilities. In 2007 the natural turf field was replaced by artificial turf and officially named Tjeerdsma Field to honor the success of Melvin L. Tjeerdsma, the former head football coach. Lights were also added to allow for night use.

Athletic Grounds Support Building, constructed in 2006-2007, is located west of the Ron Houston Center for the Performing Arts. It houses athletic field equipment, paint supplies, lawn equipment, and employee support functions.

The **Frank W. Grube Tennis Courts**, completed in 1981, are named after the long-time Department of English chairperson and first varsity tennis coach of the University.

Bearcat Field is the home of the Bearcat baseball team and is located on the west campus, and has a grass infield, a scoreboard and press box facility.

A **Softball Field** was constructed in 1996 near Phillips Hall on the west side of campus. Home to the Bearcat softball team, the dirt infield is made from aqualime, a textured soil that allows moisture to go through to the ground.

Mozingo Outdoor Education Recreation Area (MOERA)

A 315-acre rural lake front tract of land located at Mozingo Lake, MOERA is designed for student and community education/recreation activities. Facilities include a challenge course consisting of an Alpine tower, Odyssey III tower, Carolina climbing wall, and group dynamics low element obstacle stations; courtesy dock; a trap and skeet range which can also be used for target archery; a biology research area; a small astronomy observatory and outdoor telescope viewing area; and biology/astronomy and health, physical education, recreation and dance department working/storage buildings. A mixture of walking trails and gravel roads exist throughout the acreage.

B.D. Owens Library

Named for the eighth president of the University, this limestone and glass structure, located near academic facilities as well as residence halls, opened in 1983. With more than 100,000 square feet of space, Owens Library is designed to meet the library needs of the University well into the future, and to accommodate technological advances in information retrieval systems. Included in Owens Library are personal computers connected to the Electronic Campus network, including a multitude of web-based databases, group and private study rooms, and comfortable seating arranged throughout the open stacks.

Residence Halls, Suites and Apartments

Located in four areas on campus are 17 structures providing variety in living arrangements and common spaces for students. Residence halls offer integrated living/learning communities well suited for freshmen acclimating to college life. Suites provide a small group living environment desired by sophomore and junior students. Apartments offer a transition to independent living for junior, senior and graduate students.

The **West Complex** includes four **High Rise Residence Halls** that are seven-story buildings located on the west side of campus. Dieterich Hall (for H.R. Dieterich, education faculty), Millikan Hall (for Chloe Millikan, education faculty), Franken Hall (for Katherine Franken, psychology faculty), and Phillips Halls (for Homer T. Phillips, education faculty) are all coed residence halls. **Tower Suites West and Tower Suites East** located between Phillips and Franken were completed in 2004.

The **North Complex** contains Cooper Hall (for Albert H. Cooper, director of extension), and Douglas Hall (for 24-year Regent R.L. Douglas), which are coed residence halls. Cooper Hall serves as the residence and office location of the Missouri Academy of Science, Mathematics and Computing.

The **South Complex** contains Wilson Hall (for Lon Wilson, dean of men), Richardson Hall (for fourth University president Ira Richardson), and Cook Hall (for T.H. Cook, history faculty). During 1999-2000, these connected structures were completely redesigned and renovated to eliminate the traditional dormitory arrangements.

The **East Complex** contains Hudson Hall (for the first woman registrar, Nell Hudson), Perrin Hall (for the first dean of women, Alice R. Perrin), and Roberta Hall (for Roberta Steel, who lost her life after a 1951 residence hall explosion). Roberta Hall was completely renovated during the 1993-94 academic year. Hudson and Perrin Halls were demolished and rebuilt in 2005-2007 to create a modified dormitory arrangement.

Forest Village Apartments (Hawthorne, Sycamore and Willow) were completed in 2004 and are located on the north side of Centennial Drive and include a community building providing lounges and meeting facilities for apartment residents, a convenience store, mailboxes and residential life staff offices. The apartments are fully furnished; consist of two- and four-bedroom styles; include a living room, storage closets and a small kitchen and dining space. These units also contain washer, dryer, refrigerator, dishwasher, garbage disposal, microwave, stove and cable TV.

Renewable and Alternative Energy Facilities

In 1982, the University's 72 year-old Power Plant was retrofitted to utilize wood chips, a renewable energy source, along with natural gas and oil. In 1993, the Biomass Processing Building was constructed on the west side of campus to produce paper pellets made from discarded clean paper and corrugated paper. Beginning in 2000, under U.S. Patent Number 6,49,694 the "animal waste to energy production" process using solid animal waste and dry agricultural feedstock from the University Farm operations was initiated to create a virtually odor-free fuel pellet. Along with wood chips and paper pellets this fuel source has reduced the University's dependence on fossil fuels by up to 80 percent. Together, these buildings are known as the Renewable and Alternative Energy Facilities.

Jon T. Rickman Electronic Campus Support Center

In 2003 the Electronic Campus Support program staff and operations moved into the former Missouri National Guard Armory built on campus in 1951 when the Missouri National Guard moved to a newly constructed community facility. In 2008 the facility was renamed to honor Dr. Jon Rickman whose long years of service and dedication to continuously advance the electronic learning and working environment for all students, faculty, and staff established Northwest as the Electronic Campus.

The Station

Opened in 1966 as the Taylor Commons dining hall (more recently known as The Conference Center), this facility provides community building lounges and meeting space for West Complex residents, a convenience store, coffee bar, mailboxes and residential life staff offices. It also serves as a conference center with movable room dividers and state-of-the-art audio/visual capabilities for teleconferences, seminars, meetings and workshops. It houses the Textbook Services Center and a bakery. Henry Kirby Taylor was the third president of Northwest.

Support Services Complex

Located north of the High Rises, Tower Suites and The Station are five structures providing operation space for the majority of the campus physical plant services.

The **Facilities Services Building** was completed in 2009 and is designed to meet the unique needs of the environmental trades, key, sign and carpentry shops.

Three **Landscape Services Buildings** erected between 2000 and 2005 include offices/shops building, a greenhouse and equipment storage hoop shed.

The **Materials Distribution Center** built in 2002, is the warehouse facility that houses Central Receiving, Central Stores, the moving crew, and is the site for the University's surplus auctions.

Thompson-Ringold Building

The building, located north of Wells Hall, was built in 1931 and during the years has housed the Industrial Arts programs; Kenneth Thompson and Howard Ringold were long-time faculty of that department. Now it houses the Mail/Copy Center, the Adult Education Literacy program and the Regional Professional Development Center.

Valk Center

Completed in 1970 and named for Donald N. Valk, long-time chair of the Department of Technology, the building during 1993 became the home of the Department of Agricultural Sciences following the closing of the Department of Technology. Facilities within the building include faculty offices, lecture rooms, a computer laboratory, and laboratories for plant science, animal science and soil science. The lower level of Valk used formerly for warehouse storage was renovated in 2008-2009. Enhancements include new building entries, exterior stairwells, classrooms, faculty offices, student gathering and display areas for the Humanities and Social Sciences Department.

Wellness Services

Built in 1997, this structure with its pitched roofs in interlocking planes is a distinctive addition to the northwest corner of the campus. It provides a user-friendly environment in which to meet the health care needs of Northwest students living on and off campus. In 2006-2008 a new addition was added to house the Personal Development and and Counseling Services and University Wellness Services in the same facility. The facility was renamed to reflect the comprehensiveness of these programs.

Wells Hall

Dedicated in 1939 as the University library, Wells Hall is named for the University's first librarian, Edwin C. Wells. Since the opening of Owens Library, Wells houses faculty and staff offices for Communication; Theatre; Modern Languages; and Mass Communication, as well as KZLX-LP-FM, KXCV/KRNW-FM, KNWT-TV, classrooms, the English as a Second Language Program, the *Northwest Missourian* student newspaper, and *Tower* yearbook.

R.T. Wright Farm

The 448 acres two miles north of campus provide laboratory experiences in agronomy, animal and dairy science, and horticulture. The farms are named after R.T. Wright, former chairperson of the Department of Agricultural Sciences and a recognized leader in agricultural education.

A modernized swine complex and enhanced dairy were built in 2000. A solid animal waste separator, fluid lagoon and blending operation were incorporated in the design to facilitate the blending of solid waste with other farm feedstocks for the production of a pelletized alternative fuel used in the University Power Plant. This comprehensive approach to farm management provides a hands-on laboratory for students in the Department of Agricultural Sciences.

Governance

The Board of Regents. Under the powers prescribed by law, the Board of Regents functions as the policy-making body of Northwest Missouri State University. The eight-member Board of Regents is entrusted with the formulation of the general, educational and financial policies of the University. In addition, the Board has the power to carry out any further functions which are permitted by its bylaws or by the articles of incorporation.

Northwest Leadership Team (NLT). The NLT leads Northwest's strategic course and charts daily operations by providing executive leadership for all organizational operational portfolios. Additionally, the NLT is the interface between the university faculty, staff, and students and the Board of Regents. The NLT is composed of the President, the Provost, the Vice President of Finance, the Vice President of Student Affairs, the Vice President of Information Systems, the Vice President of Institutional Advancement, the Chief Public Relations Officer, the Vice President of Human Resources, and the Director of Athletics.

Strategic Planning Leadership Team (Extended Leadership Team). The Strategic Planning Leadership Team (SPLT) not only helps to chart Northwest's strategic course, but it also contributes to the shaping of daily operations. The SPLT ensures cross-departmental cooperation, transparency, and widespread input and sharing of information. Members include the Northwest Leadership Team members, the Dean of the College of Arts and Sciences, the Dean of the College of Education and Human Services, the Dean of the Booth College of Business and Professional Studies, the Dean of the Graduate School, the Dean of the Missouri Academy of Science, Mathematics and Computing, the Dean of Enrollment Management, the chairperson of the Academic Chairs Council, the president of the Faculty Senate, the president of the Support Staff Council, a representative of the professional/administrative staff, the president of the Student Senate, and the director of Environmental Services.

Faculty Senate. The Faculty Senate is the representative body of the faculty. According to the Faculty Constitution, "The Faculty Senate is authorized to formulate policy in the areas of responsibility assigned to the faculty by the Board of Regents or the President and to advise appropriate authorities in other areas assigned to the faculty by the Board of Regents." In addition, "The Faculty Senate is authorized to provide a forum for discussion of matters which are of concern to the faculty and to make recommendations concerning their findings on these matters to the appropriate body or authority."

Administrative/Professional Council (A/P Council). A/P Council serves as the liaison between the administrative and professional staff, administration, faculty, support staff and students. The council is a recognized part of the University and works cooperatively with other groups for recommendations, requests, and pertinent information to the President. A/P Council meetings are held the second Wednesday of each month at 10 a.m., hosting showcases from around campus, discussing and sharing division issues, concerns, and ideas and developing activities and events targeted at A/P employees.

Support Staff Council. Support Staff Council serves as the liaison between the support staff, administration, faculty and students. The council addresses campus-wide issues and raises money for scholarships which are awarded to support staff employees' dependents.

Graduate Council. The Graduate Council, made up of elected graduate faculty members, graduate students and the dean of the Graduate School, recommends all policies and programs involved with graduate study. It coordinates, with the Faculty Senate, all recommendations for approval of upper-division undergraduate courses which may also be approved for graduate credit if taken by eligible graduate students. The Graduate Council also reviews recommendations from the Council on Teacher Education as these relate to advanced programs in teacher education.

Student Senate. Student Senate is the representative governing body of the Student Government Association, which includes all students. The Senate serves students in many capacities: proposing beneficial changes in University policies, acting as a liaison between students and administration, screening the formation of new organizations, supervising campus-wide elections and approving fund-raising activities on campus.

Council on Teacher Education. The Council is composed of one member from each college's designated teacher education faculty with two teacher education faculty members from the College of Education and Human Services, one graduate education student and two undergraduate education students. The Council is responsible for establishing standards, curriculum, and degrees in teacher education and in teacher education admission and retention policies.

Deans Council. The mission of the Deans Council is to facilitate the development and implementation of a shared vision with our faculty colleagues so that the academic core at Northwest Missouri State University meets the needs of the constituencies it serves.

University Committees. The committees organization provides faculty, students and support and administrative staffs an opportunity to participate in the affairs of the University. The Northwest Leadership Team, in cooperation with the Faculty Senate, coordinates the University committee assignments.

Board of Regents

Lydia Hurst.	President Term Expires 2013	Tarkio
Douglas Wyckoff	Vice President Term Expires 2013	Cameron
Joseph B. Bosse.	Term Expires 2016	St. Louis
Mark Hargens.	Term Expires 2015	St. Joseph
Gary Panethiere.	Term Expires 2011	Kansas City
Douglas L. Sutton	Term Expires 2013	Maryville
Ashton Raffety.	Student Representative (non-voting) Term Expires 2013	Drexel

Northwest Missouri State University Presidents

John Jaskinski.	2009-
Dean L. Hubbard	1984-2009
B.D. Owens	1977-1984
Robert P. Foster	1964-1977
J.W. Jones.	1945-1964
Uel W. Lamkin.	1921-1945
Ira Richardson	1913-1921
Henry Kirby Taylor	1909-1913
Homer Martien Cook	1907-1909
Frank Deerwester	1906-1907

University Personnel

Northwest Leadership Team

President	John Jasinski, Ph.D.
Provost	Douglas Dunham, Ph.D.
Vice President of Finance	Stacy Carrick, M.B.A.
Acting Director, Information Systems	Kyra Mills, B.S.Ed.
Vice President of Institutional Advancement	Michael Johnson, B.S.
Vice President of Student Affairs	Matt Baker, Ed.D.
Chief Public Relations Officer	Mitzi Lutz, M.S.
Vice President of Human Resources	
Director of Athletics	Wren Baker, M.S.Ed.

Academic Administrative Officers

Dean, College of Arts and Sciences	Charles McAdams, Ed.D.
Dean, College of Education and Human Services	Joyce Piveral, Ed.D.
Dean (Acting), Booth College of Business and Professional Studies	Gregory Haddock, Ph.D.
Dean of the Graduate School	Gregory Haddock, Ph.D.
Dean, Enrollment Management	Beverly S. Schenkel, M.B.A.
Dean, Missouri Academy of Science, Mathematics and Computing	Cleopas Samudzi, Ph.D.
Director, Center for Information Technology in Education	Roger Von Holzen, Ed.D.
Director, Academic and Library Services	Leslie Galbreath, Ed.D.

Student Services

Associate Directors, Admissions	Tammi Grow, M.B.A., Jeremy Waldeier, M.S.
Assistant Director, Advisement/ Orientation/ Transfer Affairs	Brad Landhuis, M.S.Ed.
Director, Auxiliary Services	Mark Hetzler, M.S.
Bursar	Terri Christensen, B.S.
Chief, University Police	Clarence Green, M.S.
Director, Career Services	Joan Schneider, B.S.
Director, Counseling Services	Tim Crowley, Ph.D.
Director, Financial Assistance	Del Morley, M.S.Ed.
Director, Wellness Center and Emergency Coordinator	Gerald W. Wilmes, M.D.
Registrar	Terri Vogel, M.B.A.
Director, Residential Life	Rose Viau, M.S.Ed.
Coordinator, Student Employment	Paula McLain, M.B.A.
Coordinator, Study Abroad	Jeaneth Puriel, M.A.
Manager, Textbook Services	Teri Tobin, B.S.
Director, International Affairs and ESL Program	Jeffrey Foot, Ed.D.
Director, Intercultural Affairs	Steven Bryant, M.S.
Director, Campus Activities/Greek Life	Angel McAdams, B.S.

Faculty

Abington, Casey (2010)

Assistant Professor—Business
Ph.D.—Kansas State University

Adam, Peter (2008)

Assistant Professor—Natural Sciences
Ph.D.—University of California-
Los Angeles

Adkins, Joni (2001)

Assistant Professor
Mathematics, Computer Science and
Information Systems
D.B.A.—Anderson University

Akins, Robyn (2009)

Instructor—Horace Mann
Ed.S.—University of Missouri-Kansas City

Alexander, Kristina (2003)

Associate Professor—Professional Education
Ed.D.—University of Missouri-Columbia

Andrews, Jane (2004)

Assistant Professor—Professional Education
Ed.D.—University of Nebraska-Lincoln

Badami, Charles (2008)

Instructor—Fine and Performing Arts
D.M.—Northwestern University

Baker, Jill (2011)

Instructor—Professional Education
M.S.Ed.—Northwest Missouri State
University

Baker, John, Jr. (1977)

Associate Professor—Business
J.D.—University of Missouri

Barnett, Jerrold (1983)

Professor—Behavioral Sciences
Ph.D.—Penn State University

Barr, Rod (2003)

Instructor—Agricultural Sciences
M.S.—Northwest Missouri State University

Baudino, Frank (1994)

Assistant Professor—Library
M.L.S.—Indiana University

Beatty, Heidi (2011)

Instructor—Horace Mann
M.S.Ed.—Northwest Missouri State
University

Bellamy, Michael (1999)

Associate Professor—Natural Sciences
Ph.D.—Kansas State University

Benson, Christine (1997)

Associate Professor—Mathematics,
Computer Science and Information Systems
Ph.D.—University of Missouri-Kansas City

Benson, Joel D. (1987)

Professor—Humanities and Social Sciences
Ph.D.—Miami University

Bickford, Angela (2000)

Instructor—Natural Sciences
M.S.Ed.—Northwest Missouri State
University

Binette, Kori (2009)

Instructor—English and Modern Languages
M.A.—University of Massachusetts-Amherst

Bishop, Lisa (2004)

Instructor—Business
M.A.—Central Missouri State University

Black, Richard (2008)

Assistant Professor—English and Modern Languages
Ph.D.—University of Tulsa

Blackford, Benjamin (2009)

Assistant Professor—Business
Ph.D.—University of Nebraska-Lincoln

Bond, Stancy (2012)

Lecturer – English and Modern Languages
M.A.—Northwest Missouri State University

Bradley, Jeff (1990)

Instructor—Natural Sciences
M.S.—Oklahoma State University

Breckenridge, Martha (2008)

Assistant Professor—Fine and Performing Arts
Ph.D.—University of Kansas

Bryson, Jeremy (2011)

Assistant Professor—Humanities and Social Sciences
Ph.D.—Syracuse University

Butler, Loren (2000)

Associate Professor—Health and Human Services
Ph.D.—University of Arkansas

Casey, Kimberly (2011)

Assistant Professor—Humanities and Social Sciences
Ph.D.—University of Missouri-St. Louis

Chakraborty, Himadri (2006)

Assistant Professor—Natural Sciences
Ph.D.—Jodavpur University

Chandler, Wayne (2000)

Associate Professor—English and Modern Languages
Ph.D.—University of Alabama

Clark, Judy (1997)

Assistant Professor—Mathematics, Computer Science and Information Systems
Ph.D.—University of Nebraska-Lincoln

Coalter, Terry (2000)

Associate Professor—Business
Ph.D.—University of Texas-Arlington

Coats, Ella (2011)

Instructor—Professional Education
M.S.Ed.—Northwest Missouri State University

Collier, Ben (1981)

Associate Professor—Business
Ph.D.—Purdue University

Corson, Mark (1998)

Professor—Humanities and Social Sciences
Ph.D.—University of South Carolina

Creason, Sarah (2008)

Instructor—Professional Education
M.S. Ed.—Northwest Missouri State University

Crossland, Barbara (2002)

Associate Professor—Professional Education
Ed.D.—University of Missouri-Columbia

Daggs, Joy (2012)

Assistant Professor—Communication and Mass Media
Ph.D.—University of Missouri-Columbia

Davis, Ande (2012)

Lecturer – English and Modern Languages
M.F.A.—Minnesota State University

Dewhirst, Robert (1983)

Professor—Humanities and Social Sciences
Ph.D.—University of Nebraska-Lincoln

Detrixhe, Karen (2011)

Assistant Professor—English and Modern Languages
M.S.—Wichita State University

- Dickey, Eric** (2009)
Assistant Professor—English and Modern Languages
Ph.D.—University of Minnesota
- Dieringer, Gregg** (2002)
Professor—Natural Sciences
Ph.D.—University of Texas-Austin
- Dimmitt, Elizabeth** (2008)
Instructor—Behavioral Sciences
M.S.—Northwest Missouri State University
- Dorrel, Bryan** (2009)
Instructor—Health and Human Services
M.A.—Northern State University
- Drew, Margaret** (1996)
Professor—Professional Education
Ph.D.—Southern Illinois University
- Drews, Patricia** (1999)
Associate Professor—Humanities and Social Sciences
Ph.D.—University of South Carolina
- Dunham, Douglas** (1995)
Provost
Ph.D.—Washington University
- Dunnell, Rebecca** (2002)
Associate Professor—Fine and Performing Arts
D.M.A.—University of North Carolina-Greensboro
- Durbin, Lori** (1990)
Instructor—Communication and Mass Media
M.H.S.—University of Missouri-Columbia
- Easterla, David** (1965)
Distinguished University Professor—Natural Sciences
Ph.D.—Purdue University
- Edmonds, Carole** (1996)
Associate Professor—Professional Education
Ed.S.—Northwest Missouri State University
- Edwards, Carla** (1997)
Professor—Behavioral Sciences
Ph.D.—University of Missouri-Kansas City
- Eiswert, James** (1991)
Associate Professor—Humanities and Social Sciences
Ph.D.—University of Louvain
- Engel, Matthew** (2008)
Assistant Professor—Humanities and Social Sciences
Ph.D.—University of Nebraska-Lincoln
- Euler, Russell** (1982)
Professor—Mathematics, Computer Science and Information Systems
Ph.D.—University of Missouri-Kansas City
- Farlow, Nancy** (1989)
Instructor—Horace Mann
M.S.Ed.—Northwest Missouri State University
- Farnan, Shantel** (2011)
Instructor—Professional Education
Ed.S.—Northwest Missouri State University
- Ferguson, Jeffrey** (1987)
Associate Professor—Health and Human Services
Ed.D.—Oklahoma State University
- Field, Richard** (1993)
Associate Professor—Humanities and Social Sciences
Ph.D.—Southern Illinois University
- Fink, Kurtis** (1985)
Associate Professor—Mathematics, Computer Science and Information Systems
D.A.—Idaho State University
- Finn, Sarah** (2010)
Instructor—Horace Mann
M.S.Ed.—Delta State University

- Foley, Nancy** (2000)
Associate Professor—Professional Education
Ph.D.—University of Missouri-Columbia
- Foose, Alice** (2006)
Assistant Professor—Health and Human Services
Ph.D.—Indiana University
- Ford, Elyssa** (2011)
Assistant Professor—Humanities and Social Sciences
Ph.D.—Arizona State University
- Francis, Alisha** (2006)
Assistant Professor—Behavioral Sciences
Ph.D.—St. Louis University
- Fravel, Deborah Lewis** (2008)
Associate Professor—Family and Consumer Sciences
Ph.D.—University of Minnesota
- Freeman, Virgil** (2003)
Associate Professor—Professional Education
Ed.D.—University of Arkansas
- Fridell, Max** (2003)
Associate Professor—Professional Education
Ph.D.—University of Kansas
- Frogge, Steven** (2012)
Instructor—English and Modern Languages
M.A.—Northwest Missouri State University
- From, Karen** (2009)
Instructor—Health and Human Services
M.S.—Kansas State University
- Fulton, Richard** (1973)
Professor—Humanities and Social Sciences
Ph.D.—University of Connecticut
- Gallaher, John** (2003)
Associate Professor—English and Modern Languages
Ph.D.—Ohio University
- Gallaher, Robin** (2003)
Assistant Professor—English and Modern Languages
M.A.—Ohio University
- Gibson, Christopher** (1982)
Professor—Fine and Performing Arts
D.M.A.—Eastman School of Music
- Gilley, Dawn** (2009)
Assistant Professor—Humanities and Social Sciences
Ph.D.—University of Missouri-Columbia
- Glenn, Jan** (2005)
Assistant Professor—Professional Education
Ed.D.—University of Missouri-Columbia
- Gordon, William** (2011)
Assistant Professor—Professional Education
Ed.D.—University of Missouri-Columbia
- Goudge, Beth S.** (1987)
Instructor—Family and Consumer Sciences
M.S.—Iowa State University
- Goudge, Theodore** (1985)
Associate Professor—Humanities and Social Sciences
Ed.D.—Oklahoma State University
- Graves, Christopher** (2009)
Assistant Professor—Fine and Performing Arts
M.F.A.—Brigham Young University
- Gregerson Malm, Cheryl** (1989)
Associate Professor—Mathematics, Computer Science and Information Systems
Ph.D.—University of Nebraska-Lincoln
- Gustafson, Jon** (2009)
Instructor—Health and Human Services
M.S.Ed.—University of Nebraska-Kearney
- Haberyan, Kurt** (1994)
Professor—Natural Sciences
Ph.D.—Duke University

Haddock, Gregory (1996)

Vice Provost and Dean—Graduate School
Ph.D.—University of Idaho

Haile, Brian (1997)

Associate Professor—Mathematics,
Computer Science and Information Systems
Ph.D.—University of Missouri-Rolla

Hardee, Tom (2001)

Instructor—English and Modern Languages
M.A.—Michigan State University

Hardy, Carolyn (1996)

Assistant Professor—Mathematics,
Computer Science and Information Systems
Ph.D.—University of Nebraska-Lincoln

Hedge, William (2004)

Assistant Professor—Professional Education
Ed.S.—Northwest Missouri State University

Heeler, Linda (1981)

Assistant Professor—Horace Mann
M.S.Ed.—University of Oklahoma

Heeler, Phillip (1981)

Professor—Mathematics, Computer Science
and Information Systems
Ph.D.—University of Illinois

Heintz, Christina (1985)

Instructor—Mathematics, Computer
Science and Information Systems
M.S.Ed.—Idaho State University

Hendrix, Rebecca (1998)

Associate Professor—Behavioral Sciences
Ph.D.—University of Nebraska-Lincoln

Hensen, Heidi (2012)

Instructor—Natural Sciences
M.S.—Baylor University

Hesse, Brian (2002)

Associate Professor—Humanities and
Social Sciences
Ph.D.—London School of Economics and
Political Science

Hiatt, Rochelle (1997)

Associate Professor—Behavioral Sciences
Ed.D.—University of Missouri-Columbia

Hobbs, Michael (1993)

Professor—English and Modern Languages
Ph.D.—University of North Texas

Hoffmann, Allison (2008)

Instructor—Business
M.B.A.—Northwest Missouri State
University

Hollingsworth, Lynda (1982)

Assistant Professor—Mathematics,
Computer Science and Information Systems
M.S.—Northwest Missouri State University

Hull, Michael (2009)

Assistant Professor—Natural Sciences
Ph.D.—Notre Dame

Hung, Ming-Chih (2003)

Associate Professor—Humanities and
Social Sciences
Ph.D.—University of Utah

Immel, Patrick (2003)

Associate Professor—Fine and
Performing Arts
M.F.A.—Southern Illinois University at
Carbondale

Ingraham, Nissa (2006)

Assistant Professor—Professional Education
Ed.D.—University of Missouri-Columbia.

Islam, Rafiq (1997)

Professor—Natural Sciences
Ph.D.—Kyushu University

Johnson, Aaron (2007)

Associate Professor—Natural Sciences
Ph.D.—University of Missouri-Columbia

Johnson, Carolyn (1990)

Assistant Professor—Library
M.A.—University of Wisconsin

- Johnson, David** (2010)
Instructor—Business
M.I.B.S.—University of South Carolina
- Johnson, Matthew** (1999)
Instructor—Humanities and Social Sciences
M.A.—Northwest Missouri State University
- Johnson, Matthew** (2007)
Instructor—Health and Human Services
M.S.Ed.—Northwest Missouri State University
- Jones, Brenda** (2004)
Instructor—Business
M.B.A.—Northwest Missouri State University
- Jones, Rego** (2003)
Instructor—Agricultural Sciences
M.S.—Northwest Missouri State University
- Katsion, John** (2010)
Assistant Professor—Communication and Mass Media
Ph.D.—Regent University-Virginia Beach
- Kegode, George** (2006)
Assistant Professor—Agricultural Sciences
Ph.D.—Iowa State University
- Kelly, Alfred** (1975)
Professor—Business
Ph.D.—University of Kentucky
- Kenkel, Cindy** (1998)
Assistant Professor—Business
M.B.A.—Northwest Missouri State University
- Kramer, Ernest** (1985)
Professor—Fine and Performing Arts
Ph.D.—University of North Texas
- Kreizinger, Joseph** (2001)
Associate Professor—Fine and Performing Arts
Ph.D.—University of Nebraska
- Kukkee, Laura** (2004)
Associate Professor—Fine and Performing Arts
M.F.A.—Kent State
- Laber, Philip** (1976)
Professor—Fine and Performing Arts
M.F.A.—University of Iowa
- Lamer, Fred C.** (1982)
Assistant Professor—Communication and Mass Media
M.A.—Wayne State University
- Lamer, Jacqueline** (2001)
Instructor—Communication and Mass Media
M.P.M.—Keller Graduate School of Management
- Lanier, Brian** (2002)
Associate Professor—Fine and Performing Arts
Ph.D.—Florida State University
- Larson, J. Arley** (1987)
Associate Professor—Agricultural Sciences
Ph.D.—University of Nebraska
- Le, Yanfen** (2005)
Associate Professor—Humanities and Social Sciences
Ph.D.—University of Georgia
- Leach-Steffens, Lauren** (1998)
Associate Professor—Behavioral Sciences
Ph.D.—University of Illinois
- Lewis, Brenda** (2007)
Instructor—English and Modern Languages
M.A.—Northwest Missouri State University
- Lim, Chi Lo** (1999)
Associate Professor—Business
D.B.A.—United States International University

- Linville, Diana** (2010)
Instructor—Mathematics, Computer Science and Information Systems
M.S.—Northwest Missouri State University
- Long, Terry** (2000)
Associate Professor—Health and Human Services
Ph.D.—University of Utah
- Loomis, Jeffrey** (1990)
Professor—English and Modern Languages
Ph.D.—University of North Carolina
- Lovelace, Terry** (2003)
Associate Professor—Professional Education
Ph.D.—University of Georgia
- Ludwig, Stephen** (2001)
Assistant Professor—Business
Ph.D.—University of Arkansas
- Malkawi, Ahmed** (2000)
Associate Professor—Natural Sciences
Ph.D.—University of Maine-Orono
- Mardis, Lori** (2001)
Assistant Professor—Library
M.L.S.—University of Michigan
- Marta, Janet** (1999)
Professor—Business
Ph.D.—Old Dominion University
- Martin, Barbara** (2006)
Assistant Professor—Professional Education
Ph.D.—University of Kansas
- Martinez, Francisco** (2004)
Instructor—English and Modern Languages
M.A.—Northwest Missouri State University
- Mayer, Nancy** (2000)
Associate Professor—English and Modern Languages
Ph.D.—University of Wisconsin-Milwaukee
- McAdams, Charles** (2004)
Dean—College of Arts and Sciences
Ed.D.—University of Illinois-Urbana-Champaign
- McDonald, Gary** (1971)
Professor—Mathematics, Computer Science and Information Systems
Ph.D.—University of Texas-Austin
- McDonald, Merry** (1971)
Professor—Mathematics, Computer Science and Information Systems
Ph.D.—University of Texas-Austin
- McLaughlin, J. Patrick** (1978)
Professor—Business
J.D.—University of Missouri-Kansas City
- McNeese, Gina** (1998)
Instructor—Health and Human Services/
Horace Mann
M.S.Ed.—Northwest Missouri State University
- Memken, Jean** (2009)
Assistant Professor—Business
Ph.D.—Iowa State University
- Messner, Phillip** (1996)
Professor—Professional Education
Ed.D.—University of Missouri
- Meziani, Mohammed** (2010)
Assistant Professor—Natural Sciences
Ph.D.—University of Montpellier II, France
- Miller, Victoria** (2011)
Assistant Professor—Professional Education
Ph.D.—Capella University
- Mollus, Doni** (2000)
Instructor—Business
M.B.A.—Northwest Missouri State University
- Mühsam, Armin** (2000)
Associate Professor—Fine and Performing Arts
M.F.A.—Montana State University

- Musunuru, Naveen** (2009)
Assistant Professor—Agricultural Sciences
Ph.D.—Texas Tech University
- Myllykangas, Susan** (2005)
Associate Professor—Health and Human
Services
Ph.D.—Indiana University
- Nance, Michelle** (2004)
Instructor—Business
M.B.A.—Northwest Missouri State
University
- Neustadter, Roger** (1992)
Professor—Behavioral Sciences
Ph.D.—Purdue University
- Nickerson, Jeffrey** (2008)
Instructor—Business
M.B.A.—Northwest Missouri State
University
- Northup, Michael** (1999)
Instructor—Business
M.S.—University of Missouri-Kansas City
- Nuttall, Susanne** (2008)
Instructor—Professional Education
M.Ed.—Southwestern Oklahoma State
University
- Oehler, David** (1982)
Associate Professor—Fine and
Performing Arts
Ph.D.—Iowa State University
- Oehler, Erin** (2001)
Part-time Instructor—Horace Mann
B.S.—Northwest Missouri State University
- Offutt, Jason** (2005)
Instructor—Communication and Mass
Media
M.A.—Central Missouri State University
- Olasz, Ildiko** (2009)
Assistant Professor—English and Modern
Languages
Ph.D.—Michigan State University
- Olson, Anthony** (2000) Associate
Professor—Fine and Performing Arts
D.M.A.—University of Southern California
- Oludaja, Bayo** (1990)
Professor—Communication and Mass
Media
Ph.D.—University of Kansas
- Omelchenko, Natalia** (2009)
Assistant Professor—Natural Sciences
Ph.D.—Russian Academy of Medical
Sciences
- Overmier, Douglas** (2010)
Assistant Professor—Fine and Performing
Arts
D.M.A.—University of North Carolina at
Greensboro
- Park, Sarah** (2005)
Instructor—Library
M.S.—University of Illinois-Urbana-
Champaign
- Parsons, Vanessa** (2004)
Instructor—Horace Mann
B.A.—Northwest Missouri State University
- Patet, Pradnya** (2009)
Assistant Professor—Professional Education
Ph.D.—University of Bombay
- Patton, Jamie** (2003)
Associate Professor—Agricultural Sciences
Ph.D.—Oklahoma State University
- Petefish-Schrag, Amanda** (2006)
Associate Professor—Fine and Performing
Arts
M.F.A.—Minnesota State University-
Mankato
- Phillips, Sheila** (2001)
Assistant Professor—Fine and Performing
Arts
D.M.A.—University of Missouri-
Kansas City

Piveral, Joyce (2000)

Dean—College of Education and Human Services
Ed.D.—Northwest Missouri State University

Pluskota, Jonathan (2010)

Assistant Professor—Communication and Mass Media
Ph.D.—Southern Illinois University

Pope, John Paul (2002)

Assistant Professor—Natural Sciences
Ph.D.—University of Iowa

Pratt-Hyatt, Jennifer (2009)

Assistant Professor—Behavioral Sciences
M.A.—Michigan State University

Prinz, Kendall (2012)

Assistant Professor – Fine and Performing Arts
D.M.A.—University of Texas – Austin

Reusser, Janet (1992)

Professor—Health and Human Services
Ed.D.—Oklahoma State University

Richards, Beth (1992)

Associate Professor—English and Modern Languages
Ph.D.—University of Nebraska-Lincoln

Richardson, Curtis (2008)

Assistant Professor—Humanities and Social Sciences
Ph.D.—Northern Illinois University

Richardson, David (2002)

Associate Professor—Natural Sciences
Ph.D.—University of Birmingham, United Kingdom

Richardson, William (1999)

Associate Professor—Fine and Performing Arts
D.M.A.—University of Texas-Austin

Riley, Shelley (2009)

Assistant Professor—Natural Sciences
Ph.D.—University of Kansas

Robertson, Terrance (1992)

Professor—Health and Human Services
Ph.D.—University of Utah

Rogers, Michael (2009)

Assistant Professor—Mathematics, Computer Science and Information Systems
Ph.D.—Iowa State University

Rogers, Sara (2007)

Instructor—Horace Mann
M.S.—University of Nebraska-Omaha

Rohs, Renee (2000)

Associate Professor—Natural Sciences
Ph.D.—University of Kansas

Rolfes, Luke (2008)

Instructor—English and Modern Languages
M.F.A.—Minnesota State University

Ross, Theophil W. (1978)

Professor—Fine and Performing Arts
Ph.D.—University of Missouri

Rouch, Matthew (1992)

Instructor—Communication and Mass Media
M.A.—Central Missouri State University

Roush, Marcy (2003)

Instructor—English and Modern Languages
M.S.—Northwest Missouri State University

Russell, Doug (1999)

Assistant Professor—Business
M.B.A.—University of Nebraska-Omaha

Ryan, Brenda (1999)

Instructor—English and Modern Languages
M.A.—Northwest Missouri State University

Rytting, Jenny (2006)

Assistant Professor—English and Modern Languages
Ph.D.—Arizona State University

Sadek, Jawad (1994)

Professor—Mathematics, Computer Science
and Information Systems
Ph.D.—Wayne State University

Scarborough, Cindy (2010)

Instructor—Professional Education
B.S.Ed.—Northwest Missouri State
University

Schaffer, Karen (1991)

Assistant Professor—Natural Sciences
Ph.D.—University of Iowa

Schwienebart, Cathi (1997)

Part-time Teacher Associate—Horace
Mann
B.S.Ed.—Northwest Missouri State
University

Seeger, Victoria (2011)

Assistant Professor—Professional Education
Ph.D.—Kansas State University

Shadinger, David (2009)

Assistant Professor—Communication and
Mass Media
Ed.D.—Ball State University

Shanks, Melinda (2008)

Instructor—Business
M.B.A.—Northwest Missouri State
University

Shannon, Pamela (2002)

Associate Professor—Fine and Performing
Arts
D.M.A.—Indiana University

Shaw Jr., John (1988)

Associate Professor—Natural Sciences
Ph.D.—Purdue University

Shepherd, Mary (2001)

Associate Professor—Mathematics,
Computer Science and Information Systems
Ph.D.—Washington University-St. Louis

Shi, Tiebing (2010)

Assistant Professor—Business
Ph.D.—Queen's University

Shin, Kyoung-Ho (1999)

Associate Professor—Behavioral Sciences
Ph.D.—Kansas State University

Smith, Daniel (1999)

Assistant Professor—Humanities and Social
Sciences
J.D.—University of Virginia

Smith, Susan Rená (2010)

Instructor—Natural Sciences
M.S.Ed.—Northwest Missouri State
University

Spears, Kathleen (2012)

Assistant Professor—Natural Sciences
Ph.D.—University of Missouri-Columbia

Sonnenmoser, Richard (2008)

Assistant Professor—English and Modern
Languages
M.F.A.—University of Massachusetts

Spencer, Thomas (1997)

Professor—Humanities and Social Sciences
Ph.D.—Indiana University

Spradling, Carol (1988)

Associate Professor—Mathematics,
Computer Science and Information Systems
Ph.D.—University of Nebraska-Lincoln

Spradling, Kim W. (1984)

Professor—Fine and Performing Arts
Ph.D.—University of Iowa

Steffens, Shirley (1995)

Associate Professor—Professional Education
Ph.D.—University of Wisconsin

Steiner, Michael (1997)

Professor—Humanities and Social Sciences
Ph.D.—St. Louis University

Sterling, Linda (2006)

Assistant Professor—Behavioral Sciences
Ph.D.—University of Kansas

Stiens, Mary Jane (1993)

Instructor—Horace Mann
M.S.—Central Missouri State University

Stobbe, Lisa (2009)

Instructor—Natural Sciences
M.S.Ed.—Northwest Missouri State
University

Strauch, Jodell (1993)

Assistant Professor—Communication and
Mass Media
Ph.D.—University of Nebraska-Lincoln

Sudhoff, Douglas (2001)

Assistant Professor—Communication and
Mass Media
Ph.D.—University of Kansas

Symonds, Matt (2002)

Instructor—Health and Human Services
Ed.D.—University of Missouri-Columbia

Tasi, Csilla (2009)

Instructor—Mathematics, Computer
Science and Information Systems
M.S.—Northern Arizona University

Thompson, Patricia (1984)

Assistant Professor—Professional Education
M.S.Ed.—Northwest Missouri State
University

Thornsberry, Gretchen (2009)

Assistant Professor—Natural Sciences
Ph.D.—North Carolina State University

Thornsberry, Jeffrey (2003)

Associate Professor—Natural Sciences
Ph.D.—University of Missouri

Toomey, Deborah (2006)

Assistant Professor—Business
D.B.A.—Anderson University

Toomey, Richard (1999)

Associate Professor—Natural Sciences
Ph.D.—Brandeis University

Town, Stephen (1986)

Professor—Fine and Performing Arts
D.M.—Indiana University

Turner, Lurinda (2008)

Instructor—Agricultural Sciences
M.S.—Northwest Missouri State University

Veasey, Michele (2009)

Instructor—Behavioral Sciences
M.S.Ed.—Northwest Missouri State
University

Vetter, Rheba (2002)

Associate Professor—Health, Physical
Education, Recreation and Dance
Ph.D.—Texas Woman's University-

Vlieger, David (2002)

Assistant Professor—Mathematics,
Computer Science and Information Systems
M.S.—University of Missouri-Rolla

Von Holzen, Roger (1987)

Associate Professor—Mathematics,
Computer Science and Information Systems
Ed.D.—Texas Technological University

Wade, Michelle (2009)

Assistant Professor—Humanities and
Social Sciences
Ph.D.—Southern Illinois University

Walker, Callie (2010)

Assistant Professor—Agricultural Sciences
M.S.—Kansas State University

Walker, Jim (1996)

Professor—Business
Ph.D.—University of Texas

Walker, Matthew (2001)

Assistant Professor—Communication and
Mass Media
Ph.D.—University of Missouri-Columbia

Wall, Jennifer (2005)

Assistant Professor—Mathematics,
Computer Science and Information Systems
Ph.D.—University of Missouri-Kansas City

Wanorie, Tekle (2004)

Associate Professor—Business
Ph.D.—University of Alabama

Warner, Craig (1998)

Associate Professor—Fine and Performing
Arts
M.F.A.—University of Kansas

Weiss, C. Denise (1991)

Instructor—Mathematics, Computer
Science and Information Systems
M.S.Ed.—Northwest Missouri State
University

Wessell, Ryan (2007)

Assistant Professor—Behavioral Sciences
Ph.D.—Central Michigan University

White, Jason (1999)

Associate Professor—Business
Ph.D.—University of Missouri-Kansas City

Widmer, Laura (1983)

Assistant Professor—Communication and
Mass Media
M.S.—Iowa State University

Wilcox, Kenton (2000)

Instructor—English and Modern Languages
M.A.—Northwest Missouri State
University

Williams, Glenn (2003)

Associate Professor—Fine and Performing
Arts
M.F.A.—University of Wisconsin-Madison

Wilson, Nathan (2008)

Assistant Professor—Communication and
Mass Media
M.A.—University of Iowa

Wood, Rahl (1993)

Associate Professor—Business
Ph.D.—St. Louis University

Wu, Yi-Hwa (2004)

Associate Professor—Humanities and
Social Sciences
Ph.D.—University of Utah

Yu, Han (2009)

Assistant Professor—Mathematics,
Computer Science and Information Systems
Ph.D.—Florida State University

Zeliff, Nancy (1987)

Professor—Mathematics, Computer Science
and Information Systems
Ph.D.—University of Missouri-Columbia

Zweifel, Thomas (1985)

Assistant Professor—Agricultural Sciences
Ph.D.—University of Nebraska-Lincoln

Emeritus Faculty

Albertini, Virgil R. (1965-1998)
Ph.D.—English

Allen, C. K. (1983-2003)
Ph.D.—Agriculture

Baker, Carol (1993-2003)
Ed.D.—Educational Leadership

Ballantyne Jr., Edwin (1989-1998)
Ph.D.—Marketing and Management

Bayliss, Andree (1991-1999)
Ed.D.—Curriculum and Instruction

Bernard, Barbara (1966-1992)
M.S.—Physical Education

Bettis, Mervin (1977-1994)
Ph.D.—Agriculture

Bobo, Richard L. (1983-2000)
D.M.—Music

Bohlken, Robert (1970-2000)
Ph.D.—Communication and Theatre Arts

Bouas, Jean (1992-2003)
Ph.D.—Curriculum and Instruction

Bowers, John (1980-2003)
Ph.D.—Psychology, Sociology and
Counseling

Brandon-Falcone, Janice (1991-2011)
Ph.D.—History, Humanities, Political
Science and Philosophy

Brekke, Ann M. (1965-1999)
M.Ed.—Physical Education

Brekke, Jerald D. (1964-1999)
Ph.D.—Political Science

Brown, Gerald (1983-2000)
Ph.D.—Agriculture

Brown, Harold (1973-2009)
Ph.D.—Agriculture

Browning, Edward (1961-2000)
Ph.D.—Accounting, Economics
and Finance

Browning, Sharon (1964-1999)
Ph.D.—Marketing and Management

Buerman, Margaret (1998-2009)
Ph.D.—Mathematics and Statistics

Bush, Betty (1983-2002)
Ph.D.—Curriculum and Instruction

Carneal, Tom (1968-2002)
M.A.—History, Humanities and
Philosophy

Clark, Deborah (2004-2008)
M.S.—Family and Consumer Sciences

Collins, Gary (1978-2001)
Ph.D.—Physical Education

Collins, Herman (1966-1993)
Ed.D.—Technology

Corley, Roger (1966-1997)
Ph.D.—History, Humanities and
Philosophy

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- Crist, Leroy** (1962-1993)
Ed.D.—Technology
- Croft, Betty** (1979-1990)
M.S.—Library
- DeVore, Elwyn K.** (1950-1985)
D.B.A.—Business
- DeYoung, Ron** (1984-2008)
Ed.D.—Marketing and Management
- Dodds, Charles W.** (1988-2002)
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- Dougherty, John** (1965-1979)
M.A.—Foreign Languages
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- Ferris, Ron** (1966-2009)
M.A.—History, Humanities, Philosophy and Political Science
- Findley, Robert** (1971-1992)
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- Johnson, James** (1981-2006)
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- Kennedy, Madonna Davis** (1978-2001)
M.A.—Library
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M.A.—Mathematics
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Ph.D.—Accounting, Economics and Finance
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J.D.—Speech
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Ed.D.—English
- McCall, Carolyn** (1986-2011)
Ph.D.—Curriculum and Instruction
- McDonald, June** (1984-2002)
D.M.A.—Music
- McDonald, Kendall** (1975-2002)
Ph.D.—Mathematics
- McKee, Kathryn** (1946-1982)
M.A.—Education
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Ph.D.—Political Science

- Merrick, Irma** (1969-1987)
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- Midland, Dale** (1961-1995)
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- Sanders, Dean** (1999-2011)
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- Savage, Dean** (1961-1991)
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- Schmaljohn, Russell** (1969-2004)
M.S.—Art
- Schultz, Charles** (1976-2002)
Ph.D.—Communication and Theatre Arts
- Schultz, Patricia Bowers** (1985-2002)
D.M.A.—Music
- Scott, Billy D.** (1960-1991)
Ph.D.—Biology
- Sergel III, Alfred** (1981-2004)
M.S.Ed.—Music

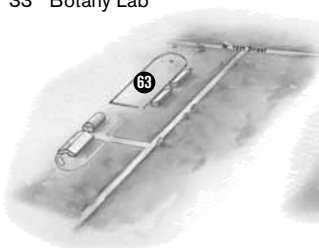
- Shanklin, James T.** (1966-1999)
M.S.—Accounting, Economics and Finance
- Shiple, A. Frances** (1968-2008)
Ph.D.—Family and Consumer Sciences
- Slater, David** (1970-2004)
Ph.D.—English
- Smith, David** (1966-2001)
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- Sunkel, Robert** (1960-1998)
M.F.A.—Art
- Thomson, Nancy** (1981-2001)
Ph.D.—Computer Science/Information Systems
- Tjeerdsma, Carol** (1995-2011)
M.A.—Curriculum and Instruction
- Trowbridge, William** (1971-1998)
Ph.D.—English
- Ury, Gary** (1996-2011)
Ed.D.—Computer Science/Information Systems
- VanDyke, Patricia** (1969-2001)
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M.A.—Psychology
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- Walker, Dorothy** (1958-1987)
M.Ed.—Physical Education
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Ph.D.—Accounting, Economics and Finance
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M.S.Ed.—Curriculum and Instruction
- Woods, Roger** (1981-2008)
M.B.A.—Accounting, Economics and Finance
- Wright, Gerald** (1969-2000)
Ed.S.—Curriculum and Instruction
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Ph.D.—Biological Sciences

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| 4 | Roberta Hall, sorority residence hall | 37 | Center for Innovation and Entrepreneurship |
| 5 | Wells Hall | 38 | Community Center/National Guard Armory |
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| 7 | Thompson-Ringold Building | 40 | University Greenhouse |
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| 9 | Transportation Shop | 42 | Landscape Services Office and Shop |
| 10 | Power Plant | 43 | Softball Field |
| 11 | Chiller Plant | 44 | Wellness Services |
| 12 | Administration Building | 45 | Phillips Hall, residence hall |
| 13 | Memorial Bell Tower | 46 | Millikan Hall, residence hall |
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| 15 | Colden Hall | 48 | The Station |
| 16 | Colden Pond | 49 | Franken Hall, residence hall |
| 17 | Thomas Gaunt House, president's residence | 50 | Dieterich Hall, residence hall |
| 18 | Alumni House | 51 | High-Rise Tennis/Basketball Courts |
| 19 | Fire Arts Building | 52 | Bearcat Baseball Field |
| 20 | Olive DeLuce Fine Arts Building, Charles Johnson Theater | 53 | Jon T. Rickman Electronic Campus Support Center |
| 21 | Bearcat Stadium, Mel Tjeerdsma Field and Herschel Neil Track | 54 | Bearcat Pitch (Soccer Field) |
| 22 | Lamkin Activity Center, Bearcat Arena | 55 | Practice Fields |
| 23 | Student Recreation Center | 56 | Athletic Grounds Building |
| 24 | Martindale Hall and Gymnasium | 57 | Raymond J. Courter College Park Pavilion |
| 25 | Frank Grube Tennis Courts | 58 | College Park |
| 26 | Joyce & Harvey White International Plaza | 59 | Ron Houston Center for the Performing Arts |
| 27 | Centennial Garden | 60 | Houston Studio Theater |
| 28 | South Complex, residence hall | 61 | Pellet Plant |
| 29 | North Complex (Missouri Academy of Science, Mathematics and Computing) | 62 | Donaldson Westside Park |
| 30 | Everett W. Brown Education Hall | 63 | Rodeo Arena |
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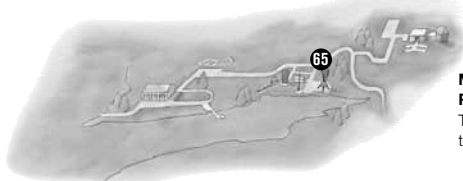
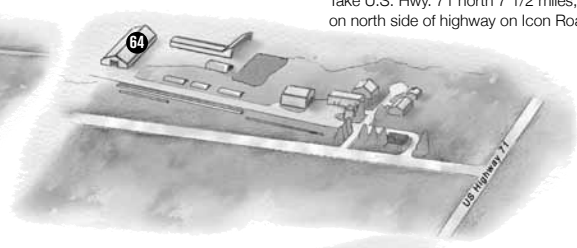
R.T. Wright Farm

Take U.S. Hwy. 71 north 7 1/2 miles, located on north side of highway on Icon Road.



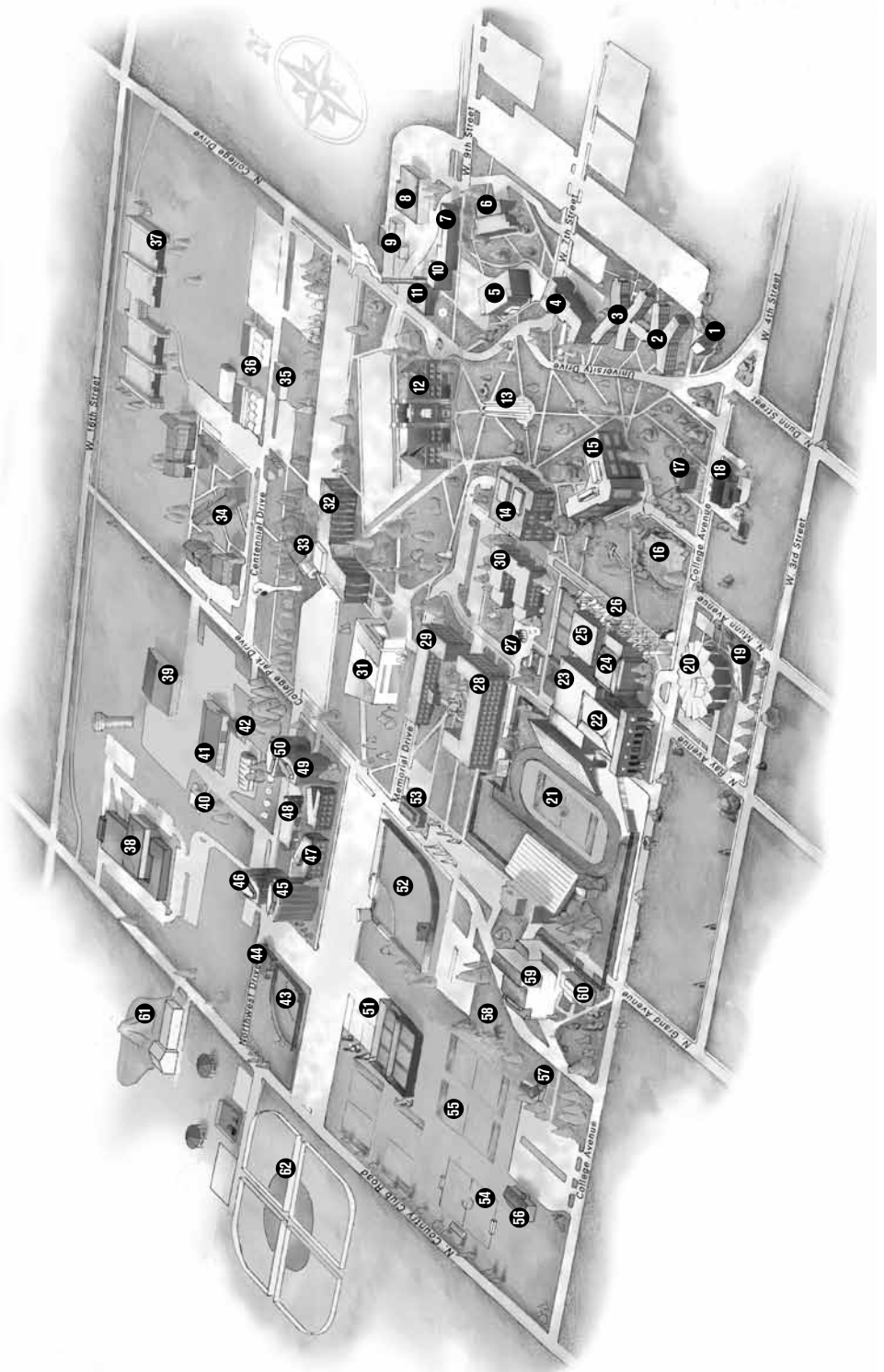
Rodeo Arena

From Country Club Road, turn west on West 16th Street, continue 1 1/2 miles, turn south onto rodeo grounds.



MOERA Outdoor Recreation Area

Take U.S. Hwy. 136 east to Mazingo Lake.



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Campus Phone Numbers

Accounting/Controller.....	1101	Student Support Services.....	1862
ADA/504 Coordinator.....	1726	Student Teaching Office.....	1231
Admissions (Administration Bldg.).....	1148	Talent Development Center.....	1726
Admissions (Mabel Cook).....	1562	Telecommunications.....	1634
Advisement Assistance.....	1695	Textbook Services.....	1150
Alumni Relations/Northwest Foundation.....	1248	Tower Yearbook.....	1528
ARAMARK (Dining Services).....	1252	University Relations.....	1143
Assessment, Information and Analysis.....	1452	Upward Bound.....	1630
Athletics – Men (Lamkin).....	1713	Volunteer Services.....	1954
Athletics – Women (Martindale).....	1297	Writing Center.....	1480
Bookstore.....	1246		
Box Office, Houston Center Performing Arts.....	1643	COLLEGES	
Campus Activities.....	1226	Arts and Sciences.....	1197
Career Services.....	1250	Booth College of Business and	
Cashiering/Bursar's.....	1578	Professional Studies.....	1277
CITE.....	1532	Education and Human Services.....	1778
Computing Services/Programming.....	1634		
Counseling Center.....	1220	DEPARTMENTS	
FAX (Student Use) Student Services Center.....	1405	Agricultural Sciences.....	1155
Financial Assistance/Scholarships.....	1363	Behavioral Sciences.....	1260
Fitness Center.....	1708	Business.....	1835
Freshman Seminar.....	1616	Communication and Mass Media.....	1361
Graduate Office/Studies.....	1144/1145	English and Modern Languages.....	1265
Horace Mann School, Brown Hall.....	1233	Fine and Performing Arts.....	1326
ID Office.....	1430	Health and Human Services.....	1297
Information Desk/Student Services Center.....	1212	Humanities and Social Sciences.....	1290
Intercultural and International Center.....	1367	Mathematics, Computer Science	
Intramurals.....	1606	and Information Systems.....	1600/1230
KNWT.....	1953	Natural Sciences.....	1388
KXCV Radio.....	1163	Professional Education.....	1239
KZLX Radio.....	1165		
Library.....	1193	RESIDENCE HALLS	
Mail/Copy Center.....	1109/1137	Dieterich.....	1392
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Provost.....	1120	South Complex.....	1516
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Registrar.....	1151		
Residential Life.....	1214	EMERGENCY NUMBERS 911 ON CAMPUS	
Student Affairs.....	1242	Wellness Services.....	562-1348
Evenings and Weekends.....	1615	University Police.....	562-1254
Student Employment.....	1140	Emergency only.....	562-1901, 562-1902
Student Senate.....	1218	Fire/Police.....	562-2511
Student Services Center.....	1212	Nodaway County Sheriff.....	582-7451
		Highway Patrol.....	582-3420
		Ambulance.....	582-8188

Area code 660.

Call 562-1212 for numbers not listed.

